

Gordonbush wind farm - proposed extension

Design evolution

Scoping

In September 2013 we submitted a Scoping Report. This report introduced the proposed extension and outlined the scope of environmental work that we intended to undertake.

At this scoping stage the proposal was presented as an indicative site boundary only, with a suggested capacity of up to 20 turbines and a maximum tip height of 132m. No turbine layout was provided at this stage as it had not been developed.

Additional information gathered during the scoping stage included hydrological, geological, ornithological, cultural heritage and ecological considerations.

Early design layout

Following the scoping stage we developed an early design layout which reduced the 20 turbine proposal to an 18 turbine scheme (still with a maximum tip height of 132m). The information, comments and feedback gathered from both the scoping stage, and our October 2013 public consultation exhibition, were taken into consideration as part of the development of our early design, in addition to the following:

- Technical constraints, for example access track gradients and ground conditions, in particular the presence and depth of peat;
- Further ecological data from surveys, including the location of sensitive habitats and the presence of protected species;
- Landscape considerations relating to the potential visibility from key viewpoints; and
- Noise modelling which was reviewed to reduce the potential for impacts.

Final design

As the design continued to be developed and refined, the scheme was reduced from 18 to 16 turbines following the removal of 2 turbines from the most southerly part of the scheme in order to reduce landscape, visual and noise impacts.

To further reduce visibility from Strath Brora the turbine height was reduced from 132m to 130m. In addition, the tip height of the 3 most southerly turbines was then changed from 130m to 115m to reduce their prominence from key viewpoints in the area.

The final design presented here also uses as much of the existing infrastructure as is practicable in order to reduce the length of new track required and minimise potential effects. This principle has also been applied, wherever possible, to the hard-standings, borrow pits, welfare facilities, meteorological mast, and substation alterations.

