

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Planning Committee

6 April 2016

AUTHOR/S: Planning and New Communities Director

Application Number: S/2642/15/FL

Parish(es): Ickleton

Proposal: Solar Farm and Associated Development

Site address: Rectory Farm, Grange Road

Applicant(s): Push Energy Ltd.

Recommendation: Refusal

Key material considerations: Renewable Energy
Countryside
Agricultural Land Classification
Landscape Character
Heritage Assets
Archaeology
Ecology
Biodiversity
Trees and Landscaping
Flood Risk
Highway Safety
Neighbour Amenity

Committee Site Visit: 5 April 2016

Departure Application: No

Presenting Officer: Karen Pell-Coggins, Principal Planning Officer

Application brought to Committee because: Major Application of Local Interest

Date by which decision due: 14 January 2016

Executive Summary

1. This proposal, as amended, is for a 5 MW solar farm with associated equipment covering an area of approximately 6 hectares of grade 3a agricultural land to the north of Grange Road, Ickleton and south of Grange Road, Duxford. It has been submitted concurrently with an application on adjoining land for a solar farm at Abbey Farm. The two proposals are intended to be viewed as a single scheme and the impacts have been considered both individually and collectively where appropriate.

2. The Government has set a target for 15% of the UK's national electricity production to be derived from renewable sources by 2020. Support for solar pv should deliver genuine carbon reductions to help meet that target.
3. However, national planning guidance states that in the case of large scale ground mounted solar photovoltaic farms, they should be located on brownfield land or lower grade agricultural land (grades 5, 4 and 3b) and the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays unless compelling evidence has been submitted to justify the use of the best and most versatile agricultural land (grades 1, 2 and 3a).
4. This proposal would result in the development of a greenfield site of the best and most versatile agricultural land. It has not been adequately demonstrated that there are no other sites of brownfield land or lower grade agricultural land in the region that could accommodate the development. Notwithstanding the above in principle objection, the proposal also has the potential to damage features of significant archaeological interest.
5. Therefore, on balance, whilst the public benefits of the scheme in relation to the contribution of renewable energy technologies towards the production of electricity and subsequent carbon reductions are acknowledged, they are not considered to outweigh the harm from the loss of the best and most versatile agricultural land and potential loss of features of significant archaeological interest.

Planning History

6. **Site**
S/2120/15/E1 - Request for Screening Opinion for Solar Farm - EIA not required

Adjoining Site

S/2617/15/FL- Solar Farm and Associated Development- Pending Decision

National Guidance

7. UK Solar PV Strategy Part 1: Roadmap to a Brighter Future 2013
UK Solar PV Strategy Part 2: Delivering a Brighter Future 2014

National Planning Policy Framework 2012- Paragraph 98

Planning Practice Guidance - Renewable and Low Carbon Energy What are the particular planning considerations that relate to large scale ground-mounted solar photovoltaic Farms? (Paragraph: 013 Reference ID: 5-013-20150327)

Written Ministerial Statement – Solar Energy: Protecting the Local and Global Environment – 25 March 2015

Speech by the Minister for Energy and Climate Change, the Rt Hon Gregory Barker MP, to the solar PV industry on 25 April 2013

Development Plan Policies

8. **South Cambridgeshire LDF Development Control Policies DPD, 2007:**
DP/1 Sustainable Development
DP/2 Design of New Development
DP/3 Development Criteria

DP/7 Development Frameworks
NE/2 Renewable Energy
NE/4 Landscape Character Areas
NE/6 Biodiversity
NE/11 Flood Risk
NE/14 Lighting Proposals
NE/15 Noise Pollution
NE/17 Protecting High Quality Agricultural Land
CH/2 Archaeological Sites
CH/4 Development Within the Setting of a Listed Building
TR/1 Planning For More Sustainable Travel
TR/2 Car and Cycle Parking Standards

9. **South Cambridgeshire LDF Supplementary Planning Documents (SPD):**

Trees & Development Sites SPD - Adopted January 2009
Landscape in New Developments SPD - Adopted March 2010
Biodiversity SPD - Adopted July 2009
District Design Guide SPD - Adopted March 2010

10. **South Cambridgeshire Local Plan Submission - March 2014**

S/7 Development Frameworks
HQ/1 Design Principles
NH/2 Protecting and Enhancing Landscape Character
NH/3 Protecting Agricultural Land
NH/4 Biodiversity
NH/14 Heritage Assets
CC/2 Renewable and Low Carbon Energy Generation
CC/9 Managing Flood Risk
SC/10 Lighting Proposals
SC/11 Noise Pollution
TI/2 Planning for Sustainable Travel
TI/3 Parking Provision

Consultation

11. **Ickleton Parish Council** - Recommends approval.
12. **Duxford Parish Council** - Has no objections.
13. **Landscape Design Officer** - Comments that the site is situated in a wide rolling chalkland landscape but on a plateau with limited visibility from public roads or the few public footpaths on lower ground or from the higher areas to the south. However, there will be some views from the east and lesser views to the north and south as the site drops by 12 metres west to east.
14. Although landscape and visual effects would be limited, the development is of large scale and some negative effects would be evident. Therefore, mitigation of these effects is required in the form of planting on adjacent to the development and on other land under the control of the applicant.
15. The revised landscape plan has taken into consideration previous comments and is now acceptable. However, additional planting is suggested to complete the landscape structure and aid establishment of planting. A condition would be attached to any consent to agree the precise details.

16. **Trees and Landscapes Officer** - Comments that no substantial trees would be affected as the site is in agricultural fields with perimeter hedgerows that do not contain large trees.
17. **Ecology Officer** - Comments that the development is generally welcomed and could give notable biodiversity benefits if greater consideration was given to design elements. Specific areas that need to be considered are the spacing of the panels, screening of the security fence by a hedge and the means to facilitate the movement of small animals across the site. States that although badger activity has been identified in the area, no setts have been recorded. The provision of 10 metre buffer strips adjacent to the hedges, wildflower seed mixes between the panels and bird and bat boxes are welcomed. Requests conditions in relation to a Biodiversity Management Plan and badger surveys prior to the commencement of development.
18. **Conservation Officer** - Comments that given the location of the solar farm, it would have limited impacts upon the setting of heritage assets in the area.
19. **Local Highways Authority** – Comments that the methodology of transporting staff to the site needs to be reviewed and requests a condition for the submission of a travel plan. Also requires a condition for the route for construction vehicles and a condition survey of Grange Road.
20. **Cambridgeshire County Council Historic Environment Team** – Comments that the site lies in an area of high archaeological potential situated approximately 200m to the north of a known Roman settlement. In addition, an archaeological investigation to the north revealed evidence of an Iron Age field system. There is also cropmark evidence of enclosures, linears and ring ditch to the north and multi-period remains to the south east. Recommends that further information is necessary in the form of a geophysical survey and archaeological trench based evaluation prior to the determination of any application. These results would allow fuller consideration of presence/absence and extent of archaeological remains to ensure an informed judgement to whether any consent needs to include provisions of archaeological works.
21. **Cambridgeshire County Council Flood Team** – Requires a condition to ensure that the development is carried out in accordance with the mitigation measures in the submitted Flood Risk Assessment.
22. **Environment Agency** - Requests informatives in relation to surface water.
23. **Natural England** – Has no comments.
24. **Environmental Health Officer** - Comments that the development would be unlikely to cause any noise and nuisance.
25. **Contaminated Land Officer** - Comments that the site is being redeveloped into a low-sensitivity commercial end use (in terms of contamination) with no obvious potentially contaminative former land uses and it is not considered necessary to require any further assessment or remediation of contamination. However, suggests a condition if any contamination is found on site during the development.

Representations

26. **Duxford Imperial War Museum** – Has no comments.

Site and Surroundings

27. The site is located outside of any village framework and in the countryside. It measures approximately 6 hectares in area and consists of part of a larger field of arable land. Hedges align the northern (some newly planted), eastern and southern boundaries. The western boundary is open. There is a belt of trees to the north of the site.
28. The site is situated within the East Anglian Chalk Landscape Character Area on grade 3a (very good to moderate) agricultural land belonging to Rectory Farm. It lies on land at the top of a ridge and the land falls significantly to the east and south. The site falls west to east by 12 metres.
29. The village of Ickleton with its conservation area and listed buildings lies 1.2km to the east of the site. The site is situated 1.3km to the south of Duxford Airfield that falls within a conservation area and comprises a number of listed buildings. Two Scheduled Ancient monuments lie 1.5km to the north west of the site and 1.9km to the south east of the site.
30. The Chrishall Grange County Wildlife Site is located 1.7km to the west of the site. The site is situated in Flood Zone 1 (low risk). There is a reservoir located to the south east. There are no public rights of way in close proximity to the site. The nearest residential properties are Rectory Farmhouse, Stockton Lodge and The Heath situated 800 metres to the south west.

Proposal

31. This full planning application, received on 15 October 2015 as amended, proposes the installation of 5MW of solar photovoltaic farm for a temporary period of 25 years. The development would include the erection of the arrays of photovoltaic panels along with 2 transformers, 4 inverters, 1 substation, 1 grid connection building, 1 comms cabinet, 1 mount cabinet, an access track, security fencing and pole mounted CCTV cameras. Access would be from Grange Road, Ickleton via Rectory Farm.
32. The photovoltaic panels would be mounted on steel frames that are angled at 15 degrees to face south. There would be arrays of panels running east to west across the site that each measure 20 metres in length. They would have a maximum height of approximately 1.84 metres and be set 3 metres apart.
33. The transformers would be located centrally within the arrays and measure 2.7 metres in length, 2.4 metres in width and 2.77 metres in height. The inverters would be located immediately adjacent the transformers and measure 3.5 metres in length, 1 metre in width and 2.3 metres in height.
34. The substation, grid connection building, comms. cabinet and mount cabinet would be located to the north west of the arrays. The substation would measure 3.5 metres in length, 2.5 metres in width and 3 metres in height. The grid connection building would measure 8.3 metres in length, 5.75 metres in width and 3.5 metres in height. The comms. cabinet would measure 2.7 metres in length, 2.4 metres in width and 2.6 metres in height. The mount cabinet would measure 1.1 metres in length, 1 metre in width and 1.1 metres in height.
35. The track would lead from Rectory Farm and would measure 4 metres in width within the site. A security fence that measures 2 metres in height and consists of timber posts with steel deer fencing would surround the site. A number of CCTV poles at a

height of 2.5 metres would be erected around the perimeter of the site. A temporary construction compound would be provided for the loading/unloading of materials, storage of materials, parking and ancillary facilities for construction workers.

Planning Assessment

36. The key issues to consider in the determination of this application are whether the general support for a renewable energy development is acceptable in this countryside location, along with its upon the best and most versatile agricultural land, character and appearance of the area, the setting of heritage assets, biodiversity, ecology, archaeology, flood risk, highway safety and neighbour amenity.

Principle of Development in the Countryside

37. The proposal represents a major development for the generation of renewable energy. It would save 2150 tonnes of carbon dioxide per annum and generate electricity for 1515 homes per annum.
38. The Government's commitment to electricity generation by renewable sources is set out in the Renewable Energy Strategy, and in particular the target that 15% of national electricity production should be derived from renewable sources by 2020.
39. Nationally the NPPF has as one of its 12 core principles the requirement to support renewable resources. Reference is made throughout the NPPF to the support of sustainable development and renewable energy. Paragraph 98 of the NPPF states that when determining planning applications, local planning authorities should not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and approve the application if its impacts are (or can be made) acceptable unless material considerations indicate otherwise.
40. The latest national guidance in a Ministerial Statement dated March 2015 that reflects guidance in the National Planning Practice Guidance emphasises that the strategy for solar energy underlines the importance of focusing growth on domestic and commercial roof space and previously developed land. Where a proposal involves agricultural land, it should be clear that it is necessary and that poorer quality land is used in preference to land of a higher quality. Any solar farm involving the best and most versatile agricultural land would need to be justified by "the most compelling evidence".
41. Locally, the development plan comprises the adopted Core Strategy and Development Control Policies DPD. The Core Strategy has as two of its four objectives the effective protection and enhancement of the environment, and the prudent use of natural resources. Policy DP/7 of the Development Control Policies DPD states that outside village frameworks, only development for agriculture, horticulture, forestry, outdoor recreation and other uses that need to be located in the countryside will be permitted. Policy NE/2 relates to renewable energy and advises the district council will support proposals to generate energy from renewable sources subject to compliance with general sustainable development principles and additionally be able to connect efficiently to existing infrastructure and for provision to be made for the removal of facilities from site should the facility cease to be operational.

42. The installation of a solar farm is considered to represent appropriate development within the countryside providing that the most compelling evidence has been submitted to demonstrate that there are no suitable sites available on previously developed land or lower grade agricultural land in the area of the scale required and the proposal would not result in the permanent loss of high quality agricultural land.

Best and Most Versatile Agricultural Land

43. The site covers approximately 6 hectares of arable land. An Agricultural Land Classification Report has been submitted following soil sampling that states the site has an agricultural land classification of grade 3a (good to moderate).
44. The applicant has submitted a Site Selection report as part of the application that considers if there are any potentially more suitable sites situated on previously developed/non-agricultural land; or lower grade agricultural land (i.e. Grade 4 and below). This takes into account the advice in the PPG and Ministerial Statement.
45. Commercial rooftops are not considered because of the vast area of roof space required for up to 10MW this is not reasonably practical, given the number of constraints in terms of building structure and orientation to be south facing.
46. The methodology utilised to carry out the assessment comprises two parts:-
i) definition of the search area;
ii) analysis of previously developed / non-agricultural land;
iii) analysis of lower grade agricultural land;
iv) create a short list of sites for further analysis; and
v) assessment of the short-list.
47. The search area is based on the requirement to connect the solar farm to the local electricity distribution network. UK Power Networks, has provided a point of connection approximately 3.5km to the north west of the site.
48. An assessment of connection costs against possible output were undertaken. This determined that a connection anywhere along the overhead line up to a distance of 5 km (from the overhead line) would be commercially viable. This is defined as the search area.
49. The search area covers land in South Cambridgeshire. Sites were assessed in relation to their constraints and size. This commenced with the identification of any brownfield land, the identification of any lower grade agricultural land and if not available an assessment of constraints including ecological designations, heritage assets, landscape designations, land availability, access, topography, flood risk and availability on sites of the best and most versatile agricultural land. This determined whether there were any feasible alternatives.
50. Within the search area, there are no brownfield sites.
51. The majority of the agricultural land is grade 2 with a limited area to the east and south being grade 3. South Cambridgeshire has just 2% grade 4 agricultural land and 0% grade 5 agricultural land. The northern and western areas were excluded.
52. There are a number of sites with ecological designations such as Sites of Special Scientific Interest and County Wildlife Sites around Fowlmere and Whittlesford that were excluded. There is a concentration of heritage assets in the villages of Ickleton, Duxford and Thriplow along with Scheduled Ancient Monuments close to the villages

that were excluded. The northern and central part of the search area is designated as Green Belt land and was excluded.

53. Access that is not close to a major roads and has restrictions along with sites with more than two public rights of way were excluded. The area surrounding the River Cam in the high risk flood zone to the east of the site area was excluded.
54. Taking into account all of the above constraints, the site subject of this application was chosen subject to the availability of the land.
55. Whilst the use of brownfield or previously developed land is considered more appropriate and the preference for the development of solar farms rather than greenfield land as per the application site, it is difficult to find such land available. The whole of the district comprises predominantly grade 2 and 3 agricultural land so it would be difficult to contribute to renewable energy in the area without the use of some of this land.
56. However, although it is noted that the grid connection is viable, it has not been demonstrated why brownfield sites or sites on lower grade agricultural land site outside the district and in the region were not considered prior to the selection of this particular grid connection. No evidence has been submitted that shows the grid capacity in the area and no information has been provided to rule out other possible connection points in terms of viability.
57. The proposal is not considered to result in the irreversible and permanent loss of the best and most versatile agricultural land given that it could be returned to its original agricultural use when there is no further need for the development and that the land could be laid to grass on the site and used for sheep grazing. The development would also result in biodiversity gain.
58. Officers have also had some regard to the decision taken by the Planning Committee in February 2016 when it considered this issue in refusing a solar farm elsewhere in the district. That site was considerable larger and as such the loss of best and most versatile agricultural land was more significant in that instance.
59. When taking all the above factors into account, it is considered there is still a lack of compelling evidence to justify the use of even a small area of the best and most versatile agricultural land for a substantial period of time. This weighs against the proposal.

Character and Appearance of the Area

60. The site currently consists of open arable land. Whilst it is noted that the introduction of a significant scale arrays of solar panels and buildings would substantially change the character and appearance of the landscape from being open and rural in character to being industrialised in character, it is unlikely to have adverse visual impact from the main public viewpoints surrounding the site. This is as a result of the low height of the development and new planting that is proposed to screen the development and mitigate its impact upon the landscape from long distance views.
61. The site is located within the East Anglian Chalkland Landscape Character Area. The distinctive features of this area are a distinctive landform of smooth rolling chalk hills and gently undulating chalk plateau; a mostly large-scale arable landscape of arable fields, low hedges and few trees, giving it an open, spacious quality; remnant of chalk grassland occurs on road verges and along tracks; small beech copses on the brows

of hills, and occasional shelterbelts, are important features; a wealth of historic and archaeological features, including; ancient trackways, earthworks, small chalk pits and pre-nineteenth century enclosures; and mostly strong rural character, though this is disrupted immediately adjacent to major roads such as the A505 and the M11.

62. Although the development is not necessarily compatible with the existing landscape qualities of the area as the open arable landscape would be lost, the development would retain some of the characteristic features and provide additional planting that would be designed to ensure it is in keeping with the visual qualities of the area. The development is not therefore considered to have an unacceptable impact upon landscape character and complies with adopted policies NE/4, DP/2 and DP/3.
63. The adjoining solar farm under application reference S/2617/15/FL has been taken into consideration in the comments from the Landscape Officer. The nearest solar farms to the site where the cumulative impact of the development needs to be taken into consideration are at Great Wilbraham and Fowlmere. The proposed solar farm would not be visible from the same viewpoints or sequentially along the same public rights of way or roads within close proximity of each other. The cumulative landscape and visual impact of both this and the proposed adjoining solar farm are also considered to be acceptable

Heritage Assets

64. The site is located a significant distance away from the conservation area and listed buildings in the village of Ickleton and Duxford Airfield. The proposal is not considered to damage the setting of these heritage assets. Thus the statutory requirements in sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 respect of listed buildings and conservation areas would be met as would compliance with adopted plan policies CH/4 and CH/5.
65. The site is located within an area of high archaeological potential due to the number of heritage assets in the area and the development may destroy important archaeological features. A desk based assessment has been carried out but a geophysical survey and trench based archaeological evaluation of the site are required prior to approval of the application to demonstrate that the proposal would not result in the loss of any significant features of archaeological interest.
66. This approach has been taken consistently across the district for solar farms when required. Whilst it is noted that float foundations are suggested so that the ground would not be disturbed, this would not take into account any exclusion zones that may be required to accommodate any significant findings that need to be completely protected from development. The lack of any such investigation is contrary to policy NE/2 and the advice in the NPPF and weighs against the proposal.

Biodiversity

67. The habitats on the site and immediately adjacent the site comprise a mixture of arable land, trees, hedgerows and grassland. They are considered of low ecological value.
68. Whilst the Ecology Officer has some concerns in relation to the close spacing of the panels and the lack of landscaping immediately adjacent the security fence, the overall development is considered to provide substantial biodiversity enhancements to the site given that its current use is arable land. In line with policy NE/6, this would not therefore warrant refusal of the application on these grounds.

69. Conditions would nonetheless be attached to any consent to secure a badger survey to be carried out prior to the commencement of development to assess the site for setts and determine whether any mitigation measures are necessary, a Biodiversity Management Plan and positions of gaps in the fence to allow the movement of small animals across the site.
70. The development would not adversely affect the interest features of the nearby County Wildlife Site due to the distance from the site.

Landscaping/Trees

71. The development would be unlikely to result in the loss of any important trees or hedges that contribute to the visual amenity of the area providing a condition is attached to any consent for protection purposes. A significant landscaping scheme would also be attached as a condition of any consent in order to mitigate the impact of the development upon its surroundings along with a Landscape Management Plan.

Highway Safety

72. The Traffic and Construction Management Plan shows the access route to the site during construction and decommissioning. Vehicles would access the site from the M11, along the A505, through the village of Duxford and along Grange Road.
73. During the 14 to 16 week construction period, the traffic generation is estimated at a maximum of 130 HGV/LGV deliveries. There would also be movements from site personnel that would be a maximum of 60 trips per day.
74. Whilst it is acknowledged that there would be a significant number of traffic movements during the construction period, the development is not considered to result in a level of traffic generation to and from the site that would be detrimental to highway safety given the position of the access and visibility and the management of the traffic to the site. The number of traffic movements during decommissioning would be lower than during construction and the number of movements for maintenance during operation of the solar farm would be very low. Conditions would be attached to any consent to agree a staff travel plan, condition survey of Grange Road.
75. The development therefore complies with policies DP/3, TR/1 and TR/2.

Flood Risk

76. The site is located within Flood Zone 1 (low risk) and not within close proximity of any watercourses.
77. The Flood Risk Assessment submitted with the application sets out the surface water drainage strategy for the site that includes panels with gaps at regular intervals to allow a more even distribution to the ground beneath the panels and swales at the bottom of the land where it slopes. The development is therefore unlikely to increase the risk of flooding to the site and surrounding area and complies with policy NE/11.

Residential Amenity

78. The nearest residential properties to the site are located approximately 800 metres away at Rectory Farm. The development would not result in a significant increase in noise and disturbance from the development given the distance from the site.

79. The construction and decommissioning access would run past Rectory Farm. The development would not result in an unacceptable increase in the level of noise and disturbance to these properties given that the construction period would be for a limited time only and delivery times would be between 08.00 hours and 18.00 on weekdays and 08.00 hours and 13.00 hours on Saturdays.

Other Matters

80. The development would be located a significant distance away from Duxford Airfield, and would not have an adverse impact upon its operation.

Conclusion

81. The benefits of providing renewable energy provided by this scheme need to be weighed against the identified harm arising from the use of the best and most versatile agricultural land and the lack of archaeological investigation.
82. Officers conclude that the benefits arising from this scheme are currently outweighed by the lack of the most compelling evidence in respect of the use of the best and most versatile agricultural land and the lack of archaeological investigation. Whether taken individually or collectively, these adverse impacts justify refusal of the application. While each application should be treated on its merits, the adjoining proposal for land at Abbey Farm is intended to be viewed as a single scheme and thus the extent of the overall harm is intensified.

Recommendation

83. Officers recommend that the Committee refuses the application for the following reasons:
- i) The most compelling evidence has not been submitted to demonstrate that the development of the proposed solar farm is justified on the best and most versatile agricultural land as opposed to brownfield or lower quality agricultural land. The proposal is therefore contrary to the Written Ministerial Statement on Solar Energy: Protecting the Local and Global Environment 2015.
 - ii) Insufficient information has been submitted to demonstrate that the development would not result in the loss of significant features of archaeological interest. The proposal is therefore contrary to paragraph 135 of the National Planning Policy Framework 2012 that states the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

Background Papers:

The following list contains links to the documents on the Council's website and / or an indication as to where hard copies can be inspected.

- South Cambridgeshire Local Development Framework Development Control Policies DPD 2007
- South Cambridgeshire Local Development Framework Supplementary Planning Documents (SPD's)

- South Cambridgeshire Local Plan Submission 2014
- Planning File References: S/2642/15/FL and S/2617/15/FL

Report Author:

Karen Pell-Coggins
Telephone Number:

Principal Planning Officer
01954 713230