Reference: 14273-L03

20 April 2015

Ms L Jackson
Staffordshire Moorlands District Council
Planning Department
Moorlands House
Stockwell Street
Leek
Staffordshire Moorlands
ST13 6HQ

Dear Lisa,

Land at Booths Farm, Froghall Road, Cheadle
Planning application seeking permission for a Short Term Operational Reserve Facility
Reference: SMD/2015/0080

I write in response to David Davies' comments in relation to the STOR application. We have considered the nature of the scheme and the location of the site, and offer additional explanation of why Booth's Farm was considered to be a suitable location for the scheme and the special circumstances that limit the choice of alternative locations. We have also considered the comments raised by the Parish Council and local residents and will respond to any further points that have been not been covered in David's response.

Environmental benefits of the STOR

The purpose of the short term operational reserve (STOR) is to only operate on a short term basis to fill gaps in the energy supply, necessary as electricity generation is increasingly diversified and localised to smaller scale generation, i.e. individual renewable energy developments. By shifting the power generation from the major centralised power stations, a number of which have already closed down, to the local energy grid network there is a need to ensure that the supply can be maintained and reinforced at times when the local energy production may not be able to meet abnormal peak loadings on the system. This could occur only 3 or 4 times a year, but in order to prevent blackouts, facilities such as the STOR that we have proposed will be required.

Moving the backup power generation to the local grid network allows the main backup generators at the large power stations (which would otherwise fill the gaps in supply) to be shut down – as the network operator can rely upon alternative redundancy options available locally to the area of where power is needed.

These large main generators at power stations consume power on standby as they have to turn over even when not generating, unlike the STOR facility which can be fully switched off. This would offer carbon reduction savings, by not using fuel on standby, that would offset the fuel used to generate power from the STOR.

Furthermore, locating the energy generation on the local network means that the backup supply can be more responsive, reducing running times and cutting down on transmission losses and inefficiencies. These factors all reduce the power that has to be put into the grid network to achieve the same result at the local level. Again, this would offer carbon savings compared to the conventional large scale centralised generators.

Whilst the STOR would burn fossil fuels to generate electricity, it would only do so on an infrequent basis and in an efficient manner to supply localised requirements on the local electricity grid. In this way and as explained above, it can be seen as offering a carbon reduction compared to centralised large scale generation. As an analogy, it would be comparable to driving yourself to the shops in an old diesel bus or a modern diesel hatchback, both achieve the same result getting you to the destination, but one is far more efficient that the other at making that local trip.

Operation of the STOR

The STOR is a complementary technology to renewables and is necessary to ensure a robust and consistent energy supply as we have become increasingly reliant upon renewable energy generation. Wind farms and solar farms can vary generation depending upon weather conditions, sometimes dropping off power suddenly or unexpectedly. This places a load on the local supply grid that has to be smoothed over to avoid power interruptions.

When all energy generation was from centralised sources, predominantly large scale coal, gas or nuclear power stations supplying all of our energy needs, the power supply was predictable and consistent one day to the next and the loading on the grid network was relatively predictable and easier to manage. This is no longer the case with localised power generation from renewables, as required by Government policy, which can be far more variable depending upon climatic conditions.

To work effectively, the infrastructure has to be brought up to date to take into account these new circumstances. This is where the justification for the STOR lies. Planning policy has not considered the technology yet, as the requirement for it has only emerged in the last few years as renewable energy schemes produce an increasingly significant amount of the UK's energy requirements.

Consideration of alternative locations

When selecting the location for the facility, very careful consideration was given to the surrounding area and potential for impacts on neighbours and the landscape.

In terms of selecting the location, Section 6 of the supporting planning statement accompanying the application highlighted that alternatives had been considered, but did not expand on these in particular detail. Following discussions with our Client, we can provide the following additional details regarding the search that was undertaken prior to selecting Booths Farm as a location for the application.

There is no policy requirement to search for alternative sites on a countrywide basis and to do so would be extremely onerous for a development of this scale and nature. The search for alternative locations can only be reasonably undertaken along the route of the power line where capacity for the connection has been confirmed. Searching elsewhere away from the grid network and where connections cannot be confirmed would essentially prevent the scheme from happening in the first place, and we do not consider such a search to be feasible or reasonable.

The original search was centred on the Kingsley Holt substation and along the power lines from here in reasonable proximity. The sites considered are as follows:

Lockwood Hall Farm

An approach was made to the landowner at Lockwood Hall Farm which is the group of buildings to the south of the substation on Lockwood Road. Our Client walked this land with the landowner, covering the area to the north around the substation. It was found to be quite close to the houses in Kingsley Holt Village and therefore deemed that this would not be an appropriate location. The area to the south of the farm buildings was quite open and had views towards Cheadle, which would have made it more difficult to hide the installation. The site was also in full agricultural use.

For these reasons this location was discounted.

High View Farm and Church Farm and Longcroft Farm

To the west of the substation and the village of Kingsley Holt, is High View Farm, Church Farm (on the edge of Kingsley Holt village. The land held by High View Farm was not considered to be appropriate because of the proximity of houses, whilst the owners of The Church Farm have opted to pursue a potential solar development, so the land would not be available for a STOR.

These locations were therefore discounted.

Longcroft Farm

Longcroft Farm is located immediately to the north of Booths Farm, and was felt to hold some potential as a potential site that offered good concealment for a scheme was apparent. However, this was on agricultural land and the owner was not interested in considering a scheme as she leased that area of land to another farmer. This site was also in the Greenbelt and therefore offered no benefit compared to the site at Booths Farm.

For these reasons this location was discounted.

North of Kingsley Holt Substation

Looking to the northeast of the Kingsley Holt substation, the electricity line was followed along the first spur of the line to Froghall where there is a further substation. Between Kingsley Holt and Froghall the line is considered to be too close to houses.

These locations were therefore discounted.

Froghall former industrial site

At Froghall there is a closed factory which is being marketed by Aspinal Verdi as 18.2 hectares of land suitable for leisure and employment purposes. This could have been a suitable location and our Client spoke to and wrote to the selling agent. However we were informed that their Client wanted to sell the site as a whole and would not consider locating a STOR on part of the land. They wished to ensure that the redevelopment of the site as a whole would not be prejudiced by development on a small section off it, and we were therefore unable to proceed.

For these reasons this location was discounted.

Whiston Quarry and Little Eaves Farm

Consideration was then given to the quarry south of Whiston and the area around it. The quarry could have represented a good location, however the owners were not interested in considering a STOR and were progressing their own solar park application. In addition, it was understood that there were aspirations with regard to future leisure use of the site and they were therefore not prepared to consider a proposal.

Our Client approached the owners of Little Eaves Farm near to the quarry but the landowners were not interested in a STOR scheme.

These locations were therefore discounted.

Whiston and Cauldon area

The search continued following the electricity line to the northeast from Whiston up to Cauldon. However, this was starting to get too far away from the Kingsley Holt substation and point of connection to the grid network foxed by the Network Operator.

In any event, having searched the area extensively and driven the route numerous times it was apparent to our Client that the area was typically agricultural in nature and the topography more open and exposed. There were also houses evenly located along the route, making positioning and concealing STOR scheme difficult, without adverse landscape or amenity impacts. This was not considered to be an appropriate location for the development.

These locations were therefore discounted.

Cauldon Quarry

Our Client also approached the owners of the quarry at Cauldon, but this was an operational site and they would not consider a STOR use on part of their landholding.

For these reasons this location was discounted.

Conclusions

Overall it is considered that a very thorough and robust search was has been undertaken of potential locations in the surrounding area along the route of the identified power line with network capacity. These locations included land within and outside of the designated Green Belt, brownfield land, quarries and agricultural land.

It has been found that none of the sites considered represent alternative locations that are either suitable for STOR scheme, or available to our Client. Locations further afield would not be viable as these could not be connected to the grid connection offered to us by the Network Operator, effectively nullifying the scheme.

The selected location at Booths Farm

Having considered a wide range of alternatives in the area, the search for sites kept returning to Booths Farm as a potential suitable location. The proposed location is well away from any houses including the house owned by the landowner. It can be completely concealed and is on the site of an existing commercial operation and is brownfield land having previously been used for landfill.

Whilst the site is located within the Greenbelt, it is very close to the boundary, which is only 200 meters away to the east and would not materially impact on the purposes of including land within the Greenbelt. It is arguably a better location that many of the alternatives outside the Greenbelt boundary which would lead to the loss of greenfield land and have a greater level of impact on the landscape and neighbouring properties. With suitable screening and landscaping in place, the STOR would not be visible.

As highlighted above the site itself has little to offer in terms of landscape character that is worthy of preservation. Screening the site can be achieved so there would be little apparent impact on the openness of the Greenbelt when viewed from longer distances all one would see would be a continuation of the rolling topography.

Locating the scheme on a brownfield urban site would be ideal, however, this would put the land rental values for the scheme in competition with other forms of development such as housing or employment. These values are simply too high and would render the STOR economically unviable. Using such brownfield locations would also displace permanent housing or employment development elsewhere, must likely onto undeveloped greenfield land, so little net benefit would be achieved. As highlighted above, my Client approached the owners of the most likely brownfield urban site (along with a number of other locations outside of the Greenbelt) and they decided they did not want to give up part of their site for the scheme.

We are tied to considering sites that may be suitable along the power lines coming from the substation with identified capacity to take the generated electricity. The STOR cannot be located away from this location, otherwise it would not fulfil the requirement to reinforce the local energy grid.

Temporary permissions can be granted on a longer term basis of 25 years, and are common place for renewable developments such as solar farms or wind turbines as David points out. We have highlighted in the application details that the development has a low impact on the site, requiring minimal groundworks and foundations, and the site can easily be restored to its former condition at the end of the temporary period. For these reasons we believe that the impact from the scheme on the openness and character of the Greenbelt would be low and can be mitigated for the duration of the scheme and then restored following its removal.

With these constraints in mind, we believe that Booths Farm is the best location and with suitable mitigation the openness of the Greenbelt can be protected and the objectives of including land within the Greenbelt will not be compromised.

Comments made by residents to the consultation

We have reviewed the comments made by the residents following the consultation and would like to clarify a few issues that have been raised.

In relation to noise issues, the submitted planning assessment considers the noise levels resulting from the operation of the generator at maximum levels. It was found that there would not be any discernible impact on receptors in the area, with the nearest neighbours to the scheme being over 300 metres distance. These calculations also made no allowance for the mitigating effects offered by the bunding surrounding the scheme, which can be supplemented with close boarded fencing to further enhance

noise containment. Following the comments made by the Environmental Health Officer, we have instructed Peak Acoustics an acoustic assessment consultancy to prepare a noise assessment, including taking on site measurements to establish background noise levels. This report will be submitted to the Planning Authority shortly for consideration. From discussions we have had with Peak Acoustics, it was evident that the results of our initial assessment generally matched their own expectations and they did not foresee there being any significant noise impacts.

It should be highlighted that the STOR will only run occasionally, and whilst we cannot be precise about when the generators will be operational, it would be more likely to be during times of peak loading on the grid network, when a combinations of factors require additional support to the local power grid. These factors could be peak loading times, for example early evening, coupled with adverse weather conditions such as very cold weather, where the contribution to the grid network from renewable sources is reduced. It is unlikely that the STOR would operate during the night time hours, as this time period would not normally generate the same peak loadings on the electricity network. Nevertheless, we have planned for a worst case scenario and considered the noise implications of the scheme running at any time.

Reference has also been made to the scheme producing pollution and affecting air quality. The generator units installed within the STOR are self-contained, acoustically shielded modern generator engines with integral exhaust systems. They meet all relevant legislation requirements and similar models are located in various different settings, supporting power needs at industrial sites, concerts, sporting events, anywhere were localised power generation is required. Whilst we are proposing a number of generators in one place, the location at Booths Farm is relatively remote and any fumes would disperse into the atmosphere. The scheme would not create any adverse pollution or emission impacts for the local residents.

In relation to comments made about visual impact and intrusion into the countryside, as we have highlighted above, the scheme can be hidden from view behind bunding and landscaping to a point where it would not be visible from the surrounding area. The topography to the south would screen the site from view and the only footpath is to the north where the bunding would prevent longer distance views across the development.

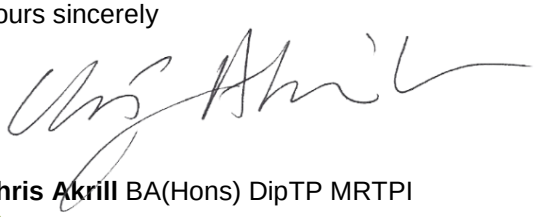
The development has a low impact on the ground and the site can be fully restored when the temporary permission comes to an end. The STOR would not set a precedent for future development on the site, each application should be considered on its own merits after all, and the restoration of the site can be a secured through the a planning condition. We do not agree that there will be visual harm arising from the scheme on the surrounding landscape, and the land itself would be restorable back to its former condition.

Overall conclusion

Whilst the scheme is within the Green Belt, for the reasons set out above, we believe that it has been demonstrated that alternative locations have been considered and that the need to provide local reinforcement on the electricity network to support the growing proportion of localised renewable electricity generation, coupled with the reduction in carbon emissions from centrally generated back up power plants demonstrate that there are special circumstances that would support the STOR development in this location.

I hope that this additional information addresses the comments that David has made, and look forward to meeting with you on Wednesday.

Yours sincerely



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