## Khobab wind farm lifts first wind turbine

by MRP on March 27, 2017 in Project updates

Khobab wind farm has announced that it has completed the lifting of the first of its 61 wind turbine generators, ahead of schedule, on 22 March 2017. It is anticipated that the first power will be exported in the next three to four months and that the wind farm is to start supplying electricity from all 61 turbines to the national grid by end-2017, as part of the third round of the Renewable Energy Independent Power Producer Procurement Programme.

"This is a crucial point in the construction of the wind farm and even more pleasing that we are not just ahead of schedule but also on budget" said Kevin Foster, Project Manager of Khobab wind farm.

The wind turbines, which are 100m tall to allow for optimum energy production, take up to three days to erect, weather dependent. The three 53m blades, made from fibreglass reinforced epoxy, are connected to the rotor at ground level before being lifted to the top of the turbine tower. This is a complicated lifting exercise, in which one crane raises the assembled rotor whilst another smaller crane and taglines guide the rotor into the correct position. The heaviest component is the nacelle, which contains the generator and gearbox; and weighs 82.5 tonnes.

This is the same team that was responsible for the installation of the wind turbines at Noupoort wind farm and more recently at the adjacent Loeriesfontein wind farm. "Working with an experienced crew, makes all the difference," added Foster.

The site was chosen because of its excellent wind resource, its proximity to national roads for wind turbine transportation, the favourable construction conditions, municipality and local stakeholder support, the straightforward electrical connection into Eskom's Helios substation approximately 7km south of the site, and studies showed that there would be minimal environmental impact.

When operating at full capacity, the Khobab wind farm will generate approximately 563,500 MWh of clean renewable energy per year; this is expected to supply electricity to power up to 120 000 South African homes.

Further information is available on the Khobab wind farm website: <u>www.khobabwind.co.za</u>.