### SCOTTISH BORDERS COUNCIL

# PLANNING AND BUILDING STANDARDS COMMITTEE

# **6 NOVEMBER 2017**

### **APPLICATION FOR PLANNING PERMISSION**

ITEM: REFERENCE NUMBER: 17/00010/FUL

**OFFICER:** Julie Hayward

**WARD:** Hawick and Hermitage

**PROPOSAL:** Construction of wind farm comprising 7 No turbines up to

149.9m high to tip, 5 No turbines up to 130m high to tip and

associated infrastructure

**SITE:** Land South West Of Lurgiescleuch (Pines Burn)

Hawick

**APPLICANT:** Energiekontor UK Ltd

AGENT: None

### SITE DESCRIPTION

The site is within the Harwood Estate to the south west of Hobkirk and comprises of 624 hectares of coarse unimproved grassland used for grazing and coniferous plantation forestry. Bonchester Bridge is approximately 6.4km to the north east, Chesters is 8km to the north east, Hawick is 7.8km to the north west and Denholm is 10.5km to the north east. The B6399 Hawick to Newcastleton road runs along the western boundary of the site. There are several watercourses within the site, including Pines Burn and Lurgies Burn. The topography of the site varies from 210m AOD by the B6399 on the western boundary to 400m AOD at the summit of Pike Fell and the turbines would be situated at elevations of between 289m and 377m AOD.

There are no residential properties within the site. There are scattered properties within the Harwood Estate to the north east; Langburnshiels is situated to the south of the site and comprises of a number of houses and there are several scattered residential properties to the west.

There are no claimed Rights of Way or Core Paths within the site. There are no statutory designated landscapes within 5km of the site. The boundary of the Teviot Valley Special Landscape Area is to the north east beyond the 5km area and the Cheviot Foothills Special Landscape Area is to the east beyond the 10km area. The site is some distance from the River Teviot, which is a tributary of the River Tweed Special Area of Conservation (SAC) and there are no SSSIs within or adjacent to the site.

# PROPOSED DEVELOPMENT

The proposal, as submitted, was for a commercial wind farm comprising of twelve turbines, with seven turbines at 158.5m to blade tip and five of 130m in height. The development also includes:

- Crane hardstandings (55m by 35m);
- Site tracks 4.5m wide and surfaced in coarse aggregate;
- Underground high voltage and control cables;

- Water course crossings;
- Two borrow pits to source materials for ground infrastructure;
- Two temporary construction compounds and storage areas: a site establishment compound 30m by 20m with office building (15m by 3.8m) parking area and storage containers at the site entrance and a construction compound 40m by 45m with offices, parking and storage;
- Substation/switchgear housing building (15m by 10m and 6.2m in height);
- An upgraded access from the B6399 for the delivery of the turbine components and then used for maintenance and decommissioning;
- Forestry felling and replanting within the site boundary.

The construction phase would last for 12 to 18 months and the development would have a 25 year operational phase. The wind farm would provide 36MW of installed capacity. The application includes a 50m micro-siting allowance for turbines and infrastructure following detailed ground investigations and geotechnical surveys.

Access to the site would be via the A7 to Hawick, A6088 and B6399. An existing field access from the B6399 south of Shankend would be upgraded for the delivery of turbine components.

Following the consultation period the proposal has been amended:

- Seven turbines have been reduced from 158.5m in height to 149.9m (turbines 4, 6, 7, 9 12);
- Repositioning of turbines 4, 6 and 11.

### **PLANNING HISTORY**

16/00034/FUL: Erection of 80m high meteorological mast for a temporary period of up to 3 years. Approved 25<sup>th</sup> February 2016.

16/00635/SCO: The request for a Scoping Opinion was submitted in May 2016 for a wind farm comprising 15 No turbines 158.5m high to tip and ancillary infrastructure.

16/00815/PAN: The Proposal of Application Notice was submitted in July 2016 also for a wind farm comprising 15 No turbines 158.5m high to tip and ancillary infrastructure.

# NEIGHBOURING SITES/SCHEMES RELEVANT TO CONSIDERATION OF THE CURRENT PROPOSAL:

### Operational:

**Langhope Rig** is situated 19.5km to the north west of the site and consists of 10 turbines 121.2m in height.

# Consented

**Windy Edge** is approximately 9.2km to the south west of the proposal and would consist of 9 turbines, 3 at 110m in height and 6 at 125m.

# In the Planning System

**Barrel Law,** comprising of 7 wind turbines up to 132m high, was submitted in September 2017 and is 15km to the north west.

### Other Schemes

**Birneyknowe** is 4.9km to the north of the site and comprises of 15 turbines 132m high. The Council objected to this Section 36 application in March 2017 and is now the subject of an appeal.

**Wauchope and Newcastleton Forest:** A scoping opinion was issued by the Energy Consents Unit in March 2016 based on 90 turbines with a tip height of 132m at three separate sites (Wauchope East, Wauchope West and Newcastleton Forest).

**Cliffhope:** The Energy Consents Units has received a request for Scoping Opinion for a windfarm consisting of 46 turbines with a maximum tip height of 200m on land approximately 2km south east if Pines Burn

### **REPRESENTATION SUMMARY**

84 representations were received in respect of the application as submitted, 54 objections and 30 in support. These can be viewed in full on the Public Access portal on the Council's website. The principal issues raised are:

# Objections:

- Adverse, irreversible impact on the landscape, landscape character and visual amenities. Industrial development in the landscape.
- Height of turbines, out of scale and cannot be absorbed into the landscape. There are no other turbines of this height in the Borders and the development would set a precedent for other wind farms in the area.
- Visual impacts of pylons from the site to the Hawick sub-station.
- Detrimental visual impact on views from iconic viewpoints such as Rubers Law, Carter Bar and Minto Hills and on the Teviot Valley Special Landscape Area, Eildon National Scenic Area and any future Borders national Park.
- This is currently a wide open, wild, tranquil area unspoilt by wind farms.
- Night time/aviation lighting would result in light pollution in this Dark Sky area.
- Inadequate boundary treatments and screening.
- Poor layout and design. Differing height of turbines, turbine types, blade lengths and rates of rotation and skyline location.
- Flood risk and inadequate drainage.
- Impact on historic sites and cultural heritage assets such as Ringlees Knowe, Wilson's Shoulder, Blackbillend Fort and Scheduled Monuments such as Penchrise Pen fort and earthwork.
- Tree felling within the site and tree and hedge removal along the turbine route to the site.
- Lack of consistency and quality of the photomontages, misleading information and inaccurate drawings.
- The southern part of the site lies within the Eskdalemuir Seismological Array 10km exclusion zone and the rest lies in the Statutory Safeguard Area.
- Cumulative impact with other wind farm developments, including combined or simultaneous visibility and successive and sequential cumulative visibility.

- Detrimental impact on tourism and recreation in the area due to damage to the landscape, which will impact negatively on the economy. The quality of the landscape attracts visitors to the region and this will be damaged.
- The development will have a detrimental impact on views experienced by walkers, cyclists (Borders Cycle Loop), horse riders and tourists.
- The proposal would have a negative socio-economic impact and no business case has been made or adequate justification of need.
- The met mast has not been in place long enough to gather sufficient data to demonstrate site suitability.
- The limited benefits of the development do not outweigh the detrimental impacts.
- Scottish Government targets for green energy have been met and the wind farm would only make a small contribution (0.6%) to wind energy targets. There is no evidence that without this scheme targets cannot be reached. The data shows that this scheme is not needed to meet the target.
- Unsubstantiated claims of job creation. There can be no guarantee that the amount of money claimed will go into the local economy or that there will be jobs in the construction phase.
- Unfair and disparaging/demeaning socio-economic analysis of life in Hawick and Teviotdale. Any economic and social hardships experienced will not be alleviated by this development.
- Community benefits are difficult to obtain and the shared ownership scheme would result in high levels of financial risk and debt.
- Wind energy is inefficient, unreliable, not economically viable and is not sustainable as the turbines are brought to the site from outwith the UK.
- Future-powering of existing wind farms will result in larger and more efficient turbines on operational sites so new sites will not be required.
- Other green energy developments should be considered, such as small turbines, biomass and solar power for local use.
- Contrary to Local Development Plan 2016 policies and to Supplementary Planning Guidance on Wind Energy. The Ironside Farrar Landscape Capacity Report 2016 states there low capacity for turbines up to 120m high and no capacity above that level in this area.
- Detrimental to residential amenity by reason of noise nuisance, loss of privacy/overlooking and light, visual intrusion and would have a dominant, overbearing impact affecting quality of life. The closest turbine is only 1.3km from the nearest residential property at 158m high and on elevated ground, ignoring the required 2km buffer.
- Impact on private water supplies.
- Increased traffic, especially combined with timber lorries and other wind farm developments, will impact on road safety. No specified route for construction traffic and the roads are unsuitable for the size and volume of construction and delivery traffic; inadequate access.
- The delivery of turbines will cause congestion, delays, inconvenience and damage to local roads and infrastructure. There is no Traffic Management Plan. The developer should pay for any road repairs.
- Impact on wildlife and habitats of development, pollution, chemicals and tree felling. The area south of Hermitage contains a large SSSI/ SPA. Proximity to watercourses and Ground Water Terrestrial Ecosystems.

### Support:

• Positive contribution to the local economy, supporting local businesses during construction, safeguarding employment.

- Wind is a sustainable and effective form of renewable energy that does not harm the environment and reduces global warming.
- Wind is a free and clean source of energy, safer than alternative methods of electricity generation, such as nuclear power, with no waste products and it replaces rapidly depleting fossil fuels.
- The development contributes to national renewable energy and carbon reduction targets and will provide power for 20,000 homes.
- · Community benefits and ownership.
- Appropriately sited, outwith within any culturally or naturally significant areas, secluded compared to other locations and the views will not be overbearing.
- Harwood Estate would not be sustainable without the wind farm.

At the time of writing this report 27 representations were received in respect of the SEI, 5 objections and 22 in support. The following additional issues were raised:

# Objections:

- Reduction in the turbine height does nothing to ameliorate the impacts. The
  varied turbine heights, blade lengths and rates of rotation would result in a
  jumbled intrusion in the landscape.
- Reference made to other wind farms in Scotland is irrelevant in considering turbine height in this location.
- The 2016 Ironside Farrar report states there is no capacity in this area for turbines over 120m.
- No improvement to the inconsistent photomontages and the SEI is convoluted, unconvincing and misleading and some claims and statements are incorrect.
- Noise impact on dwellings and cumulative impact of noise in conjunction with the Birneyknowe wind farm has not been addressed.
- There is no amendment to or retraction of the demeaning Socio-Economic section of the ES. The proposed construction spend and community benefit fund would not rectify these alleged problems.
- Impact on Ministry of Defence equipment and operations.
- The iteration process may have resulted in a less bad scheme but not an acceptable one. Even if the scheme is slightly better than other schemes, it should still not be approved.
- The visual impact is subjective and the applicant's experts are not impartial.
- There is no guarantee of investment in the local economy or job creation.
- If all consented wind farms are built the Government targets would be reached. There is no evidence that the targets cannot be reached without this wind farm.
- Site lighting during construction.

## Support:

- More wind farms will be needed in the future as this is the safest and cleanest way to produce energy. The Borders should benefit from its wind resource.
- The development is critical to the financial health of smaller contractors in the region. The applicant has made a serious commitment to using local contractors. Renewable energy developments are a competitive but shrinking market and this development would enhance the future of firms and employees.

- This is a good site with little sensitivity and the developer has been responsive to input from stakeholders and so the final layout addresses most concerns.
- Discussions about local community "buy-in" have been encouraging, though the details need to be finalised.

### APPLICANTS' SUPPORTING INFORMATION

This full planning application is an EIA Development and is supported by a full Environmental Statement (ES) resulting from an Environmental Impact Assessment, which comprises the following documents, dated December 2016:

- Pre-application Consultation Report
- Planning Statement
- Design and Access Statement

### **Environmental Statement:**

Volume I: Written textVolume II: FiguresVolume III: Appendices

Volume III. Appendices

• Volume IV: Non- Technical Summary

Supplementary Environmental Information (SEI) was submitted by the applicant in June 2017 and comprises of:

Volume 1: Written Text

Volume 2: Figures (Parts 1 and 2) Volume 3: Technical Appendices

Viewpoint Pack

### **CONSULTATION RESPONSES:**

The following consultation responses have been received in respect of the application as originally submitted and in respect of the SEI, where responses differ from that originally received. The responses are available to view in full on the Council's Public Access System.

# **Scottish Borders Council Consultees**

Landscape Architect: The site consists of forested and open land largely within the catchment of the Pines Burn, one of the headwater tributaries of the Rule Water. It lies within Landscape Character Type (LCT) 4CHG: Southern Uplands with Scattered Forest but is also very close to the adjoining 5WN: Southern Uplands Type: Forest Covered: Wauchope/ Newcastleton. Both are defined as 'Upland' types. The site also lies less than 5km from a number of 'River Valley' and 'Upland Fringe' character types which all lie in an arc to the north.

The Landscape Capacity and Cumulative Impact Study 2013 (LCCIS) offers some support for a development of 'Very Large' turbines defined as being greater than 100m high to blade tip but I am also sure that the LCCIS does not support turbines over 150m high, which constitutes another order of magnitude. This is reinforced by 150m being the threshold at which aircraft navigation lights are required. Concludes:

- Fairly local issues in relation to landscape character and scenic value;
- Issues in relation to identified visual receptors;
- Potential turbine dominance due to turbine height and visual intrusion at night;
- Some diminution of existing focal features and perspective effects;
- A wide range of potential scenarios for combined and sequential cumulative effects with other developments;
- Associated structures should be acceptable within the existing forest context and that the site benefits from suitable landform and scale;
- The effects on the existing forest cover should be acceptable subject to suitable compensatory planting;
- Other issues, such as wildland, settlements, coast and the matters relating to multiple existing windfarms do not influence the determination or are not relevant.

There are several aspects of this application that comply with landscape criteria but the overall height of 158.5m exceeds the capacity threshold accepted in the LCCIS (2013) study. This turbine height also aggravates the landscape and visual issues that do occur. I do not support the application but consider that a reduced scheme that complies with the Landscape Capacity and Cumulative Impact Study (2013) might be acceptable.

**Re-consultation:** The Landscape Capacity and Cumulative Impact Study (2013) offers some support for a development of 'Very Large' turbines defined as being greater than 100m high to blade tip. Concludes:

- Fairly local issues, now slightly reduced, in relation to landscape character and scenic value;
- Issues in relation to identified visual receptors, now slightly reduced;
- Some remaining concerns regarding potential dominance due to turbine height but somewhat reduced from the earlier iteration and the removal of concerns about visual intrusion at night;
- Some remaining diminution of existing focal features and perspective effects.

There are several aspects of the original application that complied with landscape criteria. The applicant has responded to previous advice to reduce overall turbine height to 149.9m and this proposal is now below the threshold requiring aviation lighting. It is also, arguably, just within the capacity of the LCCIS (2013) capacity study. Allowing that the number of significantly affected receptors is relatively limited, it is not clear that there are sufficient landscape and visual arguments to sustain an objection.

**Flood Protection Officer:** The site is not at risk from a flood event with a return period of 1 in 200 years. That is the 0.5% annual risk of a flood occurring in any one year.

Review of the information provided shows that the site lies out with SEPA's 1 in 200 year hazard map however there are a number of small watercourses located within the site that may be at risk of flooding. Overall, there is minimal flood risk to the site so I would have no objections to the proposal on the grounds of flooding as long as the following is adhered to:

 Newly formed hard surfaces should be attenuated to existing greenfield runoff rates so that there is no increased flood risk to downstream receptors, most significantly within Hobkirk and Bonchester Bridge.

- Details of silt traps and any other functions that the applicant proposes to minimise the amount of sediment entering the watercourse should be submitted.
- If there are to be any culverts, watercourse crossings or alterations to crossings, these should be designed to convey the 1 in 200 year flow.

**Roads Planning Service:** Whilst I have no objections to the principle of a wind farm at this location, there are several matters which will have to be addressed should the proposal be approved:

- A Traffic Management Plan (TMP) must be submitted and approved by the Council prior to any works commencing on site. This must also indicate in more detail the delivery route and vehicle numbers anticipated for HGV deliveries. Any ancillary works required to the public road network identified via this plan must thereafter be carried out to an agreed programme and timescale. This should also allow for any reinstatements after the development is complete.
- The cumulative effect of the HGV traffic associated with the construction of the wind farm causes some concern. I require further information relating to traffic movements.
- I have concerns regarding the 'C' Class road from Hawthornside to the B6399. This road is in a poor condition and excessive HGV's are likely to cause further damage. A survey this road prior to works commencing is required to agree its condition, a regime for routine maintenance during construction and for any permanent repairs to be carried out after the works are complete. This route may also require the installation of passing places and strengthening depending on the level of traffic anticipated.
- The indicative abnormal load route causes some concern. There may be significant tree loss which would have to be considered and any mitigation works required confirmed.
- Depending on the route chosen, works to accommodate the abnormal loads may require planning permission. Once the source and size of the turbine components have been confirmed, swept path analysis drawings of areas of concern must be submitted and any remedial works confirmed. A drive thru of the proposed route must be undertaken with The Roads Planning Service to confirm areas of concern and agree remedial works.
- Several areas of the abnormal load route may require the removal of street furniture, including lighting. Where this is the case, the approval of all temporary lighting measures required for the duration of the abnormal load movements must be obtained.

**Environmental Health:** The applicants wish to avail themselves of the higher noise limit for financially involved properties. Documentation should be provided to demonstrate a financial involvement on the part of the occupiers of Lurgiescleuch.

**Re-consultation:** The applicants have submitted a noise assessment to quantify any unacceptable noise impact on local receptors. The assessment has been based on background noise data obtained at two survey locations. These sites have been used to derive noise limits as proxies for other noise sensitive premises in the vicinity of the development.

The Applicant's noise submission has been examined against the relevant Guidance – ETSU(R) 97 and the Good Practice Guide produced by the Institute of Acoustics.

The noise predictions for the development have been undertaken using the recommended noise modelling methodology and correction factors.

Noise levels arising from the development have been calculated and a table of noise limits have been produced giving a maximum level for each identified receptor at each integer wind speed. Separate tables have been produced for Amenity Hours and Night Time. The Assessment has concluded that there are no nearby existing or consented wind energy development with which cumulative noise impacts might arise.

The modelling and assessment work undertaken in connection with this application has demonstrated that there will be no unacceptable noise impacts on local receptors. The applicants have undertaken an assessment of the noise arising from construction of the scheme. No major noise impacts are predicted and it is intended to control noise impacts by condition via a Construction Method Statement.

The applicants have also assessed the likely impact of the development on private water supplies in the area. No adverse impacts have been identified

**Access Officer:** There are no claimed rights of way or core paths on this area of land. However, there are a number of paths outwith the site from which the turbines will be visible.

No consideration has been given to enhancing public access around the site on completion of the development. Tracks to accommodate construction or service vehicles should be available for all types of non-motorised recreational users (pedestrians, equestrians and cyclists) after construction is complete. Where any access tracks pass through or nearby the development area, it may be useful to provide boards on-site detailing development information and information on routes that are accessible and those routes that are temporarily closed due to development. This would assist safe management of the site.

Consideration should be given to creating a circular access route around the site utilising existing tracks, new access roads and where necessary creating a new link path between Turbines T4 and T7 suitable for use by walkers, cyclists and horse riders. Reasonable developer contributions for the promotion, maintenance and management of the wider path network in the local area should be agreed.

**Ecology Officer:** The site lies within 10km of Langholm-Newcastleton moors SPA (qualifying interest: Hen harrier) so there is potential connectivity with the SPA. However, the ornithological surveys identified very limited use of site by the SPA qualifying interest and therefore, no Likely Significant Effect is expected.

There is potential connectivity through drainage into the River Tweed Special Area of Conservation. The Harwood Burn and Slitrig burn are designated as part of the River Tweed. Measures to control pollution and sediment run off adopted under a Construction Environmental Management Plan (CEMP) are likely to ensure that there will be no significant adverse impact on the integrity of the River Tweed SAC.

A 50m no-development buffer zone around watercourses is proposed, however a number of turbines and infrastructure are located in this buffer zone and should be micro-sited outwith this zone. Micro-siting and drainage management plans will be required to avoid and mitigate impacts on Groundwater Dependent Terrestrial Ecosystems (GWDTE).

There would be permanent habitat loss. Any loss of woodland, trees and other habitat must be compensated. Replanting proposals will need to be complementary to Habitat Management Plan requirements.

Mitigation, including Construction Methods Statements, would minimise impacts on protected species and watercourses.

There is potential for displacement of breeding birds. Measures for breeding waders should be included in a Habitat Management Plan to compensate for loss/displaced habitat, in areas away from the turbine array. Breeding may be affected by construction. Supplementary checks and mitigation will be required prior to and during construction.

Potential impacts on goshawk are of serious concern. The development could have a significant adverse impact on this population. Post-construction monitoring should be a requirement with mitigation proposals including curtailment of wind turbine activity if monitoring identifies any subsequent significant adverse impact on the goshawk population.

**Re-consultation:** I welcome the applicant's commitment to produce and implement a Construction Environmental Management Plan, including a Species Protection Plan and to appoint an Ecological Clerk of Works to ensure compliance with the CEMP. An Ecological and Ornithological Monitoring Plan will be produced for breeding waders and protected species. A goshawk monitoring and mitigation plan will be submitted for approval prior to commencement. The developers also intend to submit a Compensatory Replanting Scheme and an amended Habitat Management Plan.

The proximity of certain turbines and infrastructure to watercourses is still a concern. Turbines T4, T6, T11 and T12 and associated access tracks are within buffer areas for GWDTEs and turbines 9 and 10 are located adjacent to potential GWDTEs.

**Archaeology Officer:** While I do not object to the application, I do have concerns that the development poses individual and cumulative significant adverse impacts of development and is therefore potentially contrary to Policy EP8 and ED9 of the Local Development Plan:

- The applicant has sought to avoid construction impacts to known heritage assets by design. However, there are a number of assets where avoidance is not possible and mitigation is proposed, which is considered to be an acceptable approach and can be secured by condition.
- There is potential for encountering previously unknown archaeological buried deposits outside those areas highlighted in the ES. It will be necessary to condition an agreed archaeological scheme of works to mitigate the loss and potential loss of known and unknown archaeological features.
- There are potentially significant indirect (setting) impacts to two undesignated and two designated heritage assets. The undesignated assets are probable prehistoric settlements on Ringlees Knowe and Wilson's Shoulder.
- There are significant impacts to the Scheduled Monuments of Penchrise Penfort and earthwork. The placement of a wind farm along the Pines Burn would impact the prehistoric element of the historic landscape. The high visibility of the wind farm from Penchrise Pen will distract and have a dominating tendency over that landscape. The experience of the landscape will be greatly affected visually. The wind farm would also introduce large-

scale industrial elements on the fringes of an historic landscape, which is generally agrarian, with small-scale built structures, and developed as such over millennia.

- These moderately significant impacts are potentially contrary to Policy ED9, as the justifications for development in this location may not outweigh the moderate significant effects on monuments of national cultural significance and their settings.
- From Penchrise Pen fort and settlement the proposed development would be seen in combination with the developments at Birneyknowe and Wauchope Forest West and East. The Birneyknowe wind farm would occupy the line of site and key setting relationships between Penchrise Pen and the Scheduled Monuments on Rubers Law and Bonchester Hill, whilst the proposed development would sit behind key relationships with prehistoric settlements in the Slitrig Valley. It would sit in front of the Wauchope wind farm to the east. The addition of a wind farm at Pines Burn, with its individually moderate significant impacts, would increase the sense of enclosure by wind energy development to the east from Penchrise Pen and add to the distraction and dominance of turbines within and on the edges of key setting relationships. The sense of Penchrise Pen as a dominant historic landscape element would also be increasingly illegible when viewed from Rubers Law and Bonchester Hill. The cumulative impact if both Birneyknowe and Pines Burn were they to be consented is potentially major.
- There can be no mitigation for these impacts, however there are potential enhancement measures that can increase the appreciation, experience and understanding of assets and their historic landscape context and this can be secured by a condition.

**Re-consultation:** The SEI sets out a number of refutations to my original comments, which I stand by. It does add an assessment of the setting impacts to the Shankend Viaduct.

**Forward Planning:** SPP supports all forms of sustainable development which includes promotion of renewable energy and the protection of the environment. The Council continues to support this principal. However, SPP also states that whilst supporting renewable energy this should not be at any cost. It should be the right development in the right place.

Policy ED9: Renewable Energy Development in the Local Development Plan 2016 lists a number of material considerations including landscape and visual impacts, cumulative impact.

The Ironside Farrar Landscape Capacity and Cumulative Impact Study (July 2013) is referred to within policy ED9 and is therefore a material consideration to this application. The site falls within the Landscape Character Area defined as "Southern Uplands with Scattered Forests – Cauldcleuch Head Group". The Study states that there is capacity for large and very large turbines in the more elevated upland areas where topographical containment reduces intervisibility. The Study does not identify turbines of the scale proposed and it is therefore the duty of the applicants via the development management process to show the turbines can satisfactorily be accommodated in the landscape.

### **Statutory Consultees**

**SEPA:** Object. Serious concerns regarding the lack of information, assessments, mitigation and contradictory information on:

- The proximity of the development to watercourses;
- New crossings and culverts proposed for watercourses;
- Flood risk:
- Drainage, excavated water from foundations and surface water runoff:
- Borrow pits;
- Peat probing for areas of infrastructure;
- Pollution risk, the concrete washout area and wheel-washing facility;
- Control for dust.
- Water supply for the development and the identification of and mitigation to protect private water supplies;
- Waste and the restoration of the borrow pits:
- Impact on Groundwater Dependent Terrestrial Ecosystem (GWDTE):
- · Forestry felling.

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# Re-consultation: Maintain their objection:

- Clarification is required on the temporary pumping of watercourses and any abstraction and discharge;
- Object to the proximity to watercourses and the lack of information on drainage.
- A CEMP will cover details on wheel washing, dust suppression, cable crossings and pollution prevention;
- Further detail on the borrow pits and restoration needed;
- A private water supply risk assessment is required;
- Concerned about the proximity of some turbines to watercourses;
- Adequate treatment and management of dirty water from excavations;
- Details of drainage and track design are required;
- Impact on Groundwater Dependent Terrestrial Ecosystem (GWDTE);
- An Ecological Clerk of Works is required to assess areas of felling for springs or flushes and proposed infrastructure will be micro-sited to minimise direct effects on them.

**Re-consultation:** Withdraw our objection, provided that a condition is attached that a robust CEMP is agreed, in consultation with SEPA, before construction begins onsite. This would include pollution prevention measures.

The revised layout demonstrates that T1 and its laydown area, T4 and T6 are now located outwith the 50m buffer for nearby watercourses. No micro-siting should be allowed for turbines that takes them closer to watercourses. The temporary pumping of watercourses has been clarified. The revised layout allows us to withdraw our objection on the grounds of impact to ecology.

**Historic Environment Scotland:** We note that the Environmental Statement identifies significant adverse impacts on the setting of Penchrise Pen, fort (Scheduled Monument, Index no. 2296) and Penchrise Pen, earthwork (Scheduled Monument, Index no. 3365) and also considers that there is potential for adverse impacts on the setting of Bonchester Hill, fort (Scheduled Monument, Index no. 2173) and Rubers Law, fort and Roman signal station (Scheduled Monument, Index no. 2129).

We do not, however, consider that these impacts raise issues of national significance such that we would object and are unable to suggest any practical mitigation in this instance. Nevertheless, we remain concerned about the growing cumulative impacts of wind farm development on the setting of scheduled monuments in this area, especially Bonchester Hill, fort. The proposals do not raise historic environment issues of national significance and therefore we do not object.

# **Scottish Natural Heritage:**

- A degree of containment means that some mid-range views of blades and blade tips only will be visible.
- The development would be a prominent addition to the southern skyline from some of the more settled and transitional landscapes around Hawick and from the key hilltops of Bonchester Hill and Rubers Law (the turbines are markedly "stacked" in rows from Rubers Law).
- The Southern Upland Hills where the proposal is sited form an enclosing edge to the more settled and transitional landscapes to the north. Given the size of the turbines, the perceived scale of these hills will be reduced. These scale effects would diminish the prominence of the Maiden Paps and the perceived prominence of Bonchester Hill.
- Cumulatively, if all the proposed schemes are consented there is the potential for wind farm development to become a characterising feature of the area between Hawick and the Southern Upland ridges.
- The proposal is likely to have a significant effect on the brook lamprey and Atlantic salmon qualifying interests of the River Tweed Special Area of Conservation due to potential construction-related pollution. An Appropriate Assessment and Habitats Regulation Appraisal are required.
- Other natural heritage interests of international importance of the River Tweed Special Area of Conservation (sea lamprey, water crowfoot habitat and otter) will not be adversely affected. To help reduce residual impacts on the water environment the proposal should be undertaken in accordance with a detailed CEMP.
- The mitigation proposed for birds and other species should be implemented. Pre-construction surveys for otters, badgers and red squirrel are required and a Species Protection Plan prepared.
- A Decommissioning and Restoration Plan is required.

# **RSPB:** No objections but raise the following issues:

- Works undertaken during the breeding season should be preceded by checking surveys to ensure that there are no active nests on or close to the development site. Any such nests located should be included in an appropriate buffer and remain undisturbed until the chicks have fledged or any nesting attempts are otherwise concluded.
- The nearest traditional goshawk breeding territory is far enough away from the development site to make significant disturbance of the nest unlikely. Nevertheless, a survey should be carried out prior to construction works commencing to ensure that there is no nesting activity closer to the development site. A 500 m buffer between the nest and any construction works during the breeding season should be adequate to mitigate for goshawks. The predicted collision risk mortality is a concern. The applicant should be required to submit further reasoning and support for their

- assessment and conclusion that the predicted level of goshawk mortality is not significant.
- Prior to any felling of conifer plantation trees a survey should be undertaken
  to determine if any crossbills are breeding. An appropriate barrier should
  then be established around nests and remain until nesting has been
  completed.
- We welcome the proposal to provide nesting baskets for long eared.
- Whilst wet modified bog/blanket bog may be degraded, opportunities should be taken to restore it as part of a Mitigation/Habitat Management Plan.
   Works/infrastructure should be positioned so as to avoid the bog habitat.
- The removal of 2.41ha of recently planted broadleaf woodland should be compensated for.

**Joint Radio Company:** This proposal is cleared with respect to radio link infrastructure operated by Scottish Power and Scotia Gas Networks. JRC does not foresee any potential problems based on known interference scenarios and the data provided.

**NERL:** The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

**Edinburgh Airport:** This development is outside of our consultation zone so no objections.

**Scotways:** There are no rights of way within the site other than those formed by public roads. Turbines should be set back a minimum distance equivalent to the height of the blade tip from roads or rights of way. The cumulative impact of proposed wind farms in the area is a concern.

**Forestry Commission Scotland:** Support the solution proposed for compensatory planting on site and would ask that an appropriate condition is placed on any consent requiring the developer to deliver an agreed scheme on-site within an agreed timescale.

**Ministry of Defence:** Objects. The site is in the vicinity of sites used by the RAF Spadeadam electronic warfare tactics facility and the development may cause unacceptable interference to threat radars at these sites, especially at Wigg Knowe. Turbines 1, 3, 5, 6, 8, 9, 11 and 12 will be detectable by and will cause inacceptable interference with operational threat radar systems employed at Larriston Fell. If the developer can overcome these issues then the turbines should be fitted with aviation safety lighting.

**Re-consultation:** The applicant has agreed to mitigate the effects upon the threat radar, contained within a management plan; the turbines would be stopped for prearranged periods when the threat radar sites are to be used. This can be secured by a condition and the objection is withdrawn. The turbines should be fitted with aviation safety lighting.

**Scottish Water:** There are no Scottish Water drinking water catchments or water abstraction sources which are designated as Drinking Water Protected Areas in the local area.

### Southdean Community Council: Object:

- Landscape and visual impact including aviation lighting;
- Cumulative impact;
- Construction traffic, disturbance, use of third party land;
- Impact on residential amenities;
- Adverse portrayal of the local area, which indicates little understanding of the local communities:
- The suggested long terms benefits would do little to rectify the extensive problems portrayed in the application;
- The Shared Ownership Scheme is an inappropriate return for the scale of investment required given the current financial profile of the Community Council.

# Re-consultation: Object.

- A number of issues previously raised have not been addressed (though the issue of aviation lighting has been removed). In addition to the above concerns, the impact of the development on any future Scottish Borders National Park and visibility from the proposed extension of the railway from Hawick to Carlisle need to be considered;
- Economic returns have not been properly assessed and the developer has not provided any evidence of reduced costs in a post subsidy environment. The development would add to the total amount of renewable energy generation, but by a relatively small amount. Improved insulation, a reduction in fuel poverty and the exploration of Biofuel would not have the same adverse effect on the landscape.

# Second Response:

- The feasibility study has now been published for the Scottish Borders National Park and this should be taken into consideration in assessing this application;
- The Council's Landscape Architect fails to refer to the Ironside Farrar landscape capacity report 2016. In this version the location of Pines Burn is only deemed to have low capacity for turbines up to 120 metres high and the proposal is for turbines significantly higher than this. The Supplementary Planning Guidance is delayed beyond the suggested date given by the Scottish Government and its delay is significantly disadvantaging communities. The Draft SPG should be advanced as a priority before any consideration is given to the various schemes currently in the planning system.

# Third Response:

The application must be assessed against the relevant policies, which includes the Draft Supplementary Planning Guidance on Renewable Energy, which incorporates the Ironside Farrar Study 2016 and Scottish Natural Heritage Siting and Designing Wind Farms in the Landscape Version 3 February 2017, which have both been used to assess the Barrel Law wind farm application by the Council's Landscape Architect. The applicant has also referred to the 2016 Ironside Farrar Report.

# **Denholm Community Council:** Object:

- Traffic during construction, disruption and damage to the road network;
- Visual impact including aviation lighting;
- · Impact on residential amenities;
- Adverse portrayal of the local area and population within the application, which indicates little understanding of local communities;
- The suggested long terms benefits would do little to offset the negative impact on the local economy;
- The Shared Ownership Scheme is viewed with scepticism as there is little prospect of a significant take-up of such an offering from within the local community. A more direct benefit scheme for the local communities is preferred to a select wealthy few with adequate assets for investment;
- Cumulative impact.

# **Re-consultation:** Object. In addition to the above:

- The new proposed transport route has now changed considerably and will still
  cause disruption. There are still unresolved issues regarding the suitability of
  the route from Hawick to Kirkton to the site. If the plan reverts to one of
  bringing these loads through Denholm village, then the impact would be
  unacceptable;
- The reduction in height will have no impact on the detrimental visual impact of the development.

# Hawick Community Council: Object:

- Visual impact;
- Impact on tourism businesses;
- Construction traffic and disruption;
- Cumulative impact.

**Re-consultation:** Object to the revised proposal and reiterate the above concerns.

# Hobkirk Community Council: Object:

- The application has underestimated the environmental effects;
- The development need to be considered as permanent as it is likely to continue after the 25 years specified;
- There is no mention or calculation of how this would reduce the claimed CO2 savings. The CO2 emissions need to be offset against the energy used in manufacture and transport of turbines;
- Landscape and visual impacts, including the height of the turbines, lighting, the impact on views from Rubers Law and Bonchester Hill and impact on cycle routes;
- Cumulative impact with Birneyknowe and Wauchope and Newcastleton wind farm proposals;
- Socio-economic benefits are vague and aspirational, the community benefit proposed is not significant, the shared ownership scheme is not viable, the economic benefits do not outweigh the environmental consequences and the local profile is used to justify the need for the development.

- Impact on tourism;
- Impact on residential amenities;
- Traffic during construction, disruption and damage to the road network.

**Re-consultation:** Object. Whilst we welcome the reduction in the height of some turbines to remove the need for aviation lights, the overall reductions are not sufficient to remove our objection. In addition to the above:

- The proposal is contrary to policy as the draft Supplementary Planning Guidance states there is no capacity for turbines over 120m high in this area;
- There would be an unacceptable impact on residential amenities for those closest to the site.

# **Upper Teviotdale and Borthwick Water Community Council:** Object:

- Visual impact;
- Question the economic benefits;
- Traffic and turbine routes;
- Question whether the scheme is required to meet the 2020 renewable energy targets.

**Re-consultation:** Object. We do not accept that some recent changes to the height of turbines means that these turbines have become acceptable.

### **Newcastleton Community Council:** Raises concerns regarding:

- Increase in traffic and disruption;
- Derogatory comments about local communities within the Socio–Economic Statement;
- The Community Benefit Fund is impractical until detailed discussions with all the communities have been had:
- The developer needs to provide financial support so that independent advice can be given prior to the community contemplating shared ownership; any benefit needs to be shared widely by the community not just amongst investors who can afford to take risk.

### **Re-consultation:** Object. In addition to the above:

- The route of the proposed turbines to the site needs further consideration and clarification;
- Impact of the development on the potential extension to the Borders railway;
- The Community benefit Fund should be secured by way of a planning condition to ensure it is delivered in the long term. Without provision of a costed plan and detail regarding the financial setup, the shared ownership is not viable and puts too great a financial risk and burden on the community.

No responses have been received from the Association for the Protection of Rural Scotland, Scottish Badgers, the Scottish Wildlife Trust and the Upper Liddesdale and Hermitage Community Council.

#### **DEVELOPMENT PLAN POLICIES:**

# SESplan Strategic Development Plan June 2013:

Policy 1B: The Spatial Strategy: Development Principles

Policy 10: Sustainable Energy Technologies

# **Local Development Plan 2016:**

PMD1: Sustainability

PMD2: Quality Standards

ED9: Renewable Energy Development HD3: Protection of Residential Amenity

EP1: International Nature Conservation Sites and Protected Species

EP2: National Nature Conservation Sites and Protected Species

EP3: Local Biodiversity

EP5: Special Landscape Areas

EP7: Listed Buildings EP8: Archaeology

EP9: Conservation Areas

EP10: Gardens and Designed Landscapes EP13: Trees, Woodlands and Hedgerows

EP15: Development Affecting the Water Environment

IS2: Developer ContributionsIS5: Protection of Access Routes

IS8: Flooding

### OTHER PLANNING CONSIDERATIONS:

# Adopted SBC Supplementary Planning Guidance (SPG) and other documents:

- Renewable Energy 2007
- Wind Energy 2011
- Biodiversity 2005
- Local Landscape Designations 2012
- Developer Contributions 2011
- Visibility Mapping for Windfarm Development 2003
- Ironside Farrar Study on Wind Energy Consultancy Landscape Capacity and Cumulative Impact 2013
- Borders Landscape Assessment 1998 Ash Consulting Group

# **Scottish Government Policy and Guidance:**

- National Planning Framework for Scotland (3) June 2014
- Scottish Planning Policy (SPP) June 2014

### **Scottish Government On-line Advice:**

- Circular 1/2017 Environmental Impact Assessment (Scotland) Regulations
- PAN 60 Planning for Natural Heritage 2008
- PAN 51 Planning, Environmental Protection and Regulation
- PAN 1/2011 Planning and Noise
- PAN 2/2011 Planning and Archaeology
- PAN 1/2013 Environmental Impact Assessment

- Onshore Wind Turbines 2014
- Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Development 2016

### **Historic Environment Scotland Publications:**

Historic Environment Scotland Policy Statement June 2016

### **SNH Publications:**

- Siting and Designing Windfarms in the Landscape Version 3 February 2017
- Visual Representation of Wind Farms Version 2.2 February 2017
- Assessing the Cumulative Impact of Onshore Wind Energy Developments 2012
- Spatial Planning for Onshore Wind Turbines Natural Heritage Considerations 2015

### Other Publications:

ETSU-R-97: The Assessment and Rating of Noise from Wind Farms

### **KEY PLANNING ISSUES:**

- Land use planning policy;
- Landscape and visual impacts, including landscape character and visual impacts, arising from turbines and infrastructure;
- Cumulative landscape and visual impacts with other wind energy developments;
- Physical and setting impacts on cultural heritage assets;
- Residential amenity including noise impacts and shadow flicker
- Ecological, ornithological and habitat effects;
- Impact on road safety and the road network;
- Impacts on the public path network and public access on accessible land;
- Economic benefits attributable to the scheme:
- Benefits arising from renewable energy provision.

### **ASSESSMENT OF APPLICATION:**

### **Planning Policy**

Scottish Government policy, regional strategic policy and local planning policy and guidance all support renewable energy, including wind farms, provided that there are no unacceptable and significantly adverse environmental impacts.

SPP sets out a Spatial Framework for determining appropriate sites for wind farms. The site falls within Group 3: Areas with potential for wind farm development where wind farms are likely to be acceptable, subject to detailed consideration against identified policy criteria.

SESplan policy 10 requires Local Development Plans to set a framework for the encouragement of renewable energy proposals that aims to contribute towards achieving national electricity and heat targets and taking into account economic, environmental and transport considerations.

The proposal has to be assessed against a number of Local Development Plan policies. Policy ED9 deals with renewable energy development and supports commercial wind farms where they can be accommodated without unacceptable significant adverse impacts or effects, giving due regard to relevant environmental, community and cumulative impact considerations. Proposals will be approved provided that there are no significant effects that cannot be satisfactorily mitigated. Where mitigation is not possible, the development will only be approved if the Council is satisfied that the wider economic, environmental and other benefits outweigh the potential damage arising from it. The policy contains a number of criteria by which to assess the proposal.

The Council's Supplementary Planning Guidance on Wind Energy 2011 contains a Spatial Strategy and the site is located predominantly within an area Minor Constraints with areas of Moderate Constraints (Lower) and a small area of Moderate Constraints (Higher). Rubers Law, Brinkstone Hill and Minto Hill are identified as being iconic viewpoints.

Having assessed the proposal against national and local spatial framework considerations for wind farm development, the site is not located within an area which would automatically preclude the development of a wind farm. The precise impacts of the proposal must be assessed against the relevant Local Development Plan policies to establish whether the proposal is acceptable.

# **Landscape and Visual Impacts**

Policy ED9 requires consideration of the landscape and visual impacts, including the effects on wild land and the cumulative impact, taking into account the Ironside Farrar Landscape Capacity and Cumulative Impact Study July 2013 as well as guidance from Scottish Natural Heritage.

### Landscape Character

In terms of the Borders Landscape Assessment 1998 the site lies within Landscape Character Type (LCT) 4CHG: Southern Uplands Type with Scattered Forest Cauldcleuch Head group. This is an upland landscape characterised by large-scale, rolling, heather moorland and grassland covered hills, with locally prominent scattered large coniferous plantations.

Internal visibility is intermediate. External visibility is high and visual sensitivity is high due to the important roads used by local, business and leisure traffic in the adjoining valleys (A7).

The site is close to the adjoining LCT 5WN: Southern Uplands Type: Forest Covered: Wauchope/ Newcastleton, also an 'Upland' type, and is less than 5km from a number of 'River Valley' and 'Upland Fringe' character types, which all lie in an arc to the north.

The site is not one of the nationally designated areas of Wild Land. The site is outwith the Teviot Valley Special Landscape Area. Although there is some public support for the designation of a Scottish Borders National Park, there are no policies within the Local Development Plan relating to a national park and so this cannot be taken into account in assessing this application.

# Landscape Capacity

As mentioned above, the Ironside Farrar Landscape Capacity and Cumulative Impact Study July 2013 is referred to within policy ED9 and is therefore is a material consideration in respect of this application. This uses the Borders Landscape Assessment to assess the suitability of each landscape type for differing turbine typologies.

LCT 4CHG (Cauldcleuch Head Group) is classified as having a 'medium capacity' for Very Large turbines, defined as being over 100m high to blade tip. The supporting text states that there are no landscape designations or long distance footpaths and the area is sparsely populated and has a low intervisibility. There is capacity for large and very large turbines in the more elevated upland areas where topographical containment reduces intervisibility. Although not a landscape designation, the southern area of this LCA contains a large SSSI and SPA which may impact on potential turbine developments. Consideration must also be given to the setting of Hermitage Castle.

The site is located in the northern area of 4CHG and is distant from the SSSI, SPA and Hermitage Castle. It is concluded that the Capacity Study therefore offers some support for a wind farm with 'very large' turbines over 100m high at this location.

Advice from the Forward Planning Section is that the application should be assessed against the Ironside Farrar Landscape Capacity and Cumulative Impact Study July 2013 as this is specifically referred to in policy ED9, which has been adopted by the Council. The 2016 report forms part of the draft Supplementary Planning Guidance on Renewable Energy, which has been out to public consultation but has not been approved by Full Council or adopted by the Council and so carries little weight in the determination of this application.

# **Theoretical Visibility**

In assessing effects on landscape character, the Council's Landscape Architect advises that it is helpful to focus on those areas which are affected directly by the development i.e. focus on those areas which have a clear view of the development.

The Zone of Theoretical Visibility (ZTV) Maps (Figures 2.1 to 2.7 of the SEI) illustrate the potential visibility of the turbines to hub height and blade tip height within 10km, 20km, 30km and 35km zones and the extent of landform containment. The main visual impacts can be expected at the closer range and so the assessment focusses on the 10km range. Figures SEI 2.7 to 2.9 show how visibility interacts with the various LCTs; large structures can affect the character of the landscape within the receiving LCT and those adjoining where there are clear views.

The ZTVs show a slight reduction in the extent of theoretical visibility for the revised scheme. Viewpoint (VP) 1: Langburnshiels and VP3: south of Langburnshiels on the B6399, to the south of the site and VP6: A6088 to the west of Bonchester Bridge and VP8: A6088 to the east of Bonchester Bridge, indicate that there would be some localised effects on landscape character. A swathe of land running north east to south west to the north of Hawick would also be affected, as seen in VP23: Minto Hills, VP16: A7 at Hawick and VP25: B711 at Roberton. However, the Council's Landscape Architect does not consider these to be character changing at such a distance (over 10km). Overall, the site is considered to be relatively well contained.

# Landscape Impact

The receiving landscape is defined as a large scale, unenclosed upland type that lacks detailed features and can more easily accommodate large structures such as wind turbines. The receiving landscape is therefore suitable in terms of scale. However, a number of smaller scale upland fringe and river valley landscapes are located to the north east, within close range of the site and would experience significant landscape effects.

The site does not have any special landscape designations. It is a self-contained valley that is not readily visible from most external directions due to the screening provided by higher ground to the north west and south east. An exception is the area to the north east where the landform opens out where the Pines Burn flows toward Bonchester Bridge and then joins other burns to become the Rule Water. To the north east of Bonchester Bridge, the valley is included within the Teviot Valley Special Landscape Area and there are scenic views from there back towards the site. These include VP11: Bonchester Hill and VP17: B6357 at Swinnie where the development would be seen as a dominant element in the landscape, breaking the skyline, albeit from distance. The development would also be prominent when viewed from the B6399 Newcastleton to Hawick road to the south (as seen in VP3). However, from other directions, the impacts on landscape and scenic quality are limited. In terms of perspective, the development is likely to make some of the surrounding hills appear smaller and less dramatic.

The Council's Landscape Architect advises that the general appearance of the turbine array avoids the problems of 'stacking' that affect some sites and there seems to be a degree of coherence to the site layout from the various angles of view. The proposed height of the turbines, though slightly reduced, is still a concern. At the revised height of 149.9m to blade tip the turbine height far exceeds anything approved within the Scottish Borders. Focal features in the landscape, such as Maiden Paps to the south west and Bonchester Hill to the north east, would be diminished in the landscape by the competing presence of very large turbines. It is considered that a smaller turbine of more conventional size seen elsewhere in the Borders would be less dominating because the scale differences would be less marked.

The reduction in the height of the turbines has removed the need for aircraft navigation lights at night and the consequent effects on "dark skies".

Scottish Natural Heritage has not objected to the application. They acknowledge the degree of containment available but consider that the proposal would have adverse landscape effects on localised parts of the LCT. The wind farm would be a prominent addition to the skyline when viewed from Hawick, from some hill tops, such as Rubers Law and Bonchester Hill, and the lowland area to the north east around Bonchester Bridge. In addition the development would have a regimented appearance, with significant stacking, when viewed from Rubers Law.

Scottish Natural Heritage has also expressed concern regarding the height of the turbines, reducing the perceived scale, prominence and expansiveness of the Southern Upland Hills and the prominence of Maiden Paps and Bonchester Hill. In addition, the development would form a prominent new focal feature at the head of the Rule Valley, causing a significant and adverse indirect effect upon parts of the wooded upland fringe Rule Water unit, a LCT that is more sensitive to wind energy development, given its smaller scale and more complex pattern.

In summary, the receiving landscape is characterised as large scale, upland and is acceptable in scale and provides a degree of containment. The height of some of the turbines has been reduced and this has lessened the landscape impacts somewhat and removed the need for night time aviation lighting. However, the scale of the turbines would dominate the landscape from certain viewpoints, there would be a degree of diminution of local features and there are local issues in relation to landscape character within the smaller upland fringe and river valley landscapes. The Ironside Farrar Landscape Capacity and Cumulative Impact Study July 2013 offers some support for the development of very large turbines, however the turbine heights would aggravate the landscape impacts. Taking this assessment into account and the lack of objections from statutory consultees, there are insufficient reasons to sustain a recommendation for refusal on landscape grounds.

# Visual Impacts – Roads and Paths

The ZTV confirms the extent of theoretical visibility of the wind farm and viewpoints have been selected based on this to illustrate the visual impact of the development from various high sensitivity receptors. The ES has considered a number of receptors, with significant effects identified in locations close to the site.

The A7 is a major tourist route through the Borders. The ZTV demonstrates that the wind farm would potentially be visible from sections of the A7 north of Hawick within the 20km range. VP16: A7/Galalaw roundabout indicates that the tips of 3 turbines would be visible at a distance of 10.4km away, which is not significant, though the ZTV indicates increased visibility further north of this point.

The A6088 runs from the A68 to the south of Carter Bar to the south east of Hawick. A number of photomontages have been provided for this stretch of road. Carter Bar itself has been identified in the SPG on Wind Energy as being of significant strategic importance and is safeguarded with a 7km buffer. The ZTV indicates that there would be no visibility from Carter Bar. Within the 10km range, the wind farm would be visible to varying degrees along the A6088 to the north east of the site, most notably VP8: to the east of Bonchester Bridge, which indicates open views of the development where all 12 turbines would be visible, breaking the skyline at a distance of 6.4km, and VP6: west of Bonchester Bridge, which shows that two turbines would be partially screened by topography and vegetation but the remainder would be visible at a distance of 6.1km with no containment, breaking the skyline.

The B6399 Newcastleton to Hawick road is to the west of the site. The ZTV indicates that the main visual impact would be close to the site at Langburnshiels, as shown in VP1 and VP3, where the wind farm would be seen as a dominant feature in the landscape when travelling north and the visual effects would be significant. Beyond this the topographical containment of the site limits views to turbine tips.

The B6357 links the A68 with Bonchester Bridge. The ZTV indicates visibility for a short section of this route between Swinnie and Wester Fodderlie. VP17 Swinnie shows the wind farm at a distance of 11.3km. This is a smaller scale landscape and the turbines would be seen as a dominant skyline feature between Bonchester Hill and Rubers Law, although there would remain higher landforms within that view.

There are a number of core paths, public rights of way, promoted paths and permissive paths within the 20km range. These are linked to several significant hills within the area.

The Boders Abbeys Way is a strategic long distance footpath and links Hawick, Selkirk and Jedburgh. The path to the north west of Hawick passes Drinkstone Hill, an iconic viewpoint in the SPG on Wind Energy. VP20 shows a degree of screening from the landform and vegetation, with hubs and blades visible at a distance of 12.5km, some breaking the skyline above the Border ridge. VP21 at Black Law 13km to the north east shows all the turbines would be visible but at a distance, with the hills beyond acting as a partial backdrop.

There is a Core Path (126), promoted paths and rights of way to the west of the site centred on the Shankend Viaduct, Penchrise Hill, Greatmoor Hill and Maiden Paps. VP4: Penchrise Pen and VP9: Greatmoor Hill demonstrates that significant visual effects would occur for walkers in these locations, with visibility increasing as walkers climb to higher ground.

To the north east there is a right of way from Highend and a promoted path from Forkins and Crown Plantation linking with the A6088 and Bonchester Bridge. There would be significant effects on walkers from sections of these paths.

Border Loop Cycle Route passes through Roberton and Hawick through to Bonchester Bridge via the minor road between the B3699 and the A6088 at Hawthornside. VP2: junction of the B6399 and the minor road indicates that visibility is limited to 2 blade tips due to the landform and vegetation. The ZTV indicates that the 12 turbines would be visible at Hawthornside but in VP5 visibility is restricted by forestry plantations to hubs and blades only at a distance of 4.6km.

The summit of Rubers Law, within the Special Landscape Area, is accessed by a number of paths and the summit offers open, panoramic views popular with walkers. The nearest turbine would be 9.5km south west from the summit. All turbines are visible, as seen in VP14, and the majority would break the skyline due to their scale. The wind farm would be highly visible in this open landscape when viewed from this iconic viewpoint, but it is felt that the layout of the turbines would result in a condensed form of development that is limited in extent in a wider varied landscape when viewed from Rubers Law.

Bonchester Hill, also within the Special Landscape Area, is part of a circular promoted path within 7.1km of the nearest turbine. The visual impacts are similar to those from Rubers Law and significant effects are acknowledged in the ES (VP11).

Minto Hill is 14km from the nearest turbine and another iconic viewpoint accessible to the public. VP23 indicates that the some topographical screening is available to partially screen the turbines, but due to their height, they break the skyline, though at a distance.

Although the Eildon Hills are 26km from the site they are of significant strategic importance in terms of the SPG and are within the National Scenic Area and so the impact of the development on the visitor's appreciation of these hills must be considered. VP29 indicates that there would be long distance views of the turbines.

Scottish Natural Heritage advises that the proposal is located within an area of the Southern Uplands that forms a continuous and prominent horizon to the more settled and transitional landscape to the north. The scale of the development means that it will be a fairly prominent addition to the skyline in views from the north. They accept that the landform provides a degree of containment and in some mid-range views only the blades or blade tips will be visible (VP12: Hermitage Hill, VP13: minor road to the north of Chesters and VP16: north of Hawick) but consider that the proposal

would be highly prominent in some localised views, with the most significant effects from the B6399 (VP1 and 3 at Langburnshiels) and from key hilltops (VP11: Bonchester Hill and VP14: Rubers Law) and from settled lowland locations to the north east (VP8: A6088 to the east of Bonchester Bridge and VP17: B6357 at Swinnie). SNH concludes that the development would be fairly eye-catching addition to these scenic rural views, with almost entire visibility of the turbines.

In summary, significant visual impacts have been identified in certain locations, generally closer to the site, where there are clear views of the proposed development. From certain receptors the development would appear dominant on the skyline. However, overall, it is not considered that the visual effects from the more sensitive receptors are so significant that the application becomes unacceptable.

# Visual Impacts – Residential Receptors

Scottish Planning Policy advocates the identification in Local Development Plans of an area not exceeding 2km around settlements as a community separation for consideration of visual impacts. There are no settlements within 2km of the nearest turbine, though there are a number of settlements within 5km.

Hawick is located 7.8km from the site. The ZTV indicates that theoretical visibility is predicted on the higher parts of the north western edge of the town. VP16: A7 north of Hawick shows that there would be no significant visual impact.

Bonchester Bridge would be 4.6km from the nearest turbine and the ZTV indicates visibility would be limited to small areas to the west of the settlement with the majority of the settlement falling outwith the ZTV. The visual impact on Bonchester Bridge itself would not be significant.

The ZTV indicates that there would be no visibility from Kirkton, Denholm, Hobkirk or Chesters.

There are 11 residential properties within 2km of the site. The ES contains an assessment on the impact of the development on the visual amenities of occupiers of these properties and photomontages from some of them. The consideration is whether any significant effects are of such intensity that they result in serious harm to living conditions. The informal 'Lavender Test' is often applied to assess the impacts on residential receptors and whether the turbines would appear so unpleasant, overwhelming and oppressive that the dwelling would become an unattractive place to live.

Wyndburgh Cottage (VP: R2) and Slitrig Cottage are to the north of the B6399 and 1.3km from the nearest turbine. The development would be very prominent when viewed from the north elevations and garden ground of these properties due to their height and proximity. The ES classifies the effect as major and significant.

There are two properties within the converted steading at Langburnshiels (Coopers Cleuch and the Steading). These would be 1.3km from the turbines. Landform would limit visibility to partial views and the effect would be major/moderate.

Langburnshiels Farmhouse (VP: R3) is situated on elevated ground above the B6399 and the garden ground is 1.2km from the nearest turbine. The development would appear very prominent in north easterly views only from the property and the effect would be major/moderate.

Shankendshiels is to the south of the B6399 and is 1.4km to the south west of the nearest turbine. Views of the development would be filtered by vegetation and landform and the effect would be major/moderate.

Berryfell Farmhouse and Cottages (VP: R4) are 1.7km from the site and intervening landform would restrict views to one hub and blade tips. Penchrise Peel would be 1.8km from the site and views of hub and blade tips would be visible due to intervening landform. Significant effects are also acknowledged in the ES for dwellings at Harwood Burn, Hawthornside and properties along the A6088 south of Bonchester Bridge (VP8).

Shankend Signal Box, Shankend Station Cottage, Shankend Farm, Pleakknowe would be screened from the development by intervening landform and the effects would not be significant. Lurgiescleuch (VP: R1) is a financially involved property on the Harwood Estate.

The ES concludes that the turbines would not be present in such numbers, size an proximity that they represent an unpleasantly, overwhelming or oppressive presence in the main views from these dwellings that they would become an unattractive place to live.

The conclusions of the ES assessment are accepted. However, the proximity and scale of some of the turbines to the properties at Langburnshiels is a concern. Whilst the properties would not become unattractive places to like, the outlook would be significantly affected in certain directions. It is acknowledged, however, that the primary outlook of these properties is southward, away from the proposed turbines. On balance, therefore, it is considered that the effects are not at such a level or affecting a great number of properties that the application should be refused.

### Visual Impact – Associated Infrastructure

The associated works would include crane hardstandings, a new vehicular access from the B6399, site tracks, construction compounds and two borrow pits. The application site is within a shallow basin benefitting from screening provided by the higher ground to the north west and south east. The associated structures would not be prominent within a forest context that benefits from land form screening.

It is the intention that the majority of the associated infrastructure is to be removed either at the end of the construction period or the operational life of the wind farm. To avoid unnecessary lasting impacts suitably worded conditions can agree the eventual removal of these structures.

### Cumulative Landscape and Visual Impacts

Policy ED9 requires all cumulative landscape and visual impacts to be considered and recognises that in some areas the cumulative impact of existing and consented development may limit the capacity for further development.

A development of this size can be considered to be character changing, in terms of landscape, where the turbines become a dominant feature, especially within a 10km range. The southern Borders are relatively undeveloped in terms of wind farms.

The only operating wind farm is Langhope Rig, 19.5km to the north west. No Cumulative ZTV has been provided and the ES states that there is limited visibility.

This is confirmed by the viewpoint analysis, where both wind farms are visible from Greatmoor Hill (SEI Fig 2.47c VP22) at a distance.

Windy Edge is the only consented scheme within the 30km range. The Cumulative ZTV (SEI Fig 2.40) indicates small areas of joint visibility to the south due to the two schemes being separated by higher ground. This is confirmed by the viewpoint analysis within the SEI. This means that there will be relatively little cumulative impact but there would be a greater degree of sequential cumulative impact as the observer moves out of the "viewshed" of one scheme into the viewshed of the other.

Birneyknowe wind farm is currently the subject of a public inquiry as the Council objected to the Section 36 application and is 4.9km to the north of the site. The ZTV indicates large areas of intervisibility with the Pines Burn proposal within the 10km range and intervisibility to the north west and east within the 20km range and so there would be a high potential of cumulative impact between the two schemes. The Council Landscape Architect advises that this area covers a greater number of sensitive receptors and so the coincident cumulative impact is potentially the most significant. This is demonstrated by SEI 2.43b VP4: Penchrise Pen, Fig 2.45a VP9: Greatmoor Hill and Fig 2.46a: VP14 Rubers Law.

Three separate turbine arrays are proposed at Wauchope East, Wauchope West and Newcastleton Forest. A scoping opinion has been issued based on 90 turbines at 132m but this may change and the exact number, height and layout of the turbines are not yet known. Based on the scoping opinion information, the closest proposal to this site would be Wauchope West at a distance of 3.2km on the other side of Wyndburgh Hill. The ZTV indicates a wide range of cumulative effects with the three large arrays that form the Wauchope and Newcastleton scheme. SEI Fig 2.44a VP8 indicates the cumulative impact from the A6088 east of Bonchester Bridge in relation to Pines Burn and Wauchope West. VP9 from Greatmoor Hill and VP14 demonstrate the cumulative impact of Birneyknowe, Pines Burn and Wauchope East and West.

The Energy Consents Units has also received a request to provide a Scoping Opinion for a windfarm at Cliffhope consisting of 46 turbines with a maximum tip height of 200m on land approximately 2km south east of Pines Burn. Given the scale, height and distance from Pines Burn, there will likely be further significant cumulative effects which have not been considered in the ES or FEI due to the very recent submission.

Clearly cumulative impact is a complex issue based on hypothetical outcomes but there is the potential for a major change in landscape character over a significant part of the area between Hawick and the Border ridge, if all the proposed schemes are developed.

In terms of cumulative visual effects, the Landscape Architect advises that VP14: Rubers Law indicates potential significant cumulative effects on Rubers Law from all the proposed wind farms, including Pines Burn. The various proposals would create significant coincidental and sequential visual impacts from a variety of viewpoints but this will depend on which developments are approved and implemented.

The impact on residential properties within 2km is assessed in the ES and there would be significant cumulative visual effects for a number of residents at Hawthornside and to the south of Bonchester Bridge if the Pines Burn, Birneyknowe and the Wauchope/Newcastleton scheme are developed.

Scottish Natural Heritage advises that the proposal has the potential to cause adverse cumulative landscape and visual effects in conjunction with the Wauchope and Birneyknowe schemes. In particular they are concerned about the cumulative landscape effects on the skyline of the Southern Upland Hills and the potential major landscape change should all schemes be consented and wind farm development would become a characterising feature in the landscape between Hawick and the Southern Upland ridges.

From Rubers Law (VP14) SNH considers that Pines Burn appears more regimented, with significant stacking and overlapping of blades whereas the other proposals respond better to the underlying landform, in terms of scale, arrangement and with less overlapping, back dropped below the skyline. From Penchrise Pen Pines Burn would consolidate or intensify the band of wind farm development in conjunction with the Wauchope schemes.

In summary, there is a wide range of potential scenarios for combined and sequential cumulative effects with other wind farm developments. The cumulative impact, should all the developments be approved and implemented, is a significant concern. However, given the lack of existing or consented windfarms in the vicinity and the fact that the most advanced case (Birneyknowe) is only at appeal stage, it is not considered that cumulative impact, in itself, is a reason to reject the application.

### **Forestry**

The site contains 292 hectares of forestry and woodlands. A total of 23.24 hectares would be removed to accommodate the development and 24.31ha would be removed from areas around the turbines to ensure stability of surrounding trees. Compensatory replanting extending to 43.08 hectares is proposed on land within the planning boundary

Forestry Commission Scotland has requested that a condition requiring the developer to deliver an agreed scheme of compensatory replanting on-site within an agreed timescale that matches the amount of forestry to be felled.

The Council's Landscape Architect has no objections to the tree felling provided that all the compensatory planting takes place within the applicant's landholding. He advises that there is an opportunity to use this planting to provide mitigation of the visual impacts of the development on specific receptors, especially the residential properties at Langburnshiels.

# **Turbine Micro-siting**

The ES states that a micro-siting allowance of 50m is appropriate for turbines and associated infrastructure. The issue of micro-siting has to be fully considered and a degree of flexibility is suitable to allow for further investigation into ground conditions but this has to be balanced against the visual impact of the change.

SEPA requires that no turbines or supporting infrastructure are sited closer to watercourses or Groundwater Dependent Terrestrial Ecosystem (GWDTEs). Given the proximity to residential properties, the turbines should not be permitted to move closer to these properties. A micro-siting condition would require the applicant to undertake wireframe analysis of any micro-siting requirements to illustrate that each turbine's revised position can be tolerated in the landscape without increased adverse visual impacts.

### **Residential Amenity**

Policy ED9 requires the impacts on communities and individual dwellings (including visual impact, residential amenity, noise and shadow flicker to be considered. Policy HD3 states that development that is judged to have an adverse impact on the amenity of residential areas will not be permitted. Members will note that visual impacts have been considered earlier in the report.

### Noise

Environmental Health has been consulted to provide advice on whether noise generated by the proposed development, either individually or cumulatively in association with noise from other neighbouring schemes will have an unacceptable impact on residential receptors.

A noise assessment has been carried out by the applicant and is contained within the ES. This is based on background noise data obtained at two survey locations. These sites have been used to derive noise limits as proxies for other noise sensitive premises in the vicinity of the development.

Environmental Health has confirmed that this has been undertaken in accordance with guidance produced by the Department of Trade and Industry in the Assessment and Rating of Noise from Wind Farms (ETSU(R) 97) and the Good Practice Guide produced by the Institute of Acoustics. The noise predictions for the development have been undertaken using the recommended noise modelling methodology and correction factors.

Noise levels arising from the development have been calculated and a table of noise limits has been produced, giving a maximum level for each identified receptor at each integer wind speed. Separate tables have been produced for day time and night time. The Assessment has concluded that there are no nearby existing or consented wind energy developments with which cumulative noise impacts might arise.

Environmental Health has confirmed that the modelling and assessment work undertaken in connection with this application has demonstrated that there will be no unacceptable noise impacts on local receptors from the operation of the wind farm.

The ES states that construction will take place between 7.00 and 18.00 Monday to Friday and 8.00 to 14.00 on Saturdays and not at all on Sundays and Bank Holidays, unless agreed. The applicant has undertaken an assessment of the noise arising from construction of the scheme, including traffic movements within the site and along local roads. This concludes that no major noise impacts are predicted and it is intended to control noise impacts by condition via a Construction Method Statement. A condition will also control the timing of construction activity.

It is recommended that the standard condition adopted by the Scottish Government is used to control noise levels from the development. If planning permission is granted it would then be the responsibility of the developer/operator to comply with these noise limits. The condition sets out a requirement on the operators of the development to appoint independent noise consultants to record noise emissions from the development and to investigate and resolve any noise issues and complaints to the satisfaction of the Planning Authority.

### Shadow Flicker

The ES includes an assessment of the potential for shadow flicker effects. This was based on a study area comprising of a distance of 10 rotor diameters from each turbine (1168m).

One property was identified within the potential shadow flicker zone, Lurgiescleuch. This property is financially involved in the wind farm. At Shankend Station shadow flicker would occur for 19 minutes a day/1.58 hours per year. The ES concludes that this is not significant but recommends that if complaints are received these are investigated and appropriate mitigation occurs. This would be controlled by a planning condition. There is no potential for significant cumulative effects in respect of shadow flicker.

# **Cultural Heritage Impacts**

The application has to be assessed against policy ED9 in respect of impacts on the historic environment and policy EP8 which seeks to protect the appearance, fabric or setting of Scheduled Monuments or other national, regional or local significance. Development proposals that adversely affect such sites would only be permitted if it is demonstrated that the benefits of the proposal clearly outweigh the heritage value of the asset and there are no reasonable alternative means of meeting the development need. The supporting text of Policy EP8 establishes the aim of the policy is to give Scheduled Ancient Monuments and any other archaeological or historic asset or landscapes strong protection from any potentially damaging development.

The Council's Archaeology Officer does not object to the application but does have concerns that the development poses individual and cumulative significant adverse impacts of development for the reasons set out below.

# Direct Impacts on Known and Unknown Assets

The Council's Archaeology Officer advises that the applicant has sought to avoid construction impacts to known heritage assets by design. However, there are a number of assets where avoidance is not possible and mitigation is proposed, which is considered to be an acceptable approach and can be secured by condition.

However, there is potential for encountering previously unknown archaeological buried deposits outside those areas highlighted in the ES. In particular, the proximity of turbines 1 and 2 and their infrastructure to the Fernilees Sike, which would have been an important source of water for the residents of the Ringlees settlement and would, therefore have seen activity along the sike and the lands around it. There is a low to moderate potential of encountering features or deposits associated with this activity. This is in addition to the likely early post-medieval enclosed fields nearby. It will be necessary to condition an agreed archaeological scheme of works to mitigate the loss and potential loss of known and unknown archaeological features.

### Setting

There are potentially significant indirect (setting) impacts to two undesignated and two designated heritage assets. The undesignated assets are probable prehistoric settlements on Ringlees Knowe and Wilson's Shoulder.

The development will also pose significant impacts to the Scheduled Monuments of Penchrise Pen fort and earthwork. The closest turbine is 4.5km away (VP4). It is clear that the settlements to the east of the Pen and into the Slitrig Water (including the Blakebillend fort and the settlements at South Berryfell) form a coherent unit of likely contemporary late prehistoric or early medieval settlement. The settlements in the Slitrig valley are visible from the Pen, and from the settlements the Pen appears as a very prominent peak jutting from a gap between White Hill and Burnt Craig. These coherent relationships form a critical aspect of the historic landscape thus increasing its importance, as does the Slitrig Water, which is a key setting element in all settlements within its valley. The placement of a wind farm along the Pines Burn would impact this prehistoric element of the historic landscape. While there is some topographic containment and separation afforded by Pike Fell, the high visibility of the wind farm from Penchrise Pen will distract and have a dominating tendency over that landscape. It is accepted that the understanding and appreciation of key setting relationships between sites within this will remain, however, the experience of the landscape will be greatly affected visually. The wind farm would also introduce largescale industrial elements on the fringes of an historic landscape, which is generally agrarian, with small-scale built structures, and developed as such over millennia.

These moderately significant impacts are potentially contrary to Policy ED9, as the justifications for development in this location may not outweigh the moderate significant effects on monuments of national cultural significance and their settings. There must be clarity that the benefits outweigh the moderate adverse impacts to the monuments on Penchrise Pen and their setting, that there is no alternative means of meeting development need and that these impacts are acceptable. It is not clear from the ES that the policy tests have been met. However, it is accepted that the development is on the margin of acceptability in its own right and on balance can be supported.

### **Cumulative Impacts**

From Penchrise Pen fort and settlement the proposed development would be seen in combination with the developments at Birneyknowe and Wauchope Forest West and East (VP 4). The Birneyknowe wind farm would occupy the line of site and key setting relationships between Penchrise Pen and the Scheduled Monuments on Rubers Law and Bonchester Hill, whilst the proposed development would sit behind key relationships with prehistoric settlements in the Slitrig Valley. It would sit in front of the Wauchope wind farm to the east.

In respect of Birneyknowe, the Council has objected to the Section 36 application on the basis of significant impacts to the settings of forts on Penchrise Pen, Rubers Law and Bonchester Hill due to the wind farm intervening in key setting relationships between the forts. The addition of a wind farm at Pines Burn, with its individually moderate significant impacts, would increase the sense of enclosure by wind energy development to the east from Penchrise Pen and add to the distraction and dominance of turbines within and on the edges of key setting relationships. The sense of Penchrise Pen as a dominant historic landscape element would also be increasingly illegible when viewed from Rubers Law and Bonchester Hill. The cumulative impact if both Birneyknowe and Pines Burn were they to be consented is potentially major. Not only would there be a major impact to key setting relationships from the Birneyknowe scheme, the addition of Pines Burn would fundamentally alter the baseline historic landscape context from an organically developed agrarian one to one that is increasingly industrialised. The addition of further wind farms to the east (at Wauchope) would only add to this sense. If the Birneyknowe application is

consented there would be a moderate to major, and therefore unacceptable, significant cumulative impact. There can be no mitigation for these impacts, however there are potential enhancements that can increase the appreciation, experience and understanding of assets and their historic landscape context and this can be secured by a condition.

Historic Environment Scotland has considered the impact of the development on Schedule Ancient Monuments in the surrounding area and considers that the turbines would have a significant visual impact on views from Penchrise Pen fort and earthworks, especially to Blakebillend fort, with all turbines visible behind the fort resulting in moderate significant effects to the setting of the monuments. All twelve turbines would be visible in views to the south west of Rubers Law fort and Roman signal station (VP 14); the nearest turbine is 9.5km away. Given the scale of the turbines, the commercial forestry providing little screening but given the wide panoramic views afforded to this monument, Historic Environment Scotland class the significant effect as minor. A similar conclusion was reached for Bonchester Hill (VP 11 – the nearest turbine is 7.1km away). They conclude that these impacts do not raise issues of national significance and so do not object to the application. They do, however, express concern about the growing cumulative impacts of wind farm developments on the setting of Ancient Monuments in this area.

In summary, the direct impacts on known and unknown archaeological assets highlighted by the Council's Archaeology Officer are acknowledged and it would be desirable to secure a scheme of archaeological works to mitigate the loss and potential loss of these archaeological features. The significant adverse effects on the setting of Penchrise Pen fort and earthworks Scheduled Ancient Monuments, especially the cumulative impact should the Birneyknowe wind farm be approved on appeal, have been raised by Historic Environment Scotland and the Council's Archaeology Officer. However, neither has objected to the proposal. On balance, it is felt that the proposal would not have a major significant adverse impact on the Scheduled Ancient Monuments or other heritage assets to warrant a recommendation of refusal of the application. Conditions would secure the mitigation and enhancement measures.

# Listed Buildings

Policy EP7 seeks to safeguard the character, integrity and setting of Listed Buildings. There are no Listed Buildings within the site and the only one in the surrounding area is the Shankend Viaduct, a visually prominent historic asset (a category B Listed Building) that dominates the historic landscape in close proximity to the application site. The SEI includes an assessment of the setting impacts to the Shankend Viaduct.

The Shankend Viaduct is situated 0.3km to the west of the site boundary and 1.2km from the nearest turbine. The main views of the viaduct are from the B6399 and public rights of way, which include the path from the B6399 westwards around the viaduct and the path southwards to Penchrise Peel.

The ZTV (Figure 2.5) indicates that there are no views of the wind farm from the B6399 or from the viaduct itself due to the topography of the intervening area. Blade tips would be visible on higher elevations of Penchrise Peel. Taking this into account and the distance from the listed structure to the nearest turbine it is considered that the development would not have a significant detrimental impact on the historic qualities of the viaduct or on its setting or appreciation.

The proposal would not affect any Conservation Areas or Gardens and Designed landscapes.

# **Ecology, Habitat and Hydrology Impacts**

The proposal has to be assessed against policies EP1, EP2 and EP3, which seek to protect international and national nature conservation sites, protected species and habitats from development. Policy ED9 requires consideration of the impacts on natural heritage, hydrology and the water environment.

The ES contains an assessment of the likely impacts on ecology, the water environment, water supplies and flooding and puts forward mitigation measures. Further information and clarification is contained within the SEI.

The proposed development is not located within any international or nationally important areas of nature conservation or known protected species. The site is within 10km of Langholm-Newcastleton moors SPA (qualifying interest: Hen harrier) so there is potential connectivity with the SPA and there is potential connectivity through drainage and watercourses into the River Tweed Special Area of Conservation (SAC).

Scottish Natural Heritage advised that the proposal is likely to have a significant effect on the brook lamprey and Atlantic salmon qualifying interests of the River Tweed SAC due to potential construction-related pollution and requested an Appropriate Assessment and Habitats Regulation Appraisal to determine if the development would have an adverse impact on the integrity of the SAC, to be carried out by the Council, as the competent authority. The Council's Ecology Officer has carried out an Appropriate Assessment and concluded that the proposal would not adversely affect the integrity of the River Tweed SAC. Scottish Natural Heritage has been forwarded a copy of this Assessment and has made no further comment.

A Construction Environmental Management Plan (CEMP) is required containing measures to reduce residual impacts on the water environment and to control pollution and sediment run-off, which would ensure that there will be no significant adverse impact on the integrity of the River Tweed SAC.

SEPA and the Council's Ecology Officer have expressed concerns regarding the impact of the development on the water environment. Although a 50m nodevelopment buffer zone around watercourses is proposed in the ES, a number of turbines and infrastructure would be located within this buffer zone. In addition, turbines and infrastructure would be sited within a highly dependent Groundwater Dependent Terrestrial Ecosystem (GWDTEs). The layout has now been amended to reposition turbines 4, and 6 outwith the 50m buffer zone for watercourses and turbine 11 moved further away. The laydown area for turbine 1 has been repositioned so that most is outwith the 50m buffer. SEPA has now withdrawn their objection. A Drainage Management Plan will be required to avoid and mitigate impacts on GWDTEs.

The proposal would result in a loss of habitat, such as coniferous plantations, grassland, blanket bog and broad leaf woodland. Habitat loss should be compensated for. Replanting proposals and a Habitat Management Plan are required and this should incorporate proposals for habitat replacement, enhancement and ecology benefits.

Good practice regarding stand-off distances to habitat features used by bats would minimise impacts on bats. Pre-construction supplementary surveys and mitigation will be required for otter, badger and red squirrel. There is potential for displacement of breeding birds from the wind farm development. Supplementary checks and mitigation will be required prior to and during construction.

The potential impacts on goshawk are of serious concern. The predicted loss of a bird every 3-4 years could have a significant adverse impact on the regional goshawk population. Post-construction monitoring is required and mitigation proposals including curtailment of wind turbine activity should be submitted if monitoring identifies any subsequent significant adverse impact on the Border Hills Natural Heritage Zone goshawk population. This can be covered by condition.

SEPA originally objected to the proposal due to a lack of information on a number of issues, including flood risk, borrow pits, the impact on private water supplies, peat and waste management. SEPA was consulted on the SEI and has withdrawn their objection, subject to conditions regarding the submission of a CEMP and a private water supply risk assessment, no micro-siting of turbines closer to watercourses and details of the borrow pits.

In terms of flood risk, the site is not at risk from a flood event with a return period of 1 in 200 years. However there are a number of small watercourses are located within the site may be at risk of flooding. Overall, there is minimal flood risk to the site so the Council's Flood Protection Officer has no objections to the proposal on the grounds of flooding provided that her requirements regarding hard surfaces, silt traps to minimise the amount of sediment entering the watercourse, culverts and water crossing are agreed. SEPA has withdrawn their objection on flood risk grounds.

A Decommissioning and Restoration Plan is required to ensure appropriate decommissioning and restoration of the site at the end of the operational life of the wind farm.

### **Traffic and Road Safety**

The ES states that traffic to the site during the construction phase (12 - 18 months) would consist of construction workers (between 15 and 30 personnel), HGVs carrying construction materials, plant and machinery and abnormal loads vehicles carrying the wind turbine components. The estimate for the number of two way HGV trips is 8,074 during the construction period and 40 - 50 two way car and LGV trips per day. Abnormal loads carrying the turbine components would occur over three months and equate to 252 two way trips in total.

The ES accepts that some driver delay is likely. This would inevitably occur at the entrance to the site from the public road, road junctions and through towns along the route. The ES classes this as not significant. The ES has also assessed the cumulative impact of traffic associated with other wind farm developments in the area and concludes that these will not be significant as construction phases would not overlap.

No route was specified for the delivery of the turbine components to the site in the ES. The SEI confirms that the most likely route would be south on the A68 to St Boswells, the A699 to Selkirk, southbound on the A7 to Hawick, the A698 to the junction with the A6088, the A6088 to Hawthornside and the C class road to the junction with the B6399. Upgrading works would be required along this route to facilitate the abnormal loads. A new access wide enough to accommodate the

abnormal load vehicles would be formed from the B6399 into the site with 60m visibility splays in both directions. The existing track would be upgraded.

The Roads Planning Service has no objections to the principle of a wind farm in this location but require a number of issues to be addressed. A Traffic Management Plan (TMP) is required specifying in more detail the delivery route, vehicle numbers anticipated for HGV deliveries, any ancillary works required to the public road network and repairs/reinstatements once the development is complete.

The cumulative effect of the HGV traffic associated with the construction of the wind farm causes some concern. Efforts to try and split the access routes would help to alleviate concern, but this can only be achieved to a certain extent. It is also dependant on the source of stone, either from borrow pits within the site, which would reduce vehicle movements, or elsewhere. Once the details of the stone source have been confirmed, the Roads Planning Service requires further information relating to traffic movements.

The use of the 'C' Class road from Hawthornside to the B6399 is also a concern. This road is in a poor condition and excessive HGVs are likely to cause further damage. The road must be surveyed prior to works commencing, its condition, a regime for routine maintenance during construction and for any permanent repairs to be carried out after the works are complete, agreed.

Depending on the route chosen, works to accommodate the abnormal loads may require planning permission. Once the source and size of the turbine components have been confirmed, swept path analysis drawings of areas of concern must be submitted and any remedial works specified. A drive through of the proposed route would be required, with appropriate members of the Roads Authority to confirm areas of concern and agree remedial works.

Several areas of the abnormal load route may require the removal of street furniture, including lighting. Temporary lighting measures would be required for the duration of the abnormal load movements and consent from the Council is required.

The abnormal load route causes some concern as the upgrading works to facilitate vehicle movements may result in tree and hedge removal, impacting on the visual amenities of the area. A condition is required to secure replacement planting.

# **Public Access and Footpaths**

Policy ED9 requires the impact on public access to be considered. There are no claimed rights of way or core paths on this area of land that would be affected by this development.

The Council's Access Officer advises that there is no consideration given by the applicant to enhancing public access around the site on completion of the development. Tracks to accommodate construction or service vehicles should be available for all types of non-motorised recreational users (pedestrians, equestrians and cyclists) after construction is complete. Where any access tracks pass through or nearby the development area, it may be useful to provide boards on-site detailing development information and information on routes that are accessible and those routes that are temporarily closed due to development. This would assist safe management of the site. Consideration should be given to creating a circular access route around the site utilising existing tracks, new access roads and where necessary

creating a new link path between Turbines T4 and T7 suitable for use by walkers, cyclists and horse riders. These issues can be secured by condition.

The Access Officer recommends that developer contributions should be sought for the promotion, maintenance and management of the wider path network in the local area. However, this is not considered to be appropriate as this would affect land outwith the applicant's control and is not a direct requirement of the development.

# Ministry of Defence/Aviation

The Ministry of Defence originally objected to the application. Turbines 11 and 12 would be 12.6km from, detectable by and would cause unacceptable interference to the ATC radar used by RAF Spadeadam at Deadwater Fell. The radar is required to maintain awareness of aircraft movements for air traffic controllers and is necessary to achieving a safe and efficient air traffic service. The turbines would have a significant and detrimental effect on operations of air traffic services at RAF Spadeadam. The proposed development is also in the vicinity the Wigg Knowe threat radar facility, used by RAF Spadeadam electronic warfare tactics facility and may cause inacceptable interference to threat radar sites. Threat radars are employed during military exercises to train pilots against missile threats.

The Ministry of Defence maintained their objection in response to the SEI, adding that the development would also cause interference to the effective operation of the threat radar systems deployed at Larriston FeII.

The applicant has been in discussions with the Ministry of Defence to discuss mitigation to address these impacts and the Ministry of Defence has now withdrawn their objection. Mitigation has been agreed for the threat radar sites in the form of a management plan which will define protocols so that the wind turbines will be stopped for specific, pre-arranged periods when the threat radars are in use. This can be controlled by a condition.

The applicant has advised that this shut-down period is likely to be for a maximum of 240 hours per year. This would result in a 2.5% reduction in output from the wind farm (29,969 homes powered with the radar mitigation compared to 30,754 without). There would also be a 2.5% reduction in carbon dioxide savings (54,022 tonnes compared to 55,436 tonnes without).

Aviation warning lighting is required and will also be secured by a condition.

### **Economic and Socio-Economic Benefits**

Wind energy developments can make an important contribution to the UK economy. Net economic impact is a material planning consideration and local and community socio-economic benefits include employment, associated business and supply chain opportunities.

SPP states that where a proposal is acceptable in land use terms, and consent is being granted, local authorities may wish to engage in negotiations to secure community benefit. The Scottish Government's Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments advises that where local benefits are proposed through a shared ownership opportunity and there is an intention to secure a partner organisation, this may be taken into account in determining a planning application.

The ES outlines the socio-economic benefits of the development and these include:

- Direct and indirect job creation during the construction and operational phase of the wind farm and the use of local contractors;
- Investment in Scottish Borders economy and the payment of business rates:
- £180,000 per annum Community Benefit Fund for community projects;
- Shared Ownership Scheme allowing the community to invest in the project and receive an annual return.

It is accepted that some jobs would be created during construction if the developer uses local firms and businesses and there is the potential for employees to use local facilities and services, such as accommodation and shops. Following the construction phase a relatively low level of employment would be generated, though this would rise again during decommissioning.

The socio-economic benefits of the proposed wind farm development can be taken into account as a material consideration in assessing this application. It is accepted that there may be some economic gain. However, the potential for such benefits and thereby economic growth in the consideration of energy proposals must be balanced against any potential adverse environmental impacts that are likely to occur. In this case the claimed benefits do not result in any material impact on the acceptability of the scheme when taking all factors into account.

One issue raised in the representations received is the impact of the wind farm development on tourism. Tourism is a well-established and valuable contributor to the Borders economy based on the scenery and the natural and cultural environment. Whether the wind farm would deter visitors from this area is difficult to quantify. There is no evidence that the proposal would have significantly adverse effects on tourism in the Borders. Taking this into account, the potentially detrimental impact on the local tourism economy cannot be used as a reason to oppose this proposal.

### Renewable Energy benefits

NPF3 is clear that the planning system must facilitate the transition to a low carbon economy and facilitate the development of technologies that will help to reduce greenhouse gas emissions from the energy sector. The efficient supply of low carbon and low cost heat and electricity from renewable energy sources are vital to reducing greenhouse gas emissions and can create significant opportunities for communities. SPP contains the following targets:

- 30% of overall energy demand from renewable sources by 2020;
- The equivalent of 100% of electricity demand from renewable sources by 2020.

SPP supports the development of a diverse range of electricity generation from renewable energy technologies. Policy ED9 requires consideration of the scale of contribution to renewable energy generation targets and the effect of greenhouse emissions.

This proposed development would have a total installed capacity of 36MW, producing electricity equivalent to the domestic power consumed by 36% of households in the Borders and saving 50,000 tonnes of carbon emissions each year,

which would make a moderate contribution to the provision of sustainable renewable energy.

### **CONCLUSION**

The Council remains supportive of wind energy development, as reflected in its policies and guidance. As required by policy considerations, the benefits of energy production and the dis-benefits of environmental impacts must be carefully weighed against one another.

In terms of landscape and visual impact, the scale of the turbines would dominate the landscape from certain viewpoints, there would be a degree of diminution of local features and there are local issues in relation to landscape character. However, the site does benefit from a degree of containment, limiting the visual impact to some extent, and the turbine height has been reduced, removing the requirement for MOD aviation lighting. The Ironside Farrar Landscape Capacity and Cumulative Impact Study July 2013 offers some support for the development of very large turbines, however the turbine heights do aggravate the landscape and visual impacts. The cumulative impact of the various wind farms proposed for this area, should all the developments be approved and implemented, is a complex picture, based on hypothetical outcomes. The basic conclusion is that there is potential for a major change in landscape character over a significant area between Hawick and the Border ridge and coincident and sequential visual impacts from a variety of viewing positions. However, this is dependent on what is approved and implemented. Taking into account the limited number of receptors that would be significantly affected by the development and the lack of objections from statutory consultees, there are insufficient reasons to sustain a recommendation for refusal on landscape and visual grounds.

The direct impacts on known and unknown archaeological assets are highlighted in the report and a condition would secure a scheme of archaeological works to mitigate the loss and potential loss of these archaeological features. The significant adverse effects on the setting of Penchrise Pen fort and earthworks Scheduled Ancient Monuments, especially the cumulative impact should the Birneyknowe wind farm be approved on appeal, have been raised by Historic Environment Scotland and the Council's Archaeology Officer. However, neither has objected to the proposal. On balance, it is felt that the proposal would not have a major significant adverse impact on the Scheduled Ancient Monuments or other heritage assets to warrant a recommendation of refusal of the application.

Subject to the compliance with the recommended conditions, the proposed development would not generate noise levels that would detrimentally impact on the residential amenity of any of the sensitive receptors. In addition, the proposal does not give rise to any significant biodiversity impacts that cannot be mitigated against and this can be controlled by conditions. Finally, in relation to road and traffic impacts, no specific concerns have been raised by the Roads Planning Service that cannot be addressed by conditions.

It is accepted that the proposal would make a moderate contribution towards energy targets. Taking the above conclusions into account, it is considered that the detrimental impacts of the proposal are not so significant as to warrant refusal.

#### RECOMMENDATION BY CHIEF PLANNING OFFICER:

I recommend the application is approved subject to the following conditions and informative:

# **Commencement and Conformity**

- 1. 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 submitted to the Planning Authority no later than one calendar month after that date. Reason: To define the duration of the consent.
- 2. The development hereby permitted shall not be carried out otherwise than in complete accordance with the application, drawings, Environmental Statement and Supplementary Environmental Information (as supplemented or amended by any further or additional environmental information) and other documentation lodged in support of the application and approved by the Planning Authority.
  - Reason: To ensure that the development is carried out in accordance with the approved details.
- 3. This consent may not be assigned without the prior written authorisation of the Planning Authority. The Planning Authority may authorise the assignation of the consent (with or without conditions) or refuse assignation 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 Planning Authority in writing of the name of the assignee, principal named contact and contact details within 14 days of written confirmation from the Planning Authority of an assignation having been granted.

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

### Micro-Siting

- 4. All wind turbines, buildings, masts, areas of hardstanding and tracks shall be constructed in the location shown on Drawing Reference Figure 3.1a 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 Scottish Natural Heritage), micro-siting is subject to the following restrictions:
  - a. No wind turbine foundation shall be positioned higher, when measured in metres Above Ordinance Datum (Newlyn), than the position shown on Figure 3.1a unless a scheme of details, including wirelines showing the alternative positioning of the turbine have been submitted to and approved in writing by the Planning Authority (in consultation with Scottish Natural Heritage and SEPA) and thereafter no development shall take place except in strict accordance with the approved details;
  - No wind turbine, building, mast, access track or hardstanding shall be moved more than 50m from the position shown on the approved plan (Figure 3.1a);
  - c. No micro-siting shall take place within areas of peat of greater depth than the original location;

- d. No micro-siting shall take place within areas hosting Ground Water Dependent Terrestrial Ecosystems;
- e. No micro-siting shall take turbines closer to watercourses or residential properties (not financially involved with the development);
- f. All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works (ECoW).

No later than one month after the date of First Commissioning, an updated site plan 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, and to restrict micro-siting to a reasonable distance to ensure that any movement of turbines or infrastructure does not give rise to significant change to the layout and appearance of the development.

# **Design and Operation of Turbines**

5. No development shall commence until full details of the actual wind turbines (including, but not limited to, the power rating and sound power levels, the size, type, external finish and colour, which should be non-reflective pale grey semi-matt) and all associated apparatus have been submitted to and approved in writing by the Planning Authority. The development to be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned, unless otherwise agreed in writing by the Planning Authority.

Reason: To ensure that the turbines are compatible with the locality in terms of their appearance and noise output, to protect residential and visual amenities.

# **Substation and Ancillary Development**

6. No development shall commence until final details of the siting, external appearance, dimensions and external materials of the substation building, associated compounds, any construction compound boundary fencing, external lighting and parking areas have been submitted to and approved in writing by the Planning Authority. The substation building, associated compounds, fencing, external lighting and parking areas shall be constructed in accordance with the approved details.

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

### Signage

7. Notwithstanding the provisions of the Town and Country Planning (Control of Advertisements) (Scotland) Regulations 1984 none of the wind turbines, buildings other structures, means of enclosure or plant shall display any name, logos, sign, lettering or other advertisement (other than health and safety signage) without the prior written approval of the Planning Authority.

Reason: To safeguard visual amenities.

### **Turbine Failure/Removal:**

8. In the event of any wind turbine failing to produce electricity supplied to the local grid for a continuous period of 12 months, not due to it being under repair or replacement, then it will be deemed to have ceased to be required, and unless otherwise agreed in writing with the Planning Authority, the wind turbine foundation to a depth of 1.2m below ground level, the wind turbine and its ancillary equipment shall be dismantled and removed from the site and the site restored to a condition to be agreed by the Planning Authority. The restoration of the land shall be completed within 6 months of the removal of the turbine, or any such longer period agreed by the Planning Authority. Reason: To safeguard against the landscape and visual environmental impacts associated with the retention of any turbines that are deemed no longer to be operationally required.

#### **Construction Hours**

9. Construction work which is audible from any noise-sensitive receptor shall only take place on the site between the hours of 07.00 to 18.00 on Monday to Friday inclusive and 08.00 to 14.00 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 concrete pours, 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 18.00 Monday to Friday and 08.00 to 14.00 on Saturdays, with no HGV movements to or from site taking place on a Sunday or on national public holidays. Reason: To safeguard residential amenity.

#### Noise

- 10. No development shall commence until a Construction Method Statement has been submitted to and approved in writing by the Planning Authority. The development then to be carried out in accordance with the agreed Statement. Reason: To safeguard residential amenity.
- 11. The rating level of noise emissions from the combined effects of the wind turbines forming part of the development (including the application of any tonal penalty) 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 consent. The turbines shall be designed to permit individually controlled operation or shut down at specified wind speeds and directions in order to facilitate compliance with noise criteria and:
  - a. The Company shall continuously log power production, wind speed and wind direction. These data shall be retained for a period of not less than 24 months. The Company shall provide this information to the Planning Authority within 14 days of receipt in writing of a request to do so;

- 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 emissions from the wind farm at the complainant's property. The written request from the Planning Authority shall set out at least the date, time and location to which the complaint relates and any identified atmospheric 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 emissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Planning Authority. The protocol shall include the proposed measurement location(s) where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise emissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Planning Authority under paragraph c above, and such others as the independent consultant considers likely to result in a breach of the noise limits;
- e. Where the property to which a complaint is related is not listed in the tables attached to this condition, 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 property for compliance checking purposes. The proposed noise limits are to be those limits selected from the tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's property. The rating level of noise emissions resulting from the combined effects of the wind turbines shall not exceed the noise limits approved in writing by the Planning Authority for the complainant's property;
- f. The Company shall provide to the Planning Authority the independent consultant's assessment of the rating level of noise emissions within 2 months of the date of the written request of the Planning Authority for compliance measurements to be made under paragraph e, unless the time limit is extended in writing by the Planning Authority. Certificates of calibration of the instrumentation used to undertake the measurements

- shall be submitted to the Planning Authority with the independent consultant's assessment of the rating level of noise emissions;
- g. Where a further assessment of the rating level of noise emissions from the wind farm is required, the Company shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph d above unless the time limit has been extended in writing by the Planning Authority.

Table 1 – Between 07:00 and 23:00 – Noise limits expressed in dB LA90,10 minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

Location (including coordinate		Standardised wind speed at 10 meter height (m/s) within the site averaged over 10-minute periods										
s)			<3	4	5	6	7	8	9	10	11	12
Lurgiescleuch	35519 7	60683 7	45. 0									
Langburnshiels	353411	60413 8	35. 0	35. 0	35. 0	35. 0	38.	41.	43.	44.	44.	44.
Slitrig Cottage	353576	60403	35. 0	35. 0	35. 0	35. 0	38.	41.	43.	44.	44.	44.
Wyndburgh Cottage	353622	60400 8	35. 0	35. 0	35. 0	35. 0	38.	41.	43.	44.	44.	44.
Shankendshiel	353323	60401 7	35. 0	35. 0	35. 0	35. 0	38. 2	41. 4	43. 7	44. 7	44. 7	44. 7
Home Covert	356235	60830 2	35. 0									
Harwood	356519	60831 1	35. 0									
Signal Box	352550	60555 2	35. 0	35. 0	35. 1	37. 2	39. 4	41. 1	41. 9	41. 9	41. 9	41. 9
Shankend Station	352400	60571 9	35. 0	35. 0	35. 1	37. 2	39. 4	41. 1	41. 9	41. 9	41. 9	41. 9
Shankend Farm	352323	60596 3	35. 0	35. 0	35. 1	37. 2	39. 4	41. 1	41. 9	41. 9	41. 9	41. 9

Table 2 – Between 23:00 and 07:00 – Noise limits expressed in dB LA90,10-minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

Location (including coordinate		Standardised wind speed at 10 meter height (m/s) within the site averaged over 10-minute periods										
s)			<3	4	5	6	7	8	9	10	11	12
Lurgiescleuch	35519	60683	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
· ·	7	7	0	0	0	0	0	0	0	0	0	0
Langburnshiels	353411	60413	43.	43.	43.	43.	43.	43.	43.	46.	47.	47.
· ·		8	0	0	0	0	0	0	9	5	2	2
Slitrig Cottage	353576	60403	43.	43.	43.	43.	43.	43.	43.	46.	47.	47.
		2	0	0	0	0	0	0	9	5	2	2
Wyndburgh	353622	60400	43.	43.	43.	43.	43.	43.	43.	46.	47.	47.
Cottage		8	0	0	0	0	0	0	9	5	2	2
Shankendshiel	353323	60401	43.	43.	43.	43.	43.	43.	43.	46.	47.	47.
		7	0	0	0	0	0	0	9	5	2	2
Home Covert	356235	60830	35.	35.	35.	35.	35.	35.	35.	35.	35.	35.
		2	0	0	0	0	0	0	0	0	0	0
Harwood	356519	60831	35.	35.	35.	35.	35.	35.	35.	35.	35.	35.

		1	0	0	0	0	0	0	0	0	0	0
Signal Box	352550	60555	43.	43.	43.	43.	43.	43.	43.	43.	43.	43.
		2	0	0	0	0	0	0	0	5	5	5
Shankend	352400	60571	43.	43.	43.	43.	43.	43.	43.	43.	43.	43.
Station		9	0	0	0	0	0	0	0	5	5	5
Shankend	352323	60596	43.	43.	43.	43.	43.	43.	43.	43.	43.	43.
Farm		3	0	0	0	0	0	0	0	5	5	5

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.

#### Shadow Flicker

1. No development shall commence until a written scheme has been submitted to and approved in writing by the Planning Authority setting out a protocol for the assessment of shadow flicker in the event of any complaint to the Planning Authority from the owner or occupier of a dwelling which lawfully exist or for which planning permission has been granted at the date of this permission. The written scheme shall include mitigation measures to alleviate any shadow flicker attributable to the development. Operation of the turbines shall take place in accordance with the approved protocol unless the Planning Authority gives its prior written approval to any variations.

Reason: To offset impacts of shadow flicker on residential amenity.

#### **Television interference:**

13. No development shall commence until a Television Reception Mitigation Plan has been submitted to and approved in writing by the Planning Authority. The Television Reception Mitigation Plan shall provide for a baseline television reception survey to be carried out prior to the installation of any turbine forming part of the development, the results of which shall be submitted to the Planning Authority. The approved Television Reception Mitigation Plan shall thereafter be implemented in full.

Any claim by any individual person regarding television picture loss or interference at their house, business premises or other building, made during the period from installation of any turbine forming part of the development to the date falling twelve months after the date of Final Commissioning, shall be investigated by a qualified engineer appointed by the developer/operator and the results shall be submitted to the Planning Authority. Should any impairment to the television signal be attributable to the development, the developer/operator 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.

# **Air Traffic Safety**

- 14. No development shall commence until the developer has provided written confirmation to the Planning Authority and the Ministry of Defence of the:
  - a. Anticipated date of commencement of each stage of construction;
  - b. The maximum height above ground level of construction equipment, each turbine and any anemometry mast and

c. The position of each turbine (in latitude and longitude).

The developer shall provide the Planning Authority and Ministry of Defence with details of any changes to this information as soon as reasonably practicable.

Reason: In the interests of aviation safety.

15. Prior to the erection of the first wind turbine a scheme of aviation lighting for the wind farm shall be submitted to and approved in writing by the Planning Authority in consultation with the Ministry of Defence. The turbines shall be erected with the approved lighting installed and the lighting shall remain operational throughout the duration of the consent.

Reason: In the interests of aviation safety.

#### **Threat Radar**

16. No development shall commence until a Radar Mitigation Scheme setting out measures to be undertaken to address the impact of the wind farm upon military testing and training, in particular, the operation of threat radar type equipment at the remote threat radar sites at Larriston Fell and Wigg Knowe and the military testing and training activities that utilise the radars, has been submitted to and approved in writing by the Planning Authority in consultation with the Ministry of Defence.

No turbines shall become operational until those measures within the Radar Mitigation Scheme have been fully implemented and evidence of this has been submitted to and approved in writing by the Planning Authority, in consultation with the Ministry of Defence

The development then to be operated fully in accordance with the approved Radar Mitigation Scheme for the operational life of the wind farm or during the time that the remote threat radar sites at Larriston Fell and Wigg Knowe are retained by the Ministry of Defence for the purposes of military testing and training.

Reason: To secure mitigation of impacts on the threat radar type equipment at the remote threat radar sites at Larriston Fell and Wigg Knowe and the military testing and training activities that utilise the radars.

#### Road Safety

- 17. No development shall commence until a Traffic Management Plan (TMP) has been submitted to and approved in writing by the Planning Authority. The TMP to include:
  - a. The detailed delivery route and vehicle numbers for all cars, HGV deliveries and abnormal loads associated with the development and measures to ensure that the specified routes are adhered to, including monitoring procedures;
  - Details of all ancillary works required to the public road network to facilitate deliveries, including all signage and lining arrangements, a programme and timescales for implementation and reinstatement proposals after the development is complete and a programme and timescales for completion;

- c. Road condition survey of the 'C' Class road from Hawthornside to the B6399 carried out prior to the development commencing and details of any upgrading (passing places and strengthening) and a regime for routine maintenance during construction of the development. Any remedial woks required as a result of damage/deterioration by construction traffic (to be highlighted in a post construction road condition survey) to be rectified at the expense of the developer after the development has been completed in accordance with an agreed timescale;
- d. Details of tree or hedge removal along the route for the abnormal loads and a scheme for replacement planting and a timescale for its implementation and completion;
- e. Swept path analysis drawings for agreed areas of concern along the route for the abnormal loads and remedial measures;
- f. Areas of the abnormal load route where the removal of street furniture, including lighting, is required and all temporary lighting measures required for the duration of the abnormal load movements;
- g. A detailed engineering drawing of the proposed access and visibility splays from the B6399;
- h. Name and contact details of a nominated person to whom any road safety issues can be referred.

The approved TMP thereafter to be implemented in full, unless otherwise agreed in advance in writing by the Planning Authority and all work within the public road boundary to be undertaken by a contractor first approved by the Council.

Reason: To ensure all construction traffic access the site in a safe manner and that any upgrading works or repairs to public roads are carried out timeously to the Council's specifications, in the interests of road safety.

#### Access Tracks

- 18. No development shall commence until details of the position, length, width, materials and drainage of the new and upgraded tracks within the site have been submitted to and approved in writing by the Planning Authority. The tracks then to be installed in accordance with the approved details. Newly formed hard surfaces should be attenuated to existing greenfield runoff rates. Reason: To safeguard areas of ecological interest, watercourses and visual amenities and to ensure there is no increased flood risk to downstream receptors within Hobkirk and Bonchester Bridge.
- 1. No development shall commence until details of all watercourse crossings, culverts and alterations to existing crossings (position and design) have been submitted to and approved in writing by the Planning Authority, in consultation with SEPA. These should be designed to convey the 1 in 200 year flow. The development then to be completed in accordance with the approved details. Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on the water environment and thereby

minimising residual impacts on the River Tweed Special Area of Conservation.

### **Public Access**

2. No development shall commence until a scheme for enhancing public access within the site upon completion of the development has been submitted to and approved in writing by the Planning Authority. This to include tracks used for construction or service vehicles and creating a new link path between Turbines T4 and T7 suitable for use by walkers, cyclists and horse riders, unless otherwise agreed in writing by the Planning Authority. Where any access tracks pass through or nearby the development area, sign boards to be erected detailing information on routes that are accessible and those routes that are temporarily closed due to construction.

Reason: To enhance public access and to assist with the safe management of the site.

# **Private Water Supplies**

19. No development shall commence until a Private Water Supplies Risk Assessment has been submitted to and approved in writing by the Planning Authority, detailing all mitigation measures to be delivered to secure 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 may be affected by the development. The Risk Assessment shall include water quality sampling methods and shall specify abstraction points. The approved method statement shall thereafter be implemented in full.

Reason: To maintain a secure and adequate quality water supply to all properties with private water supplies that may be affected by the development.

# **Borrow Pits**

- 20. No development shall commence until a site specific scheme for the working and restoration of each 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 investigations;
  - b. Details of the handling of any overburden (including peat, soil and rock);
  - c. Drainage, including measures to prevent surrounding areas of peatland, water dependant sensitive habitats and Ground Water Dependant Terrestrial Ecosystems (GWDTE) from drying out;
  - d. A programme of implementation of the works described in the scheme; and
  - e. Full details of the reinstatement, restoration and aftercare of the borrow pit(s) 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.

The approved scheme shall thereafter be implemented in full.

Reason: To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and

the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented. To secure the restoration of borrow pit(s) at the end of the construction period.

1. 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.

# Archaeology

- 2. No development shall commence until the applicant has implemented a programme of archaeological mitigation in accordance with an approved Written Scheme of Investigation (WSI) that has first been submitted to and approved in writing by the Planning Authority.
  - Reason: The site is within an area where ground works may interfere with, or result in, the destruction of, archaeological remains and it is therefore desirable mitigate the loss and potential loss of known and unknown archaeological features.
- 3. No development shall commence until a detailed scheme of cultural heritage enhancement has been submitted to and approved in writing by the Planning Authority. The approved scheme then to be implemented in full before the development hereby approved becomes operational.
  - Reason: To improve the understanding, appreciation and experience of heritage assets where their settings and historic landscape contexts are affected by the development.

### **Ecology:**

- 4. No SUDS ponds or settlement lagoons shall be placed on areas deemed to Ground Water Dependent Terrestrial Ecosystems. Reasons: To avoid impacts on wetland ecology.
- 5. No development shall commence until an Ecological of Works (ECoW) has been be appointed to carry out pre-construction ecological surveys, to inform a Construction Environmental Management Plan (CEMP) and to oversee compliance with the Construction Environment Management Plan, Species Protection Plan, Ecological Monitoring Plan and Decommissioning, Restoration and Aftercare Plan ("the ECoW works"). The terms of the appointment shall be submitted for the approval in writing by the Planning Authority in consultation with SEPA and SNH. The terms shall include the requirement to:
  - 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 Environmental Management Plan and other plans; and

b. Require the ECoW to report to the Company's nominated construction project manager, the Planning Authority and SEPA any incidences of non-compliance with the ECoW works.

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

- 6. No development shall commence until a Construction Environment Management Plan (CEMP) has been submitted to and approved in writing by the Planning Authority, in consultation with SEPA. The CEMP shall include:
  - a. Risk assessment of potentially damaging construction activities;
  - b. Identification of "biodiversity protection zones";
  - c. Method Statements to avoid or reduce impacts during construction, to include the location and timing of sensitive works to avoid harm to biodiversity features, the times during construction when specialist ecologists need to be present on site to oversee works, include the use of protective fences, exclusion barriers and warning signs;
  - d. A Drainage Management Plan;
  - e. A Site Waste Management Plan;
  - f. An Accident Management Plan;
  - g. Responsible persons and lines of communication;
  - h. The role and responsibilities on site of an Ecological Clerk of Works ECoW).

The approved CEMP shall be implemented throughout the construction period and operational phase as appropriate, strictly in accordance with the approved details, unless otherwise agreed in writing by the Planning Authority in consultation with SEPA.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on the water environment and thereby minimising residual impacts on the River Tweed SAC and that mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.

1. No development shall commence until a Species Protection Plan, including measures for bats, otter, badger, red squirrel, breeding birds (including goshawk and crossbill), reptiles and amphibia as appropriate, has been submitted to and approved in writing by Planning Authority. This to be informed by pre-commencement surveys carried out no more than 8 months prior to construction works commencing. Any works shall thereafter be carried out in accordance with the approved scheme.

Reason: To ensure that the species affected by the development are afforded suitable protection from the construction, operation and decommissioning of the development.

2. No development shall commence until a Habitat Management Plan, including measures to compensate for habitat loss and enhance existing habitats including blanket bog, wet modified bog, acid grassland, marshy grassland, calcareous grassland, dry dwarf shrub heath and woodland habitats, has been submitted to and approved in writing by the Planning Authority. Any works shall thereafter be carried out in accordance with the approved scheme.

Reason: To mitigate the loss of habitats as a result of the development.

3. No development shall commence until an ecological monitoring programme, including monitoring in years 1, 3, 5, 10 and 15 following construction, for breeding waders has been submitted to and approved in writing by the Planning Authority. This should also include proportionate post-construction monitoring of protected mammals (bats, otter, badger and red squirrel as appropriate) and habitats. Any works shall thereafter be carried out in accordance with the approved scheme.

Reason: To ensure suitable procedures are in place to monitor the impacts of the development on ecological interests.

4. No development shall commence until a monitoring and mitigation plan for goshawk has been submitted to and approved in writing by the Planning Authority, in consultation with SNH, RSPB and the Lothian & Borders Raptor Study Group. This should include mitigation proposals including curtailment of wind turbine operations in the event that there is a significant adverse effect on goshawk (Border Hills NHZ population) and further mitigation to be implemented as appropriate. Any works shall thereafter be carried out in accordance with the approved scheme.

Reason: To ensure that the species affected by the development are afforded suitable protection from the construction, operation and decommissioning of the development.

# **Replanting of Forestry**

5. No development shall commence until a forestry and woodland planting scheme to compensate for the removal of woodland areas and forestry within the site ("the Replanting Scheme") has been submitted to and approved in writing by the Planning Authority, in consultation with Forestry Commission Scotland.

The Replanting Scheme must comply with the requirements set out in the UK Forestry Standard (Forestry Commission, 2011. ISBN 978-0-85538-830-0) and the guidelines to which it refers, or such replacement standard as may be in place at the time of submission of the Replanting Scheme for approval. The Replanting Scheme must include:

- a. Details of the location of the area to be planted;
- b. Details of land owners and occupiers of the land to be planted;
- c. The nature, design and specification of the proposed woodland to be planted;
- d. Details of all consents required for delivery of the Replanting Scheme and timescales within which each will be obtained:
- e. The phasing and associated timescales for implementing the Replanting Scheme:
- f. Proposals for the maintenance and establishment of the Replanting Scheme, including annual checks, replacement planting, fencing, ground preparation and drainage; and
- g. Proposals for reporting to the Planning Authority on compliance with timescales for obtaining the necessary consents and thereafter implementation of the Replanting Scheme.

Unless otherwise agreed in writing by the Planning Authority, the Development shall not be commissioned to supply electricity on a commercial basis unless all relevant consents necessary for implementation of the

approved Replanting Scheme in accordance with the phasing and timescales set out therein have been obtained.

In the event that there is no reasonable prospect of the relevant consents necessary for implementation of the approved Replanting Scheme being obtained, then the developer shall submit an amended Replanting Scheme to the Planning Authority for approval in consultation with Forestry Commission Scotland. Unless otherwise agreed in writing by the Planning Authority, the Development shall not be commissioned to supply electricity on a commercial basis unless all relevant consents necessary for implementation of the approved amended Replanting Scheme in accordance with the phasing and timescales set out therein have been obtained.

The approved Replanting Scheme (or, as the case may be, an approved amended Replanting Scheme) shall be implemented in full, unless otherwise agreed in writing by the Planning Authority after consultation with Forestry Commission Scotland.

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

# **Decommissioning and Financial Guarantee**

6. The Development will be decommissioned and 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 restoration of the site in accordance with this condition shall not exceed three years from the date of Final Decommissioning without prior written approval of the Planning Authority.

No development shall commence until a Decommissioning, Restoration and Aftercare Plan has been submitted to and approved in writing by the Planning Authority in consultation with SEPA and Scottish Natural Heritage. The Plan shall detail measures for the decommissioning of the development, restoration and aftercare of the site and will include proposals for the removal of the above ground elements of the development, the treatment of ground surfaces, the management and timing of the works and environmental management provisions.

No later than 3 years prior to decommissioning of the development the Decommissioning, Restoration and Aftercare Plan to be revised and submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA. The revised Decommissioning, Restoration and Aftercare Plan will provide updated and detailed proposals for the removal of above ground elements of the development, the treatment of ground surfaces, the management and timing of the works and environment management provisions.

The development shall be decommissioned, site restored and aftercare thereafter undertaken in accordance with the approved Plan, unless otherwise agreed in writing in advance with the Planning Authority in consultation with SNH and SEPA. Any decommissioning works shall be carried out in accordance with the approved Plan.

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.

7. No development shall commence until the developer/operator has delivered a bond or other form of financial guarantee in terms acceptable to the Planning Authority which secures the cost of performance of all decommissioning, restoration and aftercare obligations contained in condition 34 to the Planning Authority. The financial guarantee shall thereafter be maintained in favour of the Planning Authority until the date of completion of all restoration and aftercare obligations.

The value of the financial guarantee shall be determined by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning, restoration and aftercare obligations contained in condition 34. The value of the financial guarantee shall be reviewed by a suitably qualified independent professional no less than every five years and increased or decreased to take account of any variation in costs of compliance with restoration and aftercare obligations and best practice prevailing at the time of each review.

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

### Informative:

In respect of condition 15 the aviation lighting should either be Ministry of Defence accredited 25 candela omni-directional red aviation lighting or infrared warning lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practicable point on the perimeter turbines. The turbines should be erected with this lighting installed.

# **DRAWING NUMBERS**

ES Figure 1.1 Figure 3.2 Figure 3.4 Figure 3.5 Figure 3.6 Figure 3.7 Figure 3.8 Figure 3.9 Figure 3.10	Application site Typical Turbine Elevation (130m) Typical Turbine Foundations Typical Access Track Cross Sections Typical Internal Watercourse Crossing Typical Establishment Compound Typical Construction Compound Typical Crane Standing Typical Cable Trench Design
Figure 3.11	Typical Sub-station Elevations
Figure 3.12	Typical Sub-station Floor and Roof Plans
FEI	
Figure 3.1a Figure 6.1 Figure 6.2	Site Plan Site Access and Visibility Splays Site Access Design

Approved by

Name	Designation	Signature
lan Aikman	Chief Planning Officer	

The original version of this report has been signed by the Service Director (Regulatory Services) and the signed copy has been retained by the Council.

Author(s)

Name	Designation
Julie Hayward	Team leader Development Management

