

PeakGen Havant Generation Plant - Site Selection Details

PeakGen has investigated a large number of sites UK wide, and is pursuing more, in order to service the National Grid Capacity Mechanism / STOR requirements, with each site needing to meet a well-defined set of criteria.

For example a proposed site in the Cardiff area was recently granted planning permission but, as yet, it has not been possible to achieve a viable connection to the grid. Others have found the same obstacles such as potential sites in the Birmingham, Telford, and Stafford areas. Further sites we have reviewed have indicated good electrical connection prospects but did not meet the criteria for suitable planning permissions.

In relation to the site specific to this application, PeakGen has analysed the local networks and primary substations to identify potential sites where the system can accept embedded generation. Of these, few are capable of accepting generation connections at the required export capacity. From these few, this site is the only one available in the area for PeakGen to lease or purchase to allow development of the required installation.

Among other sites reviewed locally were the Southern Water treatment works and the SSE substation on Harts Farm Way. It was found that no plot of sufficient size was available within either site. Other commercially available land in the area was also found to be of insufficient size and/or unsuitable in planning terms i.e. too near residential premises

Other locations within the overall Harts Farm Way development were also investigated and eventually excluded as the areas were either already allocated to other planned developments or not suitable for use (e.g. soft ground, heavily wooded etc.).

Looking at the total UK STOR requirements, each Network Operator is likely to require the development of up to 800MW of additional capacity. In light of this it is foreseeable that a number of plants at the scale proposed here will be required locally and within the UKPN region.

The choice of this site is as a consequence of the points raised above – it is one of the very few places that connection of an embedded generator station is practical as the network has sufficient capacity to accept generation.

Embedded power generation supplies power to the local distribution network at or near the point of use i.e. where power is to be used and helps to support the network at times of peak demand, thus avoiding power fluctuations and blackouts. It also does not ‘waste’ the generated power in transmission losses which occur when power is transmitted over long distances.

As the substation we are to connect into (via underground cable) is located approximately 200m from the chosen site, this avoids the creation of long and unsightly overhead cables and pylons as well as minimising disruption to the local highways and byways.