PLANNING STATEMENT

Including Design and Access

Client: **Mr. L Willis,**

Location: **Cherry Barn, Cherry Lane, Cheadle, Staffordshire, ST10 4QS**

Proposal: **Extension to and change of use of existing cattle shed from agriculture to a peaking plant to provide electricity to the National Grid at periods of peak demand including the installation of an underground electricity cable.**



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1 INTRODUCTION & THE PROPOSAL

1.1 This statement is submitted in support of a full planning application for the extension and change of use of an existing cattle shed from agriculture to a peaking plant to provide electricity to the National Grid at periods of peak demand. The extended building would contain 2 No. 1-1.5MW generators fueled by GTL fuel (details submitted with application); noise attenuators, a transformer and plant control.

1.2 Before submitting the application, consideration has been given (as far as possible) to understanding the benefits of the project as well as, and weighed against, potential environmental impacts of the peaking plant during its construction, operation and decommissioning phases.

1.3 The UK electricity system is in need of new 'peaking' generation capacity to both replace ageing plants and the slow-down in growing renewable energy. The UK is now within 2% of its capacity and industries are being incentivised to turn off high power equipment during peak times, Coal fired stations continue to be de-commissioned. Hinckley Point C is not expected to be built until 2028. Peaking plants such as the one proposed are intended essential to ensure that there is a consistent supply at periods of peak demand in the future. They are only intended to be used at times when there is a shortfall in supply in the National Grid.

1.4 Peaking plants provide the UK electricity grid stability and security to the UK electricity grid provided by the National Grid. They are intended for use on an occasional basis during periods when demand is high and renewable resources are not sufficient to meet demand.

1.5 The proposed development is a small scale peaking plant. The two generators will produce between 2 to 3 megawatts of electricity at times of shortage of supply. It is not expected that they would be used for more than 200 hours per year.

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2 THE APPLICATION SITE AND ITS SETTING

2.1 Cherry Barn is a smallholding with a house and portal frame cattle shed and attached brick store. The house is a converted former farm building situated to the north of a stoned track running east to west from Cherry Lane leading to Cherry Barn and another nearby house to the south of the track which ends at the two houses. A farm track continues westwards from the houses. A public footpath runs west from Cherry Lane along both the stoned track and the farm track from Cherry lane to the north-eastern side of Cheadle.

2.2 The cattle shed and attached brick building is located roughly north of the house and the application site comprises the cattle shed, the brick building and a proposed extension at the northern end of the cattle shed.

2.3 The application site lies in the south-east corner of a roughly triangular pasture field used for grazing beef cattle. Immediately adjacent to the east of the site is a row of trees – relics of a hedge - along the eastern field boundary.

2.4 There is a small stream on the northern field boundary along which are several occasional trees and a low hedge. The western field boundary also consists of a low hedge with scattered trees in the hedge-line. Photograph No. 1 below (taken in April 2016) shows the portal frame part of the cattle shed. The edge of the brick part of the building is just visible in the right-hand side of the photo graph.

Photo No. 1 – the cattle shed.



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2.5 The site is situated less than 400 metres from the western side of Cheadle and within about 90 metres of an existing sub-station which serves Cheadle and as such is in an optimum position near existing infrastructure. There is an existing cable running west from the sub-station towards Cheadle.

2.6 A previous planning application (SMD/2016/0547) was refused in December 2016 for the

"*Proposed construction of an enclosure containing 5 No. 0.4 MW bio-fuelled electricity generators with 8 metre high vertical stacks, 1 No. spare generator and stack, a brick switch room building, the erection of a 3 metre high acoustic fence, a fuel tank and a separate power switch, the construction of a turning head and the installation of an underground electricity cable"*

2.7 The reasons for refusal were that the proposed development:

- Was inimical to the character and qualities of the rural area.
- Would undermine the site's sense of place.
- Be contrary to Core Strategy policies SS6c, SS7, DC1 and DC3 of the Local Plan Core Strategy and also contrary to the principles and aims of the Churnet Valley Masterplan Supplementary Planning Document (SPD).
- Would appear incongruous, cluttering and industrially urbanising.
- Would significantly extend the developed area at Cherry Barn into green field.
- Would impact specifically on the enjoyment of the public footpath which passes between the housing areas of Cheadle c.330m to the west and Cherry Lane to the east.
- Have an adverse impact on tourist development in the Churnet Valley.

2.8 These issues will be addressed for this application in the section "The Case for the Proposed Development".

3 THE PROPOSAL

3.1 The applicant has re-considered the proposal and has decided to no longer keep cows on the site and instead change the use of and extend the cattle shed to house the proposed generators rather than using a fenced enclosure. The land is likely to be put to silage or haylage production. The existing metal sheet walls would be replaced with brick walls to match those in the existing brick part of the building and the extension would be built in matching brick.

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3.2 The advantage of this proposal compared to the previous proposal is that the generators, the major part of the chimneys and all the associated paraphernalia would be contained within the building. The number of proposed chimneys has been reduced from five to two and whilst the chimneys are 8 metres high only about 2.5 metres of the chimneys would protrude above the roof and about 2 metres above the ridge-line of the building.

3.3 The extended building would contain two 1MW or 1.5 MW generators. The exact model of generator to be used will depend on the suitable products at the time of installation. The power generated by the plant will feed into the National Grid. Any upgrades to the national network that are needed to enable this plant to operate would be financed by the applicant. The fuel for the generators would be Shell GTL Fuel which is a synthetic fuel produced from natural gas that can help reduce local emissions. Details of the fuel are submitted as part of the application. It is anticipated that fuel would be delivered to the site by a medium-sized tanker once every three weeks or so.

3.4 The projected use is for run-times of 30 to 120 minutes; the generators are not designed to run continuously; they are designed to run only at times when the demand is identified by the National Grid. The generators will not be in use during times of low consumption (locally or nationally). Typically use may be from November to March, Monday to Fridays between 4pm and 7 pm. The typical amount of use in a year is expected to be approximately 200 hours per year.

3.5 Elevation and floor plan details are submitted on Drawing No. A101 which shows that the generators, oil tank, transformers and attenuators would be housed in the portal frame part of the building, including the proposed extension.

4 DESIGN AND ACCESS MATTERS

Appearance

4.1 The existing building is a portal frame building with part in brick and used as a store. The portal frame part of the building is used as a cattle-shed and is open-fronted on the west; the part of the north wall is open and part clad in profiled metal sheeting; the east wall is clad in profiled metal sheeting as is the roof. The southern wall of the cattle shed is formed by the adjoining brick building. The intention is to replace the eastern sheet wall with brick to match the existing brick part of the building; to build a matching brick wall where at the moment it is open; to install dark- coloured, metal, profiled sheeting on the roof; and build the proposed extension in the same materials. The brick part of the building would become the plant store.

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4.2 The major part of the two proposed chimneys would be contained within the extended building and would be hidden behind the roof ridge-line or viewed against the roof itself. Only about 2.0 metres of chimney would be visible above the roof ridge and when viewed from the west and the footpath to the south-west would be seen against the backdrop of the existing hawthorn trees. When viewed from the east the chimneys will be behind the boundary hawthorn trees.

Scale

4.3 The existing building (cattle-shed and store) is 18.158 metres long by 10.318 metres wide with a total footprint of about 187.35 square metres. The proposed extension would be the same width (10.318m) as the existing building and would increase its length by 4.645 metres making a total length of 22.8 metres metres. The height of the proposed and existing buildings is 4.079 metres to the eaves and 5.461metres to the roof ridge.

Layout & Landscaping

4.4 There are several hawthorn trees on the field boundary to the east of the building and it is proposed to plant a double row of 600mm-900mm high hawthorn (*Crataegus monogyna)* whips at 450mm centres in the gaps in the hedge to fill gaps between the existing plants.

4.5 The proposed layout is as shown on the submitted Drawing No. 0000-201.

Access

4.6 Access from the track leading to Cherry Barn would be via the existing entrance to Cherry Barn and down existing hardstanding along the front of the cattle shed.

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5 PLANNING POLICIES

5.1 The Development Plan for the District is the Staffordshire Moorlands Core Strategy, adopted 2014. The application site is within open countryside. There are no listed buildings, Tree Preservation Orders or Conservation Areas nearby and the site is not in a Flood Zone.

5.2 The following Core Strategy policies have been considered when writing this report:

- SS1 – Development principles;
- SS1a – Presumption in Favour of Sustainable Development;
- SS6c – Other Rural Areas Strategy;
- SS7 – Churnet Valley Area Strategy;
- SD4 –Pollution and Flood Risk;
- DC1 – Design Considerations;
- DC3 – Landscape and Settlement Setting;
- C1 – Creating Sustainable Communities.
- R1 – Rural Diversification.
- T1 – Development and Sustainable Transport.

5.3 The contents of the National Planning Policy Framework (NPPF) together with Development Plan policies are set out in more detail, where relevant, in the "Case for the Proposed Development". Relevant sections of the NPPF are Parts 3, 7 and 10.

6 PLANNING PRECEDENT.

6.3 The Council approved an extension to a portal frame farm building(reference: SMD/2016/0513) for a 1 MW peaking plant, consisting of two 500KW generators at Oakhill Farm, Upper Tean in November 2016. The case officer's report considered that the proposal was a rural diversification project and that the presumption in favour of sustainable development (SS1a) was also relevant as a distinct public purpose underlay the development – namely the effective management of sustained energy supply to the community.

6.4 Oakhill Farm is located in a rural location not dissimilar to the this proposal.

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7. THE CASE FOR THE PROPOSED DEVELOPMENT

7.1 The key issues are;

- The socio and economic benefits of the proposal;
- Whether the proposed development is appropriate in the countryside;
- The impact on the countryside and the landscape.
- Whether the proposal is in accord with the relevant polices in the Development Plan including design considerations.
- Impact on residential amenity.
- Impact on tourism.
- Impact on the nearby public footpath

These are addressed in turn below.

The socio and economic benefits of the proposal

7.2 Peaking plants are required to operate when there is a surge in demand for electricity associated with a particular event (for example when many people across the country boil kettles following the end of a popular television programme) or where there is a sudden drop in power being generated from plant which are constantly operational (e.g. a sudden outage). . Peaking plant are therefore vital in "evening out" the power in the grid. They are essential to ensure continuity of supply. The proposed development will have the potential to ensure approximately 660 to 990 properties in the area maintain power (based on average value household 3kW).

7.3 The project would help to "balance out" the grid at times of peak electricity demand which will include times when other technologies, such as wind and solar farms, cannot generate electricity due to their intermittent operation and reliance on prevailing weather / light conditions. Smaller peaking plant such as the one proposed supply power at or near the point where power is to be used and help to support the network at times of peak demand to help avoid fluctuations and blackouts in the vicinity.

7.4 However, typical hours of operation for a peaking plant of this type would be as previously described (run time of 25-30 minutes within 4 hour time frame, Monday – Friday between Nov and March).The peaking plant would be automatically monitored.

7.5 The proposal is part of the national approach to energy supply and is an integral part of the nation's, region's and District's renewable energy strategy. The National Policy Statement for Energy (NPS EN-1) is a material consideration. NPS EN-1 confirms that a diverse energy mix is required and that there is a significant need for new energy generation infrastructure to replace capacity that will be lost through the closure of existing large plants.

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7.6 Peaking plants are necessary to cover gaps in the electricity supply as required during periods of heavy demand on the National Grid. They are a necessary, integral and essential part of the national energy system and policy. The proposed development would feed into the national grid via an existing sub-station situated to the west of the house to the south of Cherry Barn.

Whether the proposed development is appropriate in the countryside.

7.7 Policy R1 (Rural Diversification) in the Council's Core Strategy, amongst other things, promotes the sustainable diversification of the rural economy, the facilitation of economic development, and the enhancement of countryside. This is in line with Paragraph 28 of the National Planning Policy Framework (NPPF) which states that planning policies should support the economic growth in rural areas in order to create jobs and prosperity. *Policy R1 states, amongst other things, that "priority will be given to the re-use of rural buildings for commercial enterprise, including tourism uses, where the location is sustainable and the proposed use does not harm the building's character and/or the character of its surroundings"***.**

7.8 Putting the generators inside the existing building and the proposed extension will mean that there will be little adverse visual or amenity impact on the surrounding landscape and countryside. The proposed chimney stacks of flues would be largely contained within the buildings with only the top 2.0 metres of each flue protruding above the roof ridge. The present metal sheet walls would be replaced with brick to match the existing brickwork of the adjoining brick building. This would improve the appearance of the building as well as helping insulate the building in terms of noise.

7.9 The scale, nature and low level of activity involved and traffic generated by the development would be such that the rural character of the area would not be harmed. The issue of noise is discussed later in this statement. The levels of traffic generated by the development are similar, or even lower, much lower than would be generated by farm or agricultural operation. The submitted noise report proposes a 4m high noise attenuation fence around the proposed development. The applicant proposes brick walls to further reduce noise leaving the building.

7.10 Policy R1 states that "*Wherever possible development should be within suitably located buildings which are appropriate for conversion.* This development would use an existing building with the addition of a relatively small extension and as such, it is contended, is in accord with Policy R1. The location is sustainable in that it will bring economic, social and environmental benefits. Economically it would bring more income to the area than the current agricultural operation and economically and socially it will help avoid power cuts which could have an adverse impact on the local economy and provide sufficient

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electricity at times of high demand. Environmentally the proposal would improve the appearance of the building. In terms of travel sustainability the proposal will not generate any more journeys than at present because vehicles bringing fodder and other food for the cattle would no longer visit the premises.

7.11 Putting the generators and other plant in the cattle shed is in line with the comments from Planning Policy on the previous application which asked "*could not the scheme be accommodated in existing buildings?* ". The plant would now be inside a building.

7.12 Although the upper part of both flues would be visible the impact on the character and appearance of the countryside would be limited and outweighed by the benefits that a peaking plant brings to the community both locally and nationally.

7.13 The present proposal is very different from the previous proposal and is appropriate to a countryside location. The differences from the previous proposal are:

- The generators and plant would be housed within an existing building albeit with a small extension. There would be no external compound. The hard surfacing is already in place.
- There are now only two proposed flues and only a relatively small part of the flues would be visible above the roof and ridge-line. Consequently the flues would have limited visual impact or impact on the character or appearance of the countryside. The tops of the flues would be about 400 metres from the nearest part of Cheadle and whilst the flue tops would be visible from the public footpath to the south from the west they would be seen against the existing hawthorn trees and from the east through and over the hawthorn trees on the eastern boundary of the field. Their impact would be limited. Cheadle Town Council did not object to the previous proposal which included more chimneys and which would have been considerably more visible. It is not unreasonable to assume that the Town Council considered the visual impacts of the proposal as part of their deliberations.
- The development would be contained within a building and the previous assertions that the development would be incongruous, cluttering and urbanizing would not apply. The building would appear as an agricultural building built in brick compatible with the design of the house.
- There would be little impact on the sense of place and therefore no conflict with tourism development in the area. The suggested impact on the five holiday cottages at Woodhead Hall Farm to the south of Cherry Barn is mentioned in the reason for refusal. Yet there was not, to my knowledge any objection from the owners of Woodhead Hall Farm to the previous application.

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Planning Policies

7.14 It is contended that the proposal is in accord with Core Strategy policies as follows:

- *SS1 – Development Principles*

  The proposal is development which secures high quality, sustainable environments, efficient and effective use of resources....

- *SS1a – Presumption in favour of Sustainable Development*

  The proposal is sustainable development in that it is located close to existing electricity infrastructure as required in Policy C1(4) and would have social, economic and environmental benefits and as such is in accord with paragraph 7 in the NPPF.

- *SS6c – Other Rural Areas Strategy*

  The key aim of this policy is that the other rural areas "*will provide only for development which meets an essential local need, supports the rural diversification and sustainability of the rural areas, promotes sustainable tourism or enhances the countryside".*

  The proposed development would meet an essential local need; that is it would ensure continuity of electricity supply for over 900 homes. The proposal is rural diversification and would not harm the countryside or the landscape.

- *SS7 – Churnet Valley Area Strategy*

  Whilst the Churnet Valley is identified as an area for sustainable tourism and rural regeneration it does not mean that only tourism related development will be allowed. The nature and scale of the proposed changes to the building are such that they will not harm the appearance or character of the countryside and the landscape and which are in accord with policy R1.

- *SD4 – Pollution and Flood Risk*

  The submitted noise report demonstrates that the proposal would not harm the neighbouring property. The conclusions of the noise report are based on a 4 m high acoustic barrier being erected. However, it is proposed to erect brick walls on all four elevations to further improve noise insulation. The applicant is also prepared to provide more noise insulation if required by the Council's Environmental Health Officer.

- *DC1 - Design Considerations*

  The proposal meets the requirements of this policy. The appearance of the building would be improved and this will in turn enhance the character of the local countryside.

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- *DC3 – Landscape and Settlement Setting*

  The site is located in the "Ancient Slope and Valley Farm Lands" landscape character area where the key management and planning issues are power lines, the loss of hedgerows, quarrying, busy roads, parklands, the expansion of neighbouring settlements, and loss of some semi-natural vegetation. The proposal involves none of these issues.

  The proposed development would not conflict with the requirements of Policy DC3. The development would not harm the character of the local and wider landscape or the setting of a settlement and important views into and out of the settlement as identified in the Landscape and Settlement Character Assessment. No important views are identified near the application although the footpath to the south is identified on the Setting Map in the Landscape and Settlement Character Assessment as a "significant public footpath". Later in the assessment in the section on Visual Open Space the footpath is mentioned as a link from Cheadle to the countryside to the east but it does not appear to be an important visual open space in its own right.

  The only parts of the proposal which might be considered to have an adverse impact are the part of the two flues which would protrude above the roof. It is contended that given the fact that that the flues would only protrude about 2 metres above the existing roof would not have any significant adverse impact on the landscape.

- *C1(4) - Creating Sustainable Communities*

  The proposal accords with this policy which states that new development will only be permitted where the utility …… structure necessary to serve it is either available, or will be made available by the time it is needed. The application site is only about 90 metres from an existing sub-station and whilst improvements to the existing cables from the sub-station to Cheadle would be needed these would be in place by the time the development would be built.

- *R1 – Rural Diversification.*

  The proposal will assist the rural economy by helping to maintain the continuity of the electricity supply and the proposal will make use of an existing building and improve its appearance. The general thrust of this policy is that development should not harm the local rural character. This proposal will not harm that character.

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- *T1 – Development and Sustainable Transport*.
  The level of proposed traffic to and from the development is minimal – one delivery every three weeks essentially between November and March.

8. CONCLUSION

It is contended that this small scale proposal is appropriate development in the countryside in that it makes use of existing building in accord with Core Strategy policy R1; it has clear social, economic and environmental benefits and as such is sustainable development, the traffic impact would be negligible; the changed nature of the proposal means that it would have relatively little impact on the countryside or landscape character; it is in an optimum location in respect to existing utility facilities and necessary infrastructure; and it is in accord with the relevant Core Strategy policies and NPPF policies. Finally there is also a precedent in that a similar, albeit smaller, development has recently been granted planning permission in Tean.

For these reasons the Council is asked to approve the application.

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