

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Planning Committee

1 July 2015

AUTHOR/S: Planning and New Communities Director

Application Number: S/0400/15/FL

Parish: Litlington

Proposal: Installation of bio-fuelled power generation plant, including retention and refurbishment of existing barn, and new sub-station

Site address: Highfield House, Highfield Farm, Royston Road, Litlington

Applicant: REG Bio-Power

Recommendation: Approval

Key material considerations: Principle of development, environmental impact, visual impact and highway safety

Committee Site Visit: No

Departure Application: No

Presenting Officer: Paul Sexton

Application brought to Committee because: The officers recommendation of approval is contrary to the recommendation of Litlington Parish Council

Date by which decision due: 17 March 2015

Planning History

1. S/0439/12/FL – Installation of 5 wind turbines and associated works – Refused – Appeal Withdrawn.

Policy

2. **National Policy**
National Planning Policy Framework

3. **South Cambridgeshire Local Development Framework Development Control Policies**

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/15 – Noise Pollution
NE/16 – Emissions
CH/2 – Archaeological Sites
TR/1 – Planning for More Sustainable Travel
TR/3 – Mitigating Travel Impact

4. **South Cambridgeshire LDF Supplementary Planning Documents (SPD)**

Landscape in New Developments SPD - Adopted March 2010
Biodiversity SPD - Adopted July 2009

5. **Draft Local Plan**

S/1 – Vision
S/2 – Objectives of the Local Plan
S/3 – Presumption in Favour of Sustainable Development
S/7 – Development Frameworks
CC/1 – Mitigation and Adaptation to Climate Change
CC/4 – Sustainable Design and Construction
CC/7 – Water Quality
CC/8 – Sustainable Drainage Systems
CC/9 – Managing Flood Risk
HQ/1 – Design Principles
NH/2 – Protecting and Enhancing Landscape Character
NH/4 – Biodiversity
SC/11 – Noise Pollution
SC/13 – Air Quality
TI/2 – Planning for Sustainable Transport

Consultations

6. **Litlington Parish Council** – recommends refusal.

7. “Out of character with the locale – currently a farmyard. Proposal would create an industrial facility in the middle of a field.

- Loss of amenity of Clunch pit and surrounding tracks used by walkers and dog owners.

- Decrease in air quality in local area – introduction of a facility producing greenhouse gas emissions (CO₂, NO, benzene) where there is currently fresh air.

- Concern over detrimental air quality and noise impact of installation.

- Should SCDC choose to approve this application, the village of Litlington requests that the following conditions be met;

(i) Full, independent review of impact on air quality, noise on the locale to be published.

(ii) Confirmation that approval of this application does not set a precedent for further industrial development in this locale.

(iii) On going contribution to the community to the community by REG BIO as per its community page. "REG strives to be a good neighbour to the communities surrounding our projects. We always aim to work closely with local stakeholders to ensure that communities hosting our renewable energy schemes share in the financial benefits"

8. **Environmental Health Scientific Officer (Air Quality)** – Following a thorough evaluation of the submitted report on Air Quality Impact Assessment of Emissions to Atmosphere from the Highfield Farm, Royston (STOR) Plants prepared by AMEC Foster Wheeler Limited dated 25 February 2015, no objections are raised to the proposed development.
9. The applicant may need to consider increasing the height of the stack for the individual plants, especially those that will be adjacent to the existing barn, which it is understood is higher than those for the proposed plants, for the effective dispersion of the pollutants of concern.
10. **Environmental Health Officer** - No objections in principle to this proposal. However, attention is drawn to the noise and air quality reports submitted. The proposal refers to there being "up to" 10 units on site but the reports are based on calculations for 8 units.
11. The calculations submitted are based on modelling and appear to indicate there is not likely to be a problem if 8 units are used. No other information is available as to noise levels, etc should the installation be increased to 10 units.
12. In view of the distance from residential premises (particularly the village areas) and the estimated times and extent of use it is considered that unacceptable impacts are not likely to occur from the development.
13. **Landscapes Officer** – Additional planting will be required around the facility and the barn. Filling in the sides of the barn will make the structure more bulky and prominent, and the existing planning on the east side of the compound is in poor condition.
14. It is suggested that there should be occasional large native trees (eg Oak, Beech) along the track to the site, and a field gate or gates to match the fence at the entrance to Royston Road, rather than the existing tubular metal gate.
15. **Local Highway Authority** – no objection.
16. **Environment Agency** – states that the Technical Summary provides little information about the transformers, but assuming these will feature oil-based cooling/insulation it states that there is no objection providing that appropriate conditions are included in any consent.
17. These should require the submission and approval of the design of the transformers and any associated housing/bunding/base, which should include details of how oil loss to the environment will be prevented, and a fire emergency plan.

18. **Ecology Officer** – No objection to the principle of development.
19. **Cambridgeshire Archaeology** – no objection or requirements.

Representations

20. 18 letters have been received from the residents of properties in Litlington objecting on the following grounds:
 - a. Lack of local consultation
 - b. Industrial development which will spoil the countryside. Although the site has some screening the view from Therfield Health (an important SSSI) will be affected.
 - c. Noise will be created which will carry towards Litlington. Generated levels will be 65-75 decibels (typical of an industrial estate)
 - d. Exhaust from generators will contain pollutants such as carbon dioxide, carbon monoxide and particulates – will South Cambs commission its own reports or just accept what is submitted in the application? Pollutants could exacerbate existing health problems. The modelling for the pollution plume has used data meteorological data from Stanstead Airport over 20 miles away, and is not comparable to local wind conditions.
 - e. Will exhaust/emissions smell? The Biogen plant on the A505 emits powerful odours. Although this is a different type of plant there are the same concerns.
 - f. How will the operation of the plant be monitored and controlled? The operating hours seem excessive. The application states that National Grid will be able to access the plant remotely to start it up at any time. The hours of operation indicated in the application could not therefore be controlled.
 - g. Proposed usage of 11 hours a week seems a lot of investment for a very few hours of power to the National Grid.
 - h. Concern about storage of large quantities of oil on site.
 - i. Only a single track access road, although gates shown set back to allow a waiting lorry to park. Any waiting lorry parking on Royston Road could become a hazard to traffic.
 - j. Additional traffic problems in Litlington. The applicant has stated that very few delivery vehicles will access the site, but the size of lorries and frequency of deliveries could increase.
 - k. Junction of Royston Road/A505 unsuitable for increase in larger vehicular traffic.
 - l. Green credentials not valid due to carbon footprint of lorries travelling to and from Norfolk. It should be located closer to the source of the oil.
 - m. Efficiency is debatable as the U.S Energy Information Administration projected that by 2017, biofuels are expected to be twice as expensive as natural gas, and slightly more expensive than nuclear power.
 - n. The area is already a net producer of renewable energy i.e. from solar, which does not generate harmful emissions.
 - o. Will adjacent land be polluted by emissions.
 - p. Will the operation be allowed to expand in the future if successful?
 - q. No local employment benefits?
 - r. Site is the breeding ground of the Stone Curlew.
 - s. Green Belt land – is this a suitable site?
 - t. The applicant stated at a Parish Meeting that its existing plants are on industrial/brownfield land.
 - u. With the uncertainty of impacts will SCDC be responsible for future problems of residents trying to sell houses?

- v. The applicant should make a financial contribution to the village by way of compensation.
 - w. Responses given by the applicant to a Parish Council meeting differ from those in the literature submitted with the planning application.
21. Three letters have been received from residents of Litlington supporting the application, provided that the validity of the applicant's statements regarding air quality and noise are approved by the Council's experts.
22. If this is the case the scheme appears to fulfil planning requirements. Most of the local concerns are raised by a vocal group of villagers who seem to have very little understanding of what is proposed. One letter states that the applicant should make a financial contribution to the village by way of compensation.
23. The National Grid connection at Highfield Cottages is sizeable, and it is understood that these are in short supply in the south, which means that there will be efforts made to use it until successful.

Applicants Representations

24. The applicant comments that the primary installation is made of containerised pre-manufactured components, which arrive on site fully assembled to be craned into position. No construction works in the conventional sense is required.
25. The limited extent and containerised nature of the primary installation mean the number of vehicle movements is significantly less than with a scheme using traditional methods of on-site construction.
26. The impact of the scheme in terms of both air quality and noise has been fully assessed in the consultant's reports which accompany the application. These have been considered by the Council's Environmental Health Team who has confirmed that no detrimental impact will arise as a consequence of the installation and operation of the plant.
27. The Council's Landscape Officer has confirmed that the installation will not impact on the local landscape character, or have a negative visual presence. The overall site has been revised to include additional planting, including trees and under-storey planting to further enhance the setting of the scheme, and in line with the Landscape Officer's recommendation.

Site and Proposal

28. This full application, registered on 18 February 2015, proposes the installation of a bio-fuelled power generation plant on a 0.38ha area of land to the west of Royston Road, Litlington. The site is well screened on the north, west and south boundaries.
29. The plant includes 8 containerised power generation sets. Each 'Genset' comprises a prime mover (diesel engine) and electrical generator. This is factory assembled and installed in a bespoke steel container. Each contained measures 15m x 3.5m and is 3m high. The gensets are arranged in two groups comprising one bank of 5 and one of 3, which the applicant states allows for the most efficient connection of each genset to its associated transformer and connection to the grid. The arrangement also allows the use of individual exhausts, with each genset exhausting through individual and silenced ducts to a vertical stack. The vertical stack takes the overall height of each genset to 7m.

30. The proposal includes the retention and refurbishment of an existing open sided barn on the south side of the site, which will house 2, 60,000 litre fully containerised and internally bunded tanks for biofuel storage, and the erection of a sub-station.
31. The applicant states that the installation will provide Short Term Operating Reserve, with the engines running for a maximum of 3 hours per day for 6 days in any week, to a maximum of 600 hours per year.
32. The fuel for the plant will be the applicant's patented refined LF100, which is processed from used cooking oils, or a variety of vegetable oils. The applicant states that the exact fuel sourcing will depend upon market economics at the time, but that oils will always be sourced from auditable renewable and sustainable local or sub-regional sources. The applicant states that the fuel is a fully recognised bio-fuel, not a bio-diesel, and is fully certified by the Environment Agency as an 'end of waste' product. The plant has been configured to operate at 1800kw per genset, to be exported to the national grid.
33. The building, Gensets and sub-station kiosk will be surrounded by a 2.4m high open-mesh security fence, with secured access gates at the end of the access road and in front of the proposed sub-station. The plant will be un-manned and remotely operated.
34. The site is set 250m away from Royston Road, and is served by an existing roadway, which will be upgraded. The applicant states that traffic movements during the construction phase will be limited as each item will be delivered to the site as a pre-finished package. Once operational it is anticipated that not normally more than one visit a month would be made by maintenance staff.
35. The site is surrounded by agricultural land. The nearest residential properties are at Highfield Farm, which is 650m to the south, and Limlow to the north (600m). The site is 850m from properties on the edge of Litlington village, and 1.2km from properties at Morden Grange Farm to the south west.

Planning Considerations

36. The key issues for Members to consider are the principle of development (including renewable energy generation, residential amenity, landscape impact and highway safety).

Principle of development

37. The site is outside the village framework. Policy NE/2 of the adopted Local Development Framework states that planning permission will be granted for proposals to generate renewable energy from renewable sources subject to the development according with the development principles set out in Policies DP/1 – DP/3. Proposals must demonstrate how they can be connected efficiently to existing national grid infrastructure, unless it can be demonstrated that energy generation would be used on-site to meet the needs of a specific end user. The proposal should also make provisions for the removal of the facility, and reinstatement of the site, should the facilities cease to be operational.
38. The applicant has been asked to provide details of the connectivity of the site to the national grid.

Residential amenity

39. The site is located 0.85km south of the main area of Litlington village. The distances from other residential properties are quoted in paragraph 42 above.
40. The report submitted with the application states that it considers short and long-term effects in relation to the air quality standards set out in legislation and in Government and international guidance. The pollutants covered in the assessment are oxides of nitrogen (NO_x as NO₂), particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO), and volatile organic compounds (VOCs, assumed to be benzene)
41. The impact assessment concludes that, under the anticipated operational profile of the STOR plant, exceedances of any AQS, AEL, critical level or critical load are unlikely at any human or ecological receptors. In addition, the report concludes that the impacts at human receptors can be defined as 'negligible' following guidance issued by Environmental Protection UK, and that on this basis, air quality factors should be considered a constraint to the development of the site.
42. The report has been considered by the Environmental Health Officer (Air Quality), who agrees with its findings.
43. The impact of the proposal in respect of potential noise generation has also been considered by Environmental Health Officers, and the impact deemed acceptable. The applicant has updated the submitted report so that it refers to 8 units, in accordance with the application.
44. The site is 600m south of the public right of way leading to the Clunch pits. At this distance, and with the screening on the north boundary of the site, officers are of the view that the proposal will not have a materially adverse impact on users of the right of way or Clunch pits.
45. Hours of operation can be controlled by condition.

Impact on landscape character

46. The site is already fairly well screened, particularly from the south and west, at a height which will be above the height of the proposed works. Following the comments received from the Landscapes Officer additional planting is now proposed which will adequately screen the proposed development.
47. The applicant has confirmed that the height of the stacks does not need to be above the 7.0m shown, which is below the height of the existing barn on the site.
48. Concern has been expressed that the proposed development will be out of character with the area, and will create an industrial use in the middle of a field. The introduction of the proposed containers is not a traditional feature in the countryside, however, as stated above, the site is set back from the road and is already well screened, with additional landscaping proposed. Any visual impact of the proposal needs to be balanced against the benefits of securing a facility which provides additional electrical power from materials which would otherwise go to landfill or other non-sustainable forms of disposal.

Access and highway safety

49. Following the receipt of additional information from the applicant on proposed traffic generation levels, the Local Highway Authority has raised no objections. A traffic management plan can be secured by condition. This can require traffic to access the site from the A505, rather than through Litlington village.

Other matters

50. Comment has been made regarding an on-going contribution to the community being secured from the applicant. There is no provision for this under planning legislation, and is something that will need to be pursued separately by the Parish Council.

Conclusion

51. Having considered the issues of the need for energy generation, and balanced this against the potential impacts of the proposal in respect of residential amenity, landscape impact and highway safety, officers are of the view that the proposed development can be supported.

Recommendation

52. That the application is approved subject to:

Conditions

Conditions to include:

- 3 Year Time Limit
- Approved drawings
- Landscaping
- Materials
- EA Conditions
- Traffic Management Plan
- Highway Conditions
- Hours of Use

Background Papers

Where the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012 require documents to be open to inspection by members of the public, they must be available for inspection: -

- (a) at all reasonable hours at the offices of South Cambridgeshire District Council;
- (b) on the Council's website; and
- (c) in the case of documents to be available for inspection pursuant to regulation 15, on payment of a reasonable fee required by the Council by the person seeking to inspect the documents at the offices of South Cambridgeshire District Council.

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 Plan Proposed Submission July 2013
- South Cambridgeshire Supplementary Planning Documents

- National Planning Policy Framework 2012
- Planning File References: S/0400/15/FL

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