

# Willogoleche Expansion



## Introduction

International Power (Australia) Pty Ltd (IPR), is currently investigating the potential to expand their currently consented Willogoleche Hill wind farm (26 wind turbines) by up to an additional 11 wind turbines and has appointed Wind Prospect Pty Ltd to manage this part of the process.

There are two options being assessed:

1. Simple expansion - addition of 11 turbines with a maximum height to blade tip of 130m giving a total of 37 turbines on the Willogoleche Hill site.
2. Use of larger turbines. By using larger turbines with a tip height of up to 152m, it will be possible to generate a similar amount of energy from a total of 27 turbines as it would be from the 37 smaller turbines.

To achieve this second option, the location of the 27 turbines would be selected from the 37 available in option 1. The larger turbines require additional spacing to avoid issues with turbulence and so-called wake losses, hence the reduction from 37 to 27 turbines.

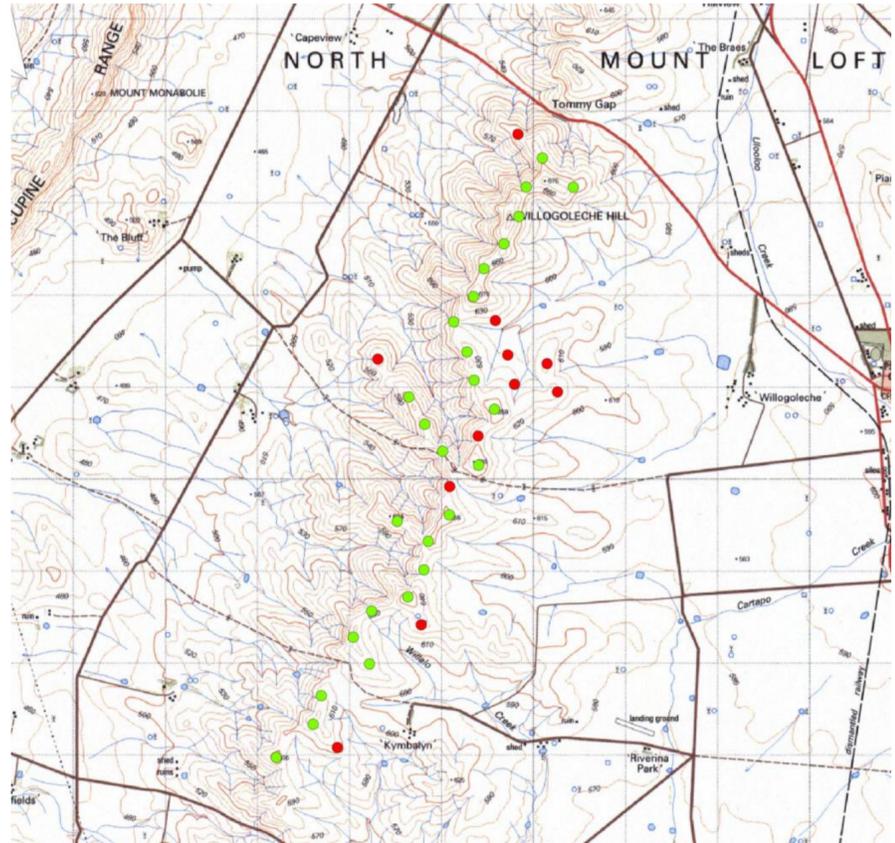


Figure: Proposed Turbines of Willogoleche Hill Wind Farm Expansion



Figure: An example of a 132kV power line pole used in SA to transmit electricity from a wind farm to the transmission line.

## Benefits

The expanded site will add a further 24MW to the Willogoleche Hill Wind Farm. This will be the equivalent of providing up to 13,225 average South Australian homes with electricity generated from this development, and representing up to 63,135 tonnes of carbon dioxide emissions savings per year. The project would make a significant contribution to the State's renewable energy target (33% by 2020) as well as the Federal Government's target of 41,000 gigawatt hours per annum from large scale renewables by 2020.

## International Power

International Power (Australia) Pty Ltd (IPR), is one of the world's largest independent power producers and owns a number of electricity generating assets in South Australia, Victoria and Western Australia, including: Pelican Point combined cycle gas turbine plant at Port Adelaide; the Synergen peaking power stations in SA – at Mintaro, Dry Creek, Snuggery and Port Lincoln; Canunda wind farm near Millicent; Hazelwood (92% owned) and Loy Yang B (70% owned) in Victoria, and the Kwinana cogeneration plant in WA. For details of International Power's worldwide assets and operations please refer to our global website at [www.ipplc.com](http://www.ipplc.com), or our Australian website at [www.ipplc.com.au](http://www.ipplc.com.au).



Figure: The old and the new