REPORT TO:	Planning Committee
AUTHOR/S:	Corporate Manager (Planning and New Communities)

S2564/11 – Gamlingay

Installation of one 330kw wind turbine (53.7m to tip), access track and crane hardstanding, Castle Farm, Hatley Road, for Gamlingay Community Turbine

Recommendation: Delegated Approval

Date for Determination: 23 February 2012

Notes:

This Application has been reported to the Planning Committee for determination as a director of the applicant company is the spouse of a Member of the District Council and the officer recommendation of delegated approval is contrary to the recommendation of Wrestlingworth and Cockayne Hatley Parish Council

Members will visit this site on 3 April 2012

Site and Proposal

- 1. The full application, received on 29 December 2011, proposes the erection of a single 330kw wind turbine on land at Castle Farm, Gamlingay.
- 2. Castle Farm is located to the south east of Gamlingay, south of the Hatley Road. The proposed turbine is within an agricultural field approximately 500m to the south of the main buildings on the farm, and approximately 380m to the north of Potton Wood, a Site of Special Scientific Interest. The land rises away from Hatley Road towards Potton Wood.
- 3. The proposed turbine is an Enercon E33 designed by leading architect Sir Norman Foster. It has a hub height of 37m and a blade length of 16.5m, giving a total ground to tip height of 53.7m. The turbine has a traditional three bladed design and a rotational speed of between 18 and 45 rpm. The turbine mast will be galvanised steel, finished in pale grey, with graduating green coloured rings on the lower portion of the mast. The nacelle and blades are also finished in pale grey.
- 4. A 142m length of new access track will need to be constructed to link the turbine location with the existing access track which runs alongside Castle Farm. The existing track will need to be reinforced to accommodate turbine construction and delivery vehicles. The existing access track off Hatley Road into Castle Farm will be used and no additional access point is proposed.
- 5. A 16m x 20m crane pad and hardstanding is proposed for use during construction, maintenance and decommissioning.
- 6. It is proposed that the turbine will connect to a transformer adjacent to the threephase overhead power cable, which is 380m to the west via an underground cable.

- 7. Public Footpath Gamlingay 5 runs from Mill Hill to Potton Wood, 400m south west of the site, with other rights of way leading from the south into Potton Wood. There is not a formal right of way which leads north from Potton Wood to Hatley Road, although there is an access track which is used by walkers.
- 8. The application documentation states that the project is being funded entirely by the local community both through individual investors and local companies, with no funds being sought from district or national government or borrowed from banks, so return of investment will also be to the community's benefit through its stakeholders. It is stated that the applicant company will donate over £200,000 to the community
- 9. The application is accompanied by a Design and Access Statement and a comprehensive Environmental Appraisal, which includes a bat report.

Planning History

10. There is no relevant planning history.

Planning Policy

- South Cambridgeshire Local Development Framework Development Control Polices adopted July 2007: DP/1 Sustainable Development, DP/2 Design of New Development, DP/3 Development Criteria, DP/7 Development Frameworks, NE/1 Energy Efficiency, NE/2 Renewable Energy, NE/4 Landscape Character Areas, NE/6 Biodiversity, NE/15 Noise Pollution, NE/16 – Emissions, CH/1 Historic Landscapes, CH/2 Archaeological Sites, TR/2 Car and Cycle Parking Standards.
- 12. **South Cambridgeshire LDF Supplementary Planning Documents (SPD)** -Biodiversity - adopted July 2009, Landscape in New Developments - adopted March 2010, District Design Guide - adopted March 2010

Consultation

- 13. **Gamlingay Parish Council** makes no recommendation. "Council considers the application with no recommendation requesting rigorous examination of the issues of noise levels, ecology with respect to bird and bat populations, visual impact and effect on local aviation."
- 14. **Hatley Parish Council** makes no recommendation. "Councillors expressed concerns about the visual impact on the countryside and discussed without conclusions the least obtrusive colour for such turbines. Chair would like to attend SCDC Planning Committee when application is discussed."
- 15. **Wrestlingworth and Cockayne Hatley Parish Council** states that after careful consideration it recommends refusal.

"In summary, our key points of objection are:

The proposal has factual errors and lacks proper consideration of all parties affected.

The proposal is sited amongst protected wildlife and represents a very real danger to their welfare.

The proposal is to close to local residents and will create unacceptable noise pollution, health risks, light/shadow flicker, vibration, and sub audio disturbance.

The proposal will blight the green belt, is out of keeping with the rural landscape and will be too obtrusive.

The proposal will cause a fall in local property values, will be subsidised by locals via government subsidies, is not sustainable in its own right and brings negligible economic benefit to the community.

The proposal's carbon saving credibility is highly questionable.

Better technology is available."

A full copy of the Parish Council's comments can be found at Appendix 1.

- 16. **Potton Town Council** makes no comment.
- 17. Central Bedfordshire District Council raises no objection.
- 18. The Landscapes Officer comments that the proposed wind turbine will have a significant impact on the landscape locally to Gamlingay. The landscape around Gamlingay lies in the Bedfordshire and Cambridgeshire Claylands Landscape Character Area. It is open, rolling and rural in character, and features many small woodlands locally, several of which are of SSSI status. The landscape is particularly open to the east of Gamlingay where the turbine will be situated, with long views possible to the turbine.
- 19. It will be clearly seen from several local roads (Gamlingay Road, Potton Road, Long Lane etc) and from local footpaths and rights of way (e.g. footpaths to the west of Potton Wood and from the SSSI woodland itself. On many routes to the south and east of Gamlingay the turbine will be visible above the skyline for long periods it will be constantly visible rather than intermittently.
- 20. At 53 metres to blade tip, it will be the tallest feature in the area, which currently features only timber power lines and farm buildings. The tallest local feature to be seen in context with the proposed turbine is the mature Ash/Maple woodland at Potton Wood with the tallest trees being approximately 20 metres.
- 21. The movement of the turbine will also add to its visual prominence, as will its position alone and unconnected with any buildings or other landscape features. Further significant views will be apparent from land controlled by neighbouring authorities e.g. views to the north west from Cockayne Hatley.
- 22. Some of the viewpoints describing the turbine do tend to underplay the landscape affects by positioning it behind trees etc (e.g. viewpoints 9 and 11), when moving the viewpoint a few metres to either side a better representation of the turbine in the Landscape could be achieved.
- 23. The turbine will cause some degree of harm to the landscape in that it will introduce a large, moving, industrial scale object into a rural setting. However, while it is felt that the turbine will be a very prominent feature, it will remain a feature within the wider landscape rather than dominating and suppressing the local landscape character, as a large turbine or group of turbines would do.
- 24. No landscaping is proposed for this development, however it is requested that occasional tree planting alongside roads and pathways so that the turbine will be

seen in conjunction with other significant landscape objects rather than standing alone on the horizon. Hatley Road and the footpath from Mill Hill are areas where planting would be possible.

- 25. The **Environmental Health Officer** has no objection in principle subject to the imposition of conditions for operational noise and shadow flicker. It is concluded that the potential for noise impact has been assessed in accordance with best practice/guidance and standards. It has been demonstrated that noise from the proposed turbine can be controlled to within acceptable noise level limits, determined in accordance with ETSU-R-97. It is therefore considered that noise from the turbine once operational would be minor and not significant. No significant adverse impact is envisaged and an adequate level of protection against noise to protect amenity can be secured through conditions. Shadow flicker is unlikely to cause any significant adverse impact.
- 26. Whilst the wind turbine is wholly within SCDC, there are villages to the south such as Cockayne Hatley that are within the neighbouring district boundary of Central Bedfordshire. It is understood that some residents of Central Bedfordshire have expressed concern in relation to possible noise and shadow flicker impacts. As the closest properties to the wind turbine are dwellings in SCDC, only the direct impact at these properties has been considered however it can be confidently concluded that the impacts would be even less significant and probably imperceptible at these locations due to a greater separation distance. The noise predictions have been modelled in all directions. In addition, any conditions that have been recommended to protect amenity are considered equally robust enough to protect residents outside SCDC
- 27. A full copy of the EHO comments can be found at Appendix 2.
- 28. The **Conservation Manager** comments "The proposed turbine is within the settings of Gamlingay & East Hatley Conservation Areas, the Registered Park & Garden at Hatley and a number of listed buildings in both villages, of which the closest are at Merton Grange (Grade II). The site is significant as part of the countryside and fields along the valley edge, with the valley leading views towards the hilltop village of Gamlingay, giving long views across and within it, and being within the settings of numerous historic scattered farmsteads.
- 29. Because of the topography, views from East Hatley are mostly obscured apart from views from the meadows in the valley floor, from which the turbine is seen in conjunction with the designated Park and the village and Conservation Area, including the Church. The siting, being more easterly than anticipated, gives less prominence to the turbine from this direction.
- 30. From Gamlingay, the views are limited and from the easterly edge of the village, the rest being obscured by the valley edge and modern development. The Church is surrounded by other development and is not prominent from beyond the eastern side of the village, so any impact would be minimal.
- 31. The turbine would be visible to and from Merton Grange and from the Gransden Road. The submitted viewpoint is not as requested but the more easterly siting of the turbine means that part is obscured by the modern factory units, making the difference between open countryside and modern development less marked.

- 32. Whilst there are views along the valley from the east, the valley edge curves northwards, obscuring longer views from the nearest villages on the north-east, and the nearest listed buildings are screened by trees.
- 33. There would be some harm to the setting of the East Hatley, including to its Church and Registered Park & Garden, and to the isolated farmsteads and listed and curtilage listed buildings at Merton Grange, and lesser harm to listed buildings along the eastern edges of Gamlingay. Under PPS1, this harm should be balanced against the public benefit of the turbine and in this case I would consider that the benefit outweighs the harm.
- 34. I understand that some harm has been identified to villages south of the turbine, which are outside our District. This has not been considered under the conclusion above and advice should be sought of the relevant Local Authority. If found to be harmful, the cumulative harm within both Districts should be balanced against the benefit.
- 35. The Council's Team Leader (Sustainable Communities) comments:
- 36. "This application is an exemplar of best practice in bringing forward community based renewable energy generation. It is a genuine and very well developed example of local sustainability in action, bringing together and specifically delivering on the three essential elements of:
- 37. Protecting our environment (reducing emissions of carbon dioxide and other pollutants associated with energy generation from fossil fuels whilst ensuring it is at a scale that respects the value of the local landscape)
- 38. Contributing directly towards the well-being of the local community (establishing an income linked revenue stream for community benefit use), and Supporting the local economy (Using local investment to generate local returns).
- 39. It is clear that great care and professional attention has been paid to ensuring that the application not only delivers on the Council's Renewable Energy Planning Policy NE/3 and Sustainable Development Policy DP/1 but also respects the design, landscape and development criteria policies DP/2, DP/3 and NE/4 (et al).
- 40. The project also strongly reflects and supports the wider Council priorities of securing the transition to more sustainable energy use and self-reliance across the District, especially as taken forward through the work of the South Cambridgeshire Sustainable Parish Energy Partnership.
- 41. The application is therefore fully supported.
- 42. The generation of renewable and very low carbon energy from wind in South Cambridgeshire has on occasion been a controversial topic. Whilst the Council has fully recognised and supported the importance of bringing forward renewable and low carbon energy development, generation from wind turbines has proved problematic under certain conditions. Difficulties have essentially centred upon the scale of development alongside the balance between the landscape impact and the benefit to the hosting village-based communities.
- 43. The Gamlingay Community Wind Turbine proposal, however, has paid tremendous care and attention to overcoming both of these potential impediments. The project stands as a region-leading exemplar of how wind power, as a very significant clean

energy technology, can be successfully brought forward to directly serve and benefit a local community whilst delivering at a scale of development that is appropriate to the South Cambridgeshire landscape."

- 44. The Local Highway Authority has no objection. It requests that conditions are included in any consent requiring the submission for approval of a traffic management plan for all large loads associated with the construction of the development, together with proposals to control and manage traffic using the agreed route and to ensure no other local roads are used by construction traffic; and ensuring that the vehicular access, where it crosses the public highway, is laid out and constructed in accordance with County Council construction specification.
- 45. The **Environment Agency** has no objection in principle to the proposal but requests that informatives and comments are included in any consent.
- 46. The **Ecology Officer** has no objection to the proposed wind turbine as he does not believe its impact to be of any great significance on local wildlife. This view is supported by Natural England with regard to bats who have written: *Natural England has advised that the turbine is likely to represent a low risk to bat populations due to the low level of bat activity in the vicinity of the turbine which was limited to species thought to be at a low risk from wild turbines.*
- 47. The questions of colour attraction and the emission of high UV reflectivity is a point that is currently much harder to evaluate. Whist there may be an attraction to yellow, white or grey colours to pollinating insects it is not clear to how this should be suitably mitigated, nor if the likely impact upon a locally important invertebrate such as the golden hover (See Natural England's' comments below) is so great that specific measures should be sought to avoid harm. The Ecology Officers feeling is that the golden hover fly, being an insect that seeks out ivy to feed upon and rot holes in wood to lay its eggs in, is unlikely to be significantly attracted to a wind turbine. As such it is not felt that this development poses a risk to this species (unless significant parts of the turbine are yellow in colour).
- 48. The **Wildlife Trust** is pleased to see that the application is accompanied by a thorough ecological assessment and bat survey, and agrees with the general conclusions of the ecological assessment that there is unlikely to be a significant ecological impact from this single turbine.
- 49. It emphasises, however, the findings of the bat survey, that there is a good diversity of species in the area, including the nationally rare Barbastelle. The site is also within the West Cambridgeshire Hundreds Living Landscape project area; this project is based around a cluster of ancient woodland sites, which include Potton Wood, and is seeking to link together the ancient woodlands and habitats to creates a landscape richer in wildlife. It is stressed that although this individual turbine, should it be granted planning permission, would be unlikely to have significant ecological effects, any future applications for turbines within the same area (particularly for multiple turbines) should be considered very carefully, and include an assessment of possible cumulative effects.
- 50. It is important to follow the EUROBAT/Natural England guidance for siting of turbines i.e. at least 200m away from the woodland edge and 50m away from the nearest linear feature. The current proposal follows these guidelines and is almost 400m

from the edge of Potton Wood. The extra buffer distance is particularly important in this case given the concentration of bat activity recorded along the woodland edge.

- 51. **Natural England** comments that the site is in close proximity to the Potton Wood, Buff Wood and Gamlingay Wood Sites of Special Scientific Interest (SSSI). However, given the nature and scale of this proposal, it raises no objection to the proposal being carried out according to the terms and conditions of the application and submitted plans on account of the impact on designated sites. It comments that this should not be interpreted as a statement that there are no impacts on the natural environment and other bodies and individuals may be able to make comments that will help the Local Planning Authority to fully take account of the environmental value of this site in the decision making process
- 52. It comments that in addition to considering the legal protection given to bat roosts it has also assessed possible risks from the turbine to bats in flight. Whilst some high risk and rare species (noctules and barbastelle) were recorded along the wood edge and hedgerow leading from the wood these are several hundred metres from the turbine. Activity at the turbine location was low and limited to low risk species i.e. pipistrelles. The surveys therefore suggest that there would be a low risk to bat populations from the proposals.
- 53. The application may provide opportunities to incorporate features into the design which are beneficial to wildlife.
- 54. Subsequent to its initial consultation response, Natural England has supplied a copy of a letter which it has sent to a resident of Cockayne Hatley, in which it responds to a claim that the *golden hoverfly*, which although not protected species under the Wildlife and Countryside Act, or any other legislation, is a very rare species within the UK and is classed as a Red Data Book species, is present at Potton Wood. Natural England has advised that in order to fulfil its duty to 'have regard ...to the purpose of conserving biodiversity' under Section 40(1) of the Natural Environment and Rural Communities Act, the Local Planning Authority should explore options to reduce or avoid potential impacts of the proposal on this species. Options could include specifying a colour for the turbine, which is less likely to attract insects or siting of the turbine and/or screen planting to reduce its visibility from Potton Wood.
- 55. **Cambridgeshire Archaeology** comments that the site should be the subject of an archaeological investigation, which can be secured through a negatively worded condition.

Representations

Support

- 56. 83 letters have been received in support of the application from a total of 55 residential properties in Brockwood Close, Chapel Field, Church End, Church Lane, Church Street, Dutter End, Fairfield, Green Acres, Hatley Road, Heath Road, Little Heath, Mill Street, Rowan Gardens, School Close, Station Road, The Cinques, The Maltings, Waresley Road and West Road, Gamlingay, Mill Road, Gt Gransden, East Hatley, Everton Road, Potton and Gamlingay Road, Waresley. Also included in the total of 82 are letters of support from Unit 6 and KMG Systems, Station Road, Forward Gamlingay and the Gamlingay Environmental Action Group.
- 57. The reasons for support include:

- Application in line with PPS22 as it will provide a new source of renewable energy in a remote area where all the energy would be used. By generating 6% of Gamlingay's domestic electricity there will be a significant reduction in its carbon footprint. Even if carbon reduction is small it has to be good
- Will reduce emissions of greenhouse gases and will support economic growth and local employment in doing so. Green energy is the way forward. Gamlingay is a proactive village in this respect, and this project, along with the EcoHub is something that residents can be proud of.
- Sustainable energy project which follows the SCDC initiative of the Sustainable Parish Energy Project.
- Scheme will be 100% funded by the community, with no recourse to public funds and will result in a tithe donation and reinvestment in the village. It will provide continuing support of local environmental projects and the Company has pledged to donate 10% of the net income to the local community.
- The Ecological Impact Assessment considered the effect of the turbine and site on wildlife, habitats, noise levels, shadow flicker etc. The turbine has been sited sufficiently outside the village on the far side of the industrial estate such that any noise and shadow flicker often associated with wind turbines will be so low as to be insignificant. The turbine has been sited further away from bat routes. Recent studies show that the greatest impact of a turbine on wildlife are during the construction phase. These turbines do not have gear boxes and are therefore quieter than other turbines, they are also reliable.
- Closest footpath is 400m from the turbine. Nearest house is twice that distance.
- Better than providing nuclear power stations. Will reduce load on the feeder network to Gamlingay, making power cuts less likely.
- Create 2 part time jobs for more than 20 years
- Appearance is pleasing, having been designed by Sir Norman Foster, and is sized appropriately for its location. It will be a thing of beauty that will enhance the attractive countryside. Visual impact will be small in a well-established working landscape with many structures visible including electricity pylons, grain silos, a water tower, radio and microwave antenna, a crane and the Sandy Heath transmitter mast. The water tower at Cockayne Hatley may have been considered an eyesore when first constructed, now it is part of the landscape.
- Play an important role in the diversification of the rural economy in accordance with PPS7. It will help ensure a local farming business is sustainable. Wind turbines divert very little land away from agricultural production.
- Supports national and global aims of reducing greenhouse gas emissions,
- Benefit to local schools by having a practical example of renewable energy that children can feel part of and learn from.
- Unlikely to be a hazard to aircraft.
- There will be minimal ground disturbance.

- Letter of support from occupiers of Castle Farm grave concern about noise when first proposed but these were allayed having visited a similar, but larger, turbine in Swaffham.
- It can be completely removed and the land returned to its original use after the lifetime of the turbine.

Objections

- 30 letters of objection have been received from the occupiers of 24 residential properties, namely 25 Cinques Road, 35, 37, 47, 49, 50, 51 54, 58, 62, Chapel Field, 4, 6 Hatley Road, 4 North Lane and 104 Station Road, Gamlingay; The Flat, Hatley Park and Church Farm, Hatley, 45 East Hatley, Home Farm, The Stables, Woodview, 6, 7 Village Road, Cockayne Hatley, and Greenman Farm, Drove Road, Tetworth. A letter has also been received from the West Cambridgeshire Hundreds Group.
- 59. The reasons for objection include:

General

- No advantage to the village. No benefits locally or nationally to justify approving the application.
- No benefit to community at Cockayne Hatley, and the process has ignored this community, having only collected data from Gamlingay. Viewpoints are Gamlingay orientated. Will have a massive adverse impact on this quiet peaceful village. No consultation with residents of this village.
- Environmental benefits of turbines minimal. Do not provide a reliable and secure • flow of electricity, which is one of the key objectives of Government energy policy. The EA shows wind speed at 45m is 5.8m/s which is very low and below the level most wind farm operators consider worthwhile. It is questioned whether the turbine chosen will be effective at the suggested wind speeds and these issues together raise serious issues around the estimated electricity output claimed. No anemometer has been deployed so any assumed wind speeds are theoretical. The estimated load factor is 23%, which can be compared to the total load factor of all installed wind farms in the UK in 2010 of 21.4%. Therefore in the area of lowest wind speed in the country it must be expected that the load factor here would be below the average. The Burton Wold site at Kettering with 100m turbines registered 20.7% and given this information it is clear that the projected load factor of 23% is a complete exaggeration and is more likely to be 15%. The electricity production could therefore represent less than that consumed by 92 houses – 6% of the number of dwellings in Gamlingay.
- Reduction of carbon footprint by the 330k turbine is over estimated by the applicants according to some experts, and at best would only benefit approximately 10% of households in Gamlingay. If the business use of electricity is added the percentage drops to 6%. Choosing PV panels to reduce Gamlingay's carbon footprint would be just as efficient and would not have a negative impact on the countryside.

- If the Government reduces feed in tariffs for turbines it will have a dramatic effect on the predicted income and will in turn reduce the amount of return to the village for community projects.
- Put forward as a 'community turbine' in order to get support from the village, however the minimum investment of £500 probably precludes significant percentage of villagers from investing. The real reason to invest in the project is to make money from the generous feed in tariff. The suggestion that 10% of the net income would be donated to the community is a diversion to mislead people who do not realise how wind energy subsidies are financed. Amount of money that could be donated to the community is unsubstantiated and therefore cannot be used as a definitive basis to assess a material consideration to weigh against any harmful impact of the proposal.
- Level of CO2 offset is unsubstantiated and therefore cannot be used as a definitive basis to assess a material consideration to weigh against any harmful impact of the proposal.
- Danger from collapsing blades and turbines and from "ice-fling". An Enercon turbine completely failed in Lincolnshire and metal fatigue has been identified at the cause of the accident. There is much factual evidence demonstrating that turbines fail in high wind despite manufacturer's reports to the contrary.
- Rotating blades could be distraction to drivers on the Hatley and/or Station Road, and cast a shadow over the road.
- Maps with the application are misleading and do not give a full impression of the impact of the proposal.
- Reduction in the prices of houses.
- Will not generate enough electricity to be a substantive part of the solution for the UK.
 - Will set a precedent for further turbines
- The ZTV shows impact over a 10km radius.
- Lack of wind testing data how can GCT Ltd be sure it has the right site and that it will produce the energy and results stated in the application?
- Site close to a proposed nature trail near the Station Road housing estate.
- Contrary to the Government's aims in PPS7 of the protection and enhancement of the countryside, which carries through in both the Regional Spatial Strategy and East of England Plan, which still has weight in the determination of this application. Contrary to the aims of LDF policies DP/2, DP/3, NE/2, NE/4, NE/7 and CH/1.
- PPS22 recognises that wind turbines are the most intrusive form of development visually. The impact of rotating blades is magnified in this instance by the increased speed of the rotation of the blades on the Enercom E33 (45 rpm as opposed to the norm of 19 rpm.

- No evidence that the District Network Operator has confirmed that the connection is viable in the stated location.
- The applicant has failed to properly explain that the photos provided should be printed in colour, on A3 paper and each viewed at a different fixed distance. Insufficient photomontages have been produced to assess the potential impact of the turbine, and do not show the potential impact from the village. Additional photographs should be taken in winter when trees and hedges are not in leaf to show how the impact will change with seasons
- Strong chance of adversely affecting even digital TV reception, and may also affect radio and mobile phones.
- In determining a planning application for a 16m high crane in Potton Road, the Council insisted that that height should not be exceeded "to minimise its visual impact on the surrounding area in accordance with the aims of Policies.DP/2 and DP/3. The consent was made temporary. The proposed turbine is in open countryside, 3 times the height and will be there for more than 20 years.
- The EA says "the local community is behind the project". This is based on selective data.
- Negative effect on local economy as people would not want to come and visit the area, or to move to the area
- The very modest amount of low carbon electricity produced will be outweighed by the harm caused.
- Will a small company have the funds to decommission properly or pay for routine maintenance.
- The archaeological survey does not cover sufficient percentage of the area that will be affected.
- Possibility of Council Tax reductions for local residents if this development proceeds.

Wildlife

- The proposal will result in harm to wildlife.
- Inadequacy of ecological study which was performed in just three hours on one day. The survey did identify two 'red listed' bird species and 20 grazing corn buntings and a male yellow hammer. It does not allow for migration of birds at different times of the year, for example the flocks of Graylag geese in the autumn. Buzzards and kestrels fly over the site. The survey needs to be more comprehensive
- Impact on bats. Bats fly around the estates at the edge of Gamlingay village and probably fly across from the woods. Any threat to this protected species is unacceptable. The survey identified barbastelles in the area along with other bat species. Tracking and identifying the movement of bats between Cockayne Hatley wood and Hayley Wood to the east, is one of the projects of the West Cambridgeshire Hundred's project, with early indications that barbastelles might

be flying between them when foraging. This highlights the risk of placing a wind turbine here. Bats can be affected by a condition known as Baratrauma, where the moving blades of a turbine lower pressure and cause the delicate lungs of a bat to suddenly expand, bursting the tissue's blood vessels.

- Owls are known to breed in Potton Wood, and these will hunt over the adjacent arable areas around the proposed turbine
- The concrete foundation and tracks required for access will cause irreparable damage to the local eco-system and disrupt wildlife
- Survey did not state how many garlic plants are present.
- Turbine would be a serious step backwards in the time, effort and money of a number of conservation organisations, farmers and landowners into making this rural environment richer in biodiversity and generally a richer ecosystem for both wildlife and local people.

Landscape

- Adverse impact on the landscape industrialisation of the unspoilt landscape. No buildings of this magnitude in the area, and no amount of tree planting will mitigate the massive visual effect this structure will have. It is out of proportion with anything else in the area and would remain prominent for many miles in all directions. Will destroy the views enjoyed by persons walking the footpaths. Whilst not designated as an Area of Outstanding Natural Beauty, the area is currently a well-known beauty spot.
- It would be the dominant feature when approaching the village and from the village towards Potton Wood.
- At least six ancient woodlands surround the site with a close radius, mostly SSSI's, which provide a home to many rare plants and animals and create a special ecological 'corridor' which helps many of these species to thrive. This landscape should not be destroyed.
- The West Cambridgeshire Hundreds Project provides clear evidence of the importance of the area in terms of its landscape character. The vision of the project is for landowners and their neighbours to work together and in partnership with conservation organisations to enrich and enhance the visual and biodiversity character and quality of the rural landscape within the project area.

Noise

- Impact of noise to anyone living with 1km of the turbine. Can result in sleep disturbance leading to mental and physical health problems. The turbine is approximately 0.8km from housing and some local businesses, 1.1km from a care home and 1.3km from a school. It is also only 300m from The Clopton Way Footpath and 1km from the proposed Gamlingay Nature Trail.
- CGT Ltd state that the turbine will generate up to 103dB(A) of noise at any time of the day or night. The village is very quiet through the day and night so there is a high chance that the turbine will be heard, particularly by the houses at the edge of the village. This close proximity poses a risk with regard to the rhythmic noise

produced by turbines which can lead to health problems such as depression and anxiety. In addition to the sound of the blades cutting through the wind there are also mechanical noises.

- It is noted that Appendix C of the EA deals with wind speeds of up to 10 mps. Why does it stop there when the optimum output is achieved at around 13 mps?
- Amplitude Modulation (AM) is of the upmost importance as it will affect the health of residents and is the change in volume of the sound as the blades rotate and can be heard as a swishing sound. The noise report quotes research evidence to show that AM will be no more than 3bB(A), which it says will not cause problems. A communication from the Environmental Health Officer, submitted as part of the application background documentation shows that further research has been carried out in which the same source quotes AM as 9.5dB(A), a value which is said not to be acceptable.
- It is disputed that no background noise surveys need to be undertaken. The noise impact statement uses discredited methods, in particular the ETSU-R-97, which bears no resemblance to standards used for other industrial developments. Other renewable energy developments have to meet much stricter standards. It is the only standard where the permissible nighttime level is higher than the daytime figure.
- The predictive noise model provided by the applicant does not fully assess the extent of potential noise that will be produced by the turbine, and may have even underestimated the sound levels at various receptors. It appears that the applicant has chosen not to directly assess the issues raised by the EHO.
- Residents will not be able to sleep with windows open.
- Construction work will produce noise, dust, exhaust and other emissions, and traffic would increase during this period, with many more HGV's which would cause disruption and dangers to local residents. There is no evidence submitted to demonstrate that the proposed delivery route has been assessed as a viable route, or to demonstrate the effect it will have on the road and residents of Hatley

Shadow flicker –

• The siting of the turbine means that everyday, as the sun rises behind it, the village will experience shadow and flicker to varying degrees. It will be particularly bad on clear days during winter months when the sun is low in the sky for longer. At these times the trees will be bare subjecting more residents to this unpleasant experience, including the village college. There will also be lunar flicker. The impact of shadow flicker on people in Cockayne Hatley has not been considered.

Aviation

• Concern about safety of aircraft using Little Gransden Airfield as the turbine is sited on the flight path to the airfield. If flight paths have to be moved there could be more planes flying over the village, increasing noise levels. Concern about the impact on low flying military aircraft and other planes that cross the area. Same applies to Cambridge Gliding Centre.

Residential amenity (including visual impact)

- Turbine is less than the SCDC minimum recommended distance of 2km, passed by resolution at Council in February 2012. Half the village is within 2km, as is the conservation area
- The application acknowledges that the turbine would have a medium to high adverse affect on two houses in Chapel Field, whereas in reality it would be many more than two which would have a 'principle view'. The EA has therefore failed to properly assess the visual impact on Chapel Field. Pictures are submitted to demonstrate this.
- The "Wind Turbines (Minimum Distances from Residential Premises) Bill is currently before the House of Lords, which says that a turbine 50m to 100m high must be located not closer than 1.5km from the nearest dwelling or regularly habited place of work. The proposed turbine does not conform to this.
- Only 800m from 4 Hatley Road, with views from five rooms in the cottage as well as the garden. Similar impact on 6 Hatley Road.

Cultural Heritage

- The turbine would be viewable from listed buildings in the village i.e. The Emplins, Church, Baptist Chapel, The Manor House, Merton Grange, Hatley Park, and many houses in Church End. Hatley Park is Grade II* and not Grade II as described in the application. The EA has not properly assessed this impact.
- The application contains an incomplete map of Gamlingay Conservation Area, with the eastern most section (nearest the proposed turbine) omitted, and therefore the applicant has failed to properly assess the impact on the Conservation Area.
- Impact on St John the Baptist Church in Cockayne Hatley. The turbine would be viewed on the skyline over the Church.
- 60. In addition to the above letters have been received from the operators of Little Gransden Airfield, Cambridge Gliding Centre, CPRE Bedfordshire and Cllr Adam Zerny (Central Bedfordshire DC).
- 61. **Little Gransden Airfield** objects stating that the turbine would present a number of hazards to the users of both Little Gransden Airfield (LGA) and the neighbouring Gliding Club at Gransden Lodge, who use LGA as an alternative in case of precautionary landings, and to the safe operations at LGA.
- 62. The increasing number of wind turbines being planned and built throughout the UK are of considerable concern to light aircraft movement because they can be a significant hazard if sited close to an airfield such as Little Gransden. This concern is recognised by the CAA in a recent publication.
- 63. The site of the proposed turbine is within 2.8km of the threshold of the 010 (west to east) runway and is directly underneath the flight tracks of the agreed airfield operating map (routes are approximate), which was fully agreed by SCDC and the Planning Inspectorate at the Airfield Public Inquiry in 1999. The turbine being so close to the aerodrome and agreed and established circuit pattern and entry/exit routes would present a severe danger to any aircraft using the airfield.

- 64. Legally pilots are not allowed to fly within 500ft of these structures with the result that pilots landing at, or taking off from LGA would be forced to veer to one side or the other of the pylon. It could be said that distance should be 1000ft over the tip of the turbine if deemed by the CAA that Rule 6 applied (flight over built up area). The approach from the southwest would thus be overhead Gamlingay, which will lead to an increase in aircraft noise and inconvenience over that village whenever that route is used.
- 65. In bad weather and/or poor visibility the height and the sweep of the turbine blades will present a severe physical hazard to aircraft using the aerodrome at a time when the pilots workload is already substantial. These dangers are well documented.
- 66. In the 32 years experience of the writer pilots will never fly over an obstacle and thus lose sight of it but always around it. Flying over the top can cause panic and further distraction. A large number of aircraft with retractable undercarriage use the airfield and distractions cause pilots to land wheels up causing damage and injury. It is most likely that the turbine will not be marked on CAA charts so pilots not familiar with the airfield will be surprised to find such a thing with potential for distraction.
- 67. Although it is often asserted that turbulence caused by wind turbines only extends downwind for 16 times the diameter of the blades, there is an increasing body of evidence that wind shear and tip vortices can substantially increase this minima distance, sometimes for an extent of several kilometres, which if correct the presence of a turbine at Gamlingay will present a significant hazard to aircraft using LGA, given that the proposed site is within the existing established circuit pattern and agreed entry/exit lanes wherein aircraft would be flying at lower levels and speeds in preparation for landing.
- 68. Very light aircraft such as gliders, microlights, gyroplanes, hang-gliders, paragliders and paramotors are particularly susceptible to turbulence and in certain circumstances can cause loss of control that is impossible to recover from.
- 69. In some circumstances localised fog can be triggered by wind turbines (photos supplied). If correct a fog at Gamlingay would extend to the circuit for LGA preventing landings.
- 70. Wind turbines are known to interfere with radio transmissions, radio waves and navigation equipment of aircraft, and there could be a safety hazard if pilots using LGA were unable to communicate effectively with each other, especially during busy time, during air shows, or when Cambridge Gliding Centre is launching large numbers of gliders.
- 71. The airfield was previously licensed for flying training, which afforded a standard "air traffic zone" (ATZ). This is no longer held as training can now be carried out from unlicensed airfields. One of the purposes of the ATZ is to offer aircraft a form of 'protection' from hazards in that all aircraft need to use the radio whilst in the ATZ. The site is within the previous ATZ, this now not being marked on charts negates a person listening to the VHF radio and thus no one would be monitoring to advise air traffic of obstacles.
- 72. If planning is granted it is requested that the obstruction has the necessary permanent red light affixed in accordance with ICAO regulations.

- 73. **Cambridge Gliding Centre** states that the applicant has sought to overcome concerns expressed at the pre-application stage with the assistance of an aviation consultant, and since this input has largely achieved this the Gliding Centre would have little ground for sustained objection to the application.
- 74. There remains concern that the erection of this wind turbine on the approach to 028 runway at Little Gransden Airfield will present an additional hazard to an aircraft or glider seeking to land there but that this hazard will be relatively minor and not grounds for a sustained objection.
- 75. The **Council for the Protection of Rural England (Bedfordshire)** objects. The need to reduce greenhouse gas emissions and energy consumption is recognised, along with the need to exploit the potential for a range of renewable energy sources, including wind power. The proposal for a community turbine for Gamlingay taken in isolation may be seen as a laudable attempt to meet some of these environmental principles, however what would be the situation if very parish in England decided to take a similar line?
- 76. National government policy is slowly shifting on the contribution that renewables such as wind and solar make to our energy requirements. The very low contribution that wind energy makes will inevitable become viewed as a distraction from the main debate where the bulk of our energy will come from etc, and it seems possible that many turbines erected in the past, and potentially the near future, could soon lie idle.
- 77. CPRE will support renewable energy projects in certain cases, but they should not come at the expense of the countryside. In this case the technical information in support of the application is in general Cambridgeshire centric, and appears to take little account of impact on Bedfordshire residents.
- 78. It is located on elevated ground in open countryside next to Potton Wood and beyond doubt will represent a major visual impact on the local countryside due to its height. The photomontage is somewhat Cambridgeshire centric and appears to demonstrate little concern for the perspective from Bedfordshire, with the county boundary only 500m or so away. The turbine will dominate views from and over local Bedfordshire natural features such as Potton Wood.
- 79. The turbine is proposed in a tranquil area where noise will be more apparent. Flicker is also an assault on tranquillity and will be an intrusion for residents in and around Cockayne Hatley.
- 80. **Alistair Burt MP** (North East Bedfordshire) states that he has been made aware of this application by Wrestlingworth and Cockayne Hatley Parish Council who are concerned about the application and its location on a site where rare and protected bats roost nearby. It is understood that there are also very rare insects living in the same canopy.
- 81. He states that he remains unconvinced about the merits of onshore wind turbines, and supports the Parish Council's concerns in relation to the possible disturbance of local wildlife and wishes his objections to the application to be noted.
- 82. **Cllr Adam Zerny** requests that the concerns of the residents of Cockayne Hatley are highlighted.

- 83. The plans do not take account of the impact of wildlife in Central Beds, especially Potton Wood, which is an SSSI. An independent study of the effects that the turbine may have on local bats has not been provided.
- 84. Light flicker and noise in the Cockayne Hatley direction, particularly with regard to the houses to the north of the church.
- 85. There is insufficient independent support for the economic benefits of one wind turbine.

Applicant's Representations

86. The applicant has submitted a number of representations in response to matters raised during the consultation process. Copies of letter submitted by the agent can be viewed at Appendix 3 and a letter from the GCT Ltd at Appendix 4.

Aviation

- 87. The applicant's Aviation Advisor states that he has studied the proposed site of the turbine alongside the relevant CAA regulations, and has also looked at the proposed site from the point of view of a flight safety officer. He states that he has acted as the safety committee for the flying displays at Little Gransden on four occasions, and can see no risk or hazard to aviation by the erection of the turbine at the proposed site.
- 88. A copy of the full letter, which deals with each point raised by Little Gransden Airfield can be viewed at Appendix 5.
- 89. A further letter has been submitted commenting on the possibility of fog formation stating that while there have been occasions when fog has been associated with large scale offshore wind farms these are rare, and will only occur if weather conditions are marginal for fog formation, otherwise fog would not form or would exist whether the wind farm was present or not. No account has been found of fog associated with an onshore wind farm. Fog formation would be harder to initiate by a wind turbine onshore due to the way fog is formed.

Load factor calculations

90. An extract from a submission commenting on the concerns expressed regarding the methodology used to estimate the predicted energy yields and hence CO2 offset used by the applicant can be found at Appendix 6.

Community donations

- 91. GCT pledges a community donation of 10% of net income (income from sales of electricity and Feed in Tariff less all outgoings) for the first 15 years of operation. The money would be spent on community projects in accordance with the wishes of the community. The decision on which projects to spend the funds on would be decided by a committee with representation from Gamlingay Parish council, local charity Forward Gamlingay! and GCT.
- 92. GCT estimates that over this 15 year period the tithe donation would be more than £200,000; this sum represents about 60 times the size of community donation that commercial wind farms are asked to contribute to their community on a £/kW of generating capacity. GCT's preference would be for these funds to be put towards other environmentally friendly local projects such as supporting community transport,

offering support for enhanced insulation installations or introducing renewable energy into public buildings e.g photovoltaics on schools etc.

- 93. GCT decided to offer this as a tithe of net income over the first 15 years rather than a tithe of profits over the lifetime of the project as it recognised the benefit for this early investment into the community rather than waiting until the project was into profit, which could be 8-10 years into operation.
- 94. The project would be of huge benefit to the rural economy, as it would provide significant sustained reinvestment over a long period. £25,000 has already been spent in getting the project to the planning application stage. 2 part time local jobs will be created for the duration of the project, and it is intended to employ local individuals and firms in as much of the construction, and decommissioning as possible.
- 95. The tithe donation would be given to the local community for local investment, and the ground rent for a local farm would help them with diversification and ensure the family business is sustainable.
- 96. As the project would be funded wholly from the local community then any residual returns would be fed back into the local economy. The local Enercon service centre is at St Ives, so whilst service costs would not be reinvested in the immediate locality they would still be retained in Cambridgeshire.
- 97. GCT estimates that between £1,750,000 and £2,250,000 will be reinvested locally over the next 22 years.

Golden Hoverfly

98. A letter submitted in response to the concern about possible impact on the Golden Hoverfly can be viewed at Appendix 7.

Planning Comments – Key Issues

- 99. The key issues for Members to consider with this application are the impact of the proposal with regard issues of sustainability, landscape character and visual impact, noise, shadow flicker, aviation, residential amenity, ecology/biodiversity and highway safety.
- 100. The motion passed by Council on 24 February 2011 in respect of wind farms, and the minimum distance of 2km between a dwelling and a turbine, relates to proposals for 2 or more turbines, and therefore is not applicable to this application.

Sustainability

- 101. In accordance with Policy DP/7, outside urban and village frameworks only development for agriculture, horticulture, forestry, outdoor recreation and other uses, which need to be located in the countryside, will be permitted. Although the proposed turbine is outside the village framework officers are of the view that it could not reasonably be sited within a village framework, and does not therefore constitute a departure from Policy DP/7.
- 102. Policy NE/2 states that the District Council will grant planning permission for proposals to generate energy from renewable sources, subject to proposals according with the development principles set out in Policies DP/1 to DP/3. The

proposed development is considered to accord to Policy NE/2 as it would meet the following criterion:

- 103. The proposal would be connected efficiently to the national grid infrastructure;
- 104. The proposal and its ancillary facilities can be removed and reinstatement of the site achieved, should the facilities cease to be operational;
- 105. Policy NE/2 states that individual or small groups of wind turbines may be appropriate and that the District Council seeks to reduce the use of fossil fuels, opportunities to increase the proportion of energy, especially electricity, generated from renewable sources will be permitted unless there is clear adverse impact on the environment or amenity of the area.
- 106. The Government aims to put the UK on a path to cut its carbon dioxide emissions by some 60% by 2050, and to maintain reliable and competitive energy supplies. The development of renewable energy is considered to be an important part of meeting this aim and as such, there has been greater emphasis on 'positive planning', which facilitates renewable energy developments.
- 107. One of the key principles of Planning Policy Statement 22: 'Renewable Energy' is that "renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic, and social impacts can be addressed satisfactorily". It also states that "the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission."
- 108. The Council's Team Leader (Sustainable Communities) supports the application stating that it represents an exemplar of best practice in bringing forward community based renewable energy generation.
- 109. In light of the above it is considered that subject to the other material considerations discussed below the proposed development whilst being outside the village framework, would not harm the principles of this policy.

Landscape character and visual impact

- 110. The site is within the Bedfordshire and Cambridgeshire Claylands Landscape Character Area and is open and rural in character. It features several small woodlands in the locally, some of which are SSSI's. Policy NE/4 states that development will only be permitted where it respects and retains or enhances the local character and distinctiveness of the individual Landscape Character Area in which it is located.
- 111. The applicant has provided an assessment of landscape and visual impact as part of the EA, which includes a Zone of Theoretical Visibility over a distance of 10km, and identifies a number of viewpoints from which 12 photomontages and wireframes have been produced. These show that the turbine will be clearly visible from Clopton Way, Hatley Road, Chapel Field, sections of Potton Road (B1040), Long Lane (although a point further to the east of that selected would show clearer views), and the road from Potton to Cockayne Hatley (although not the base), but views that will be obtained are by no means restricted to these specific areas. Extensive views of the turbine will be obtained from large sections of the south east of Gamlingay.

- 112. The significance of the effect on visual amenity from close range along Clopton Way (620m) is described in the application as being major, and from Hatley Road, adjacent to the closest non-associated residential property (790m) as being major/moderate. From south east Gamlingay (1.2km), from the edge of Chapel Field the effect on visual amenity is described as being moderate/major.
- 113. The Landscapes Officer has commented that the landscape is particularly open to the east of Gamlingay, where the turbine will be situated, with long views of the turbine being obtained from several local roads, including Hatley Road, Long Lane and Potton Road. The turbine will also be viewed from several rights of way in the area. However, whilst it is considered that it will cause some degree of harm to the landscape, and will be a very prominent feature, it will remain a feature within the wider landscape rather than dominating and suppressing the local landscape character.
- 114. Additional information has been submitted by the applicant outlining in more detail the views of the turbine that might be obtained from Chapel Field in particular, and the structure will be very visible from that point, at a distance of 1.2km.
- 115. However, when viewed from the majority of viewpoints, the turbine, due to its scale, will often only take up only a small portion of a total views, which in the opinion of officer reduces the significance of its impact.
- 116. PPS22 advises that in assessing planning applications it should be recognised that the impact of turbines on the landscape will vary according to the size and number and the type of landscape involved, and that these impacts may be temporary if conditions are attached to planning permissions which require future decommissioning of turbines.
- 117. The applicant has submitted additional information which attempts to demonstrate that due to the relative ground levels, height of trees in Potton Wood, and the angles of view from Cockayne Hatley, that the turbine will not be visible from this particular area. I have asked the Landscapes Officer to confirm this opinion.
- 118. The Landscape Officer's suggestion for planting will be taken up with the applicant and provided this will be on land which is within the same ownership as the site of the proposed turbine officers are of the view that it could be secured through the planning permission.
- 119. Officers note the concerns expressed by the West Cambridgeshire Hundreds Project.

Cultural Heritage

- 120. The Conservation Manager has assessed the information submitted with the application and has concluded that there will be some harm to the setting of Hatley, including the Church at East Hatley and the Registered Park and Garden, and to the isolated farmsteads a listed and curtilage listed buildings at Merton Grange, and lesser harm to listed buildings along the eastern edges of Gamlingay. However it is considered that the harm does not outweigh the public benefit in this case.
- 121. In the additional information submitted by the applicant further photographs are supplied from within the village showing potential views out to the turbine, however many of these are masked from public viewpoints.

- 122. In response to comments that the application does not address the possible impact of the turbine on St John the Baptist Church at Cockayne Hatley, officers are aware that the applicant sought advice from Central Bedfordshire District Council at the pre-application stage in an attempt to agree suggested viewpoints from within that District which should be submitted with the application, but that no response was received. The applicant has submitted additional information which attempts to demonstrate that due to the relative ground levels, height of trees in Potton Wood, and the angles of view from Cockayne Hatley, that the turbine will not be visible from this particular area. As stated under *Landscape* above I have asked the Landscapes Officer to confirm this opinion.
- 123. Officers are of the view that there would be insufficient grounds to reject the application on this point.

Noise

- 124. The Corporate Manager Health and Environmental Services has considered the noise report submitted by the applicant and has concluded that the potential for noise impact has been considered in accordance with best practice/guidance and standards, and that it has been demonstrated that the noise from the proposed turbine can be controlled to within acceptable noise level limits, determined in accordance with ETSU-R-97. It is therefore considered that noise from the turbine once operational would be minor and not significant. No significant adverse impact is envisaged and an adequate level of protection against noise to protect amenity can be secured by conditions.
- 125. In terms of construction noise, an assessment of the activities has demonstrated that calculated noise levels generated at the nearest residences (with no financial interest in the project) during construction and demolition are below the threshold of significance when assessed against best practice guidelines. Any impact would be temporary but the Corporate Manager Health and Environmental Services has suggested a condition restricting the hours of works, including collections and deliveries.
- 126. Members should refer to the assessment of noise undertaken by the Corporate Manager Health and Environmental Services at Appendix 2. The comments point to both PPS22 and ETSU-R-97 which refer to a 'simplified assessment method', which states that 'for single turbines or wind farms with very large separation distances between the turbines and nearest properties, a simplified noise condition may be suitable. If the noise is limited to a LA90, 10min of 35 dB(A) up to wind speeds of 10m/s at 10m height, then this condition alone would offer sufficient protection of amenity, and background noise surveys would be unnecessary.'
- 127. It is accepted that it has been demonstrated that predictions indicate that at all residential properties not having a financial interest in the turbine noise levels will be below a LA90, 10min of 35 dB(A) up to wind speeds of 10m/s at 10m height calculated at the turbine site. For those properties identified as having a financial interest, where levels can be higher, noise levels will be below a LA90, 10min of 40 dB(A). This approach is more conservative and stringent than the fixed limits proposed by ETSU-R-97, and should afford higher protection.
- 128. The Corporate Manager Health and Environmental Services has considered the phenomenon of amplitude modulation, but having regard to the site specifics, government research, and the fact that this is a single turbine, it is considered that its occurrence is extremely unlikely and warrants no further consideration.

129. Safeguarding conditions that control noise are suggested.

Shadow Flicker

- 130. Shadow flicker can occur when the sun passes behind the rotors of a wind turbine and casts a shadow over neighbouring properties. When the blades rotate the shadow flicks on and off within buildings and can cause the 'shadow flicker' affect. PPS22 advises that the effect diminishes with distance, and that such effects have been proven to occur only within ten rotor diameters of a turbine. Due to the trajectory of the sun, effects only occur within 130 degrees either side of north relative to the turbine.
- 131. Based on this guidance, the Corporate Manager Health and Environmental Services has advised that shadow flicker for the proposed turbine can only realistically occur at distances of up to approximately 334 metres away. Castle Farm is the closest property, and is approximately 500m NNE, and therefore officers are of the view that based on the separation distance alone shadow flicker is very unlikely to cause any adverse impact in this case. Shadow flicker should not occur in the Cockayne Hatley direction due to the relative location of the turbine.
- 132. It is suggested that as a matter of normal good practice a condition should be attached to any consent which would allow the Local Planning Authority to assess any future concerns regarding shadow flicker from the operating turbine and, if proven to be justified, require suitable mitigation which would normally be cessation of operation of the turbine during relevant periods.

Ecology

- 133. Concern has been expressed locally about the potential impact of the proposal on ecology and wildlife which is presently found in the area, particularly the impact on bats and the SSSI at Potton Wood, but also other species such as migrating birds that are found in the area and the golden hoverfly. There has also been concern that the Phase 1 habitat survey carried out was not extensive enough to identify all the potential impact that the proposal will have.
- 134. The application has been assessed by Natural England, the Wildlife Trust and the Council's Ecology Officer and each of these conclude that given the proposal is for a single turbine, the location of the turbine, and its distance from Potton Wood, that any impact is not likely to be significant.
- 135. Additional advice has been received in respect of the information submitted in respect of the Golden Hoverfy which again concludes that given the distance of the turbine from Potton Wood any impact will not be significant.

Aviation

136. The possible impact of the proposed turbine on existing aviation activities in the area is a material consideration. Although the flight paths set out in the airfields Standard Operating Procedure Plan are not controlled by conditions attached to the planning consent that covers the airfield, they are important in ensuring that aircraft taking off from and landing at the airfield do not overfly adjoining villages wherever possible. Any proposal which causes aircraft to deviate significantly from these flight paths could give rise to additional noise problems, particularly for residents within Gamlingay and Hatley villages.

- 137. In response to the concerns raised by LGA the applicants aviation consultant has argued that the distance of the proposed turbine from the airfield is such that the height of an aircraft at that point would be such that it were not affected by the location of the turbine, and that the position is in fact 0.5km to the west of the designated flightpath, such that planes should not have to divert.
- 138. The applicant's aviation expert also suggests that the turbine is not close enough or high enough to cause increase in the workload of pilots to be a danger.
- 139. A copy of the letter from the applicant's aviation consultant has been sent to the operators of Fullers Hill and officers will report any further comments at the meeting. Cambridge Gliding Centre has not objected and its comments consider that any hazard to planes or gliders attempting to land at LGA will be relatively minor and not grounds for a sustained objection.
- 140. Having reviewed the concerns about the possible formation of fog associated with wind turbines officers are of the view that there is no evidence to justify an objection on these grounds
- 141. I have not received any comments from other aviation bodies. The Local Planning Authority does not have expert knowledge in aviation matters however from the information currently provided by both parties officers are minded to the view that there would not be sufficient grounds to object to the application.

Highway Safety

- 142. The Local Highway Authority has not objected to the application and will have considered in principal the issue of construction traffic and its implications for the surrounding road network. It has requested that a condition be included in any consent requiring the submission for approval of a traffic management plan for all large loads associated with the construction of the development, together with proposals to control and manage traffic using the agreed route and to ensure no other local roads are used by construction traffic.
- 143. There will be an impact during the construction period on traffic levels and amenity, however this will be for a temporary period. The applicant indicates that this will involve approximately 45 vehicle trips, totalling 90 vehicle movements, which will occur intermittently over a period of eight weeks.

Other Matters

- 144. Reference has been made to Bills currently before the House of Lords regarding the proximity of turbines to dwellings. This is a private Member Bill introduced in the House of Lords which has only been through the first two readings in that house, and is still in its early stages, therefore officers do not consider that it is a material consideration in the determination of this application.
- 145. Although there have been isolated incidents where turbine failure has occurred, such incidents are rare. The applicant has pointed out that the turbine has been sited so as to comply with current guidance on safe siting practice which recommends that wind turbines should be sited tip height plus 10% from all highways and public rights of way.

- 146. The applicant states that it has only ever been the intention to install a single turbine, however each application must be assessed on its individual merits.
- 147. It is the applicants view that the chosen turbine is the most appropriate available for the location.
- 148. The applicant has confirmed that the District Network Operator has agreed connection to the grid with up to 500fW at this point.
- 149. The applicant sought a screening opinion from the Council as to whether it considered that the proposed development constituted EA development. The Council opined that the development did not constitute EA development and a copy of its decision can be viewed as part of the background papers.

Conclusion

- 150. PPS22 states that Local Planning Authority should not refuse a planning application for renewable energy technology on the grounds that the particular contribution it would make towards a regional target would be small. Any potential adverse impacts of a proposal will need to be considered alongside the wider environmental, economic and social benefits that arise from renewable energy projects.
- 151. The Draft National Planning Policy Frameworks sets a presumption in favourable of sustainable development. Although arguments have been submitted both supporting and questioning the sustainability of the proposal in coming to a decision Members will need to balance the various views.
- 152. In coming to a recommendation of delegated approval officers have had regard to fact that neither the Landscapes Officer, Conservation Manager, Corporate Manager (Health and Environmental Services, Ecology Officer or Natural England have raised an objection to the proposal, having considered the impacts upon respective areas of expertise. The proposal is strongly supported on sustainability grounds by the Team Leader (Sustainable Communities).

Recommendation

- 153. Subject to the receipt and satisfactory resolution of any further comments in respect of aviation matters that delegated powers are given to approve the application, subject to safeguarding conditions.
- 154 These will be set out in detail in the update report but will include the following:
 - Time limits Noise Shadow Flicker Landscaping Decommissioning Archaeology

Background Papers: the following background papers were used in the preparation of this report:

South Cambridgeshire Local Development Framework Core Strategy (adopted January 2007)

- South Cambridgeshire Local Development Framework Development Control Policies (adopted July 2007)
- Planning File Ref: S/2564/11

Case Officer:Paul Sexton – Principal Planning Officer
Telephone: (01954) 713255