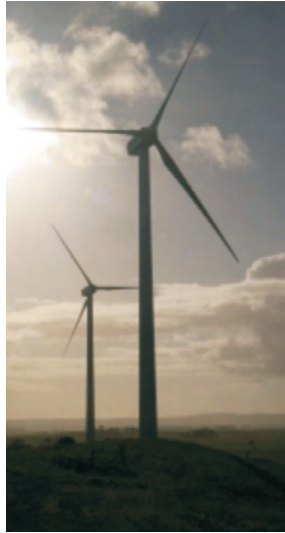


Woodlawn Wind Farm



Introduction

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1. Introduction

1.1 Background

This Statement of Environmental Effects (SEE) provides an environmental impact assessment of proposed variations to the Woodlawn Wind Farm Project for which development consent was granted in 2005. In 2009, the ownership of this development project was wholly acquired by Woodlawn Wind Pty Ltd which has reviewed the project design and now proposes to implement a number of variations to the project. The proposed changes are such that a modification of the existing development consent is required to allow the currently proposed project to proceed.

Development Consent for the Woodlawn Wind Farm was granted by the Minister for Planning under Part 4 of the Environmental Planning and Assessment Act, 1979 to Woodlawn WindEnergy Joint Venture (WWE JV) on 5 October 2005. The consent was based on the *Woodlawn Wind Farm Environmental Impact Statement (EIS)* (Volumes 1 and 2) prepared by URS, dated September 2004 and as revised by a report entitled *Assessment of Revised Transmission Line Option: Woodlawn Wind Farm* prepared by URS, dated 11 February 2005.

The project on which the 2004 EIS was based and for which development approval was granted involved the construction and operation of a 50 MW wind farm immediately south of the former Woodlawn Mine Site. The project comprised 25 wind turbines, a 22 kV/66 kV electrical substation, access tracks, underground electrical cables, a three kilometre section of 66 kV overhead transmission line linking the substation to an existing 66 kV line to the north-west of the wind farm and a viewing platform adjacent to Collector Road.

The revised project will be of similar form and purpose to the approved project and will involve a 42 MW wind farm of 20 turbines located on the same section of the ridgeline where the approved project was to be located. The lesser number of turbines has meant that the turbines are slightly more spaced along the ridge and at a lower density. Instead of grid connection to the 66 kV line to the north-west of the site, the power will be exported by a double circuit 33 kV transmission line between the Woodlawn Wind Farm and the Capital Wind Farm substation. In many respects the project can be regarded as essentially the same as originally proposed with relatively minor variants in respect of turbine layout and grid connection.

While the project will be connected to the Capital Wind Farm substation, it is treated separately to that wind farm in respect of parent company structure, different contracts for construction and operation and separate arrangements for the electricity supply into the National Electricity Market (NEM).

This Statement of Environmental Effects (SEE) has been prepared by Aurecon on behalf of Woodlawn Wind Pty Ltd to support an application for a modification of the existing development consent for Woodlawn Wind Farm. It addresses the Department of Planning assessment requirements and provides:

- description of the approved wind farm
- description of the proposed variations to the approved project and overall amended form of the project
- assessment of the potential environmental impacts associated with variations to the project
- a description of the consultation undertaken or proposed for the amended project
- an update on the measures proposed to mitigate the impacts of the project with specific attention to those additional measures arising from variations to the project

Where relevant, specialist reports are appended to this SEE in respect of additional studies for the proposed project variations.

Much of the material in the 2004 EIS is still relevant to the amended project and it forms a substantive reference for this assessment and the development consent. Aspects of the project which are unchanged from the project elements described in the 2004 EIS and for which the existing consent is applicable are not the focus of this SEE.

1.2 Overview of the proposed modifications

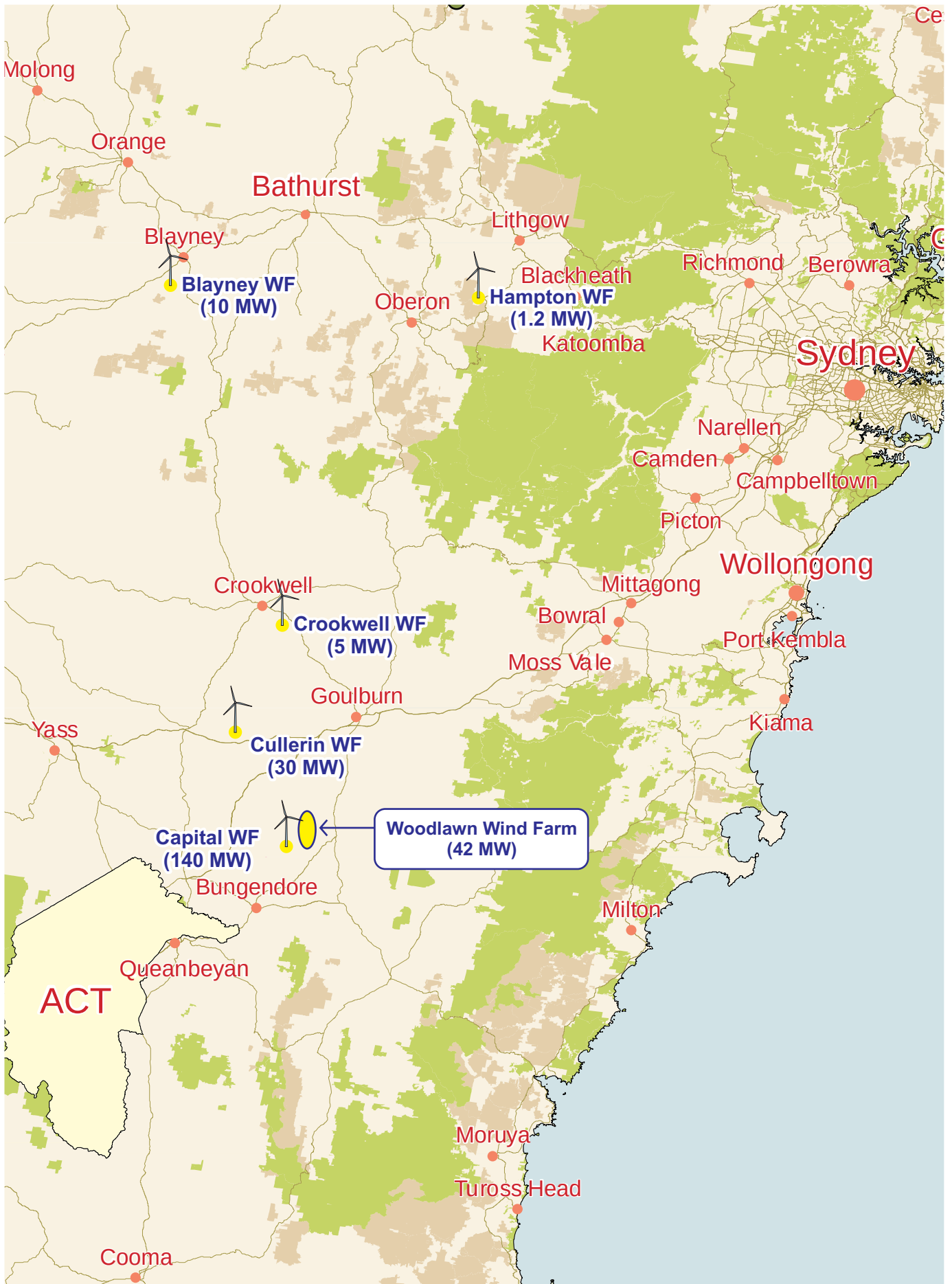
The following variations of the approved project have been proposed:

- variation in description of the lands applicable to the development consent (see Chapter 2)
- reduction in number of wind turbine generators from 25 to 20
- reduction of total capacity to 42 MW from the originally approved 50 MW
- changes to previously proposed and approved wind turbine equipment includes
 - increase in capacity from 2 MW to 2.1 MW turbines
 - increase in tower height for 16 turbines to 80 metres
 - increased blade length from 40 metres to up to 44 metres
 - selection of off-white colour for turbine structures instead of the possible light grey colour
- minor relocation of turbines within the previous turbine envelope
- installation of external (kiosk-type) transformers at base of each wind turbine tower
- relocation of:
 - the construction site office to a central location on the main access track
 - temporary construction storage area to a site adjacent the site access track
- construction of 12 kilometres of 33 kV overhead line from Woodlawn Wind Farm to the Capital Wind Farm substation. This negates the construction of a substation at the Woodlawn Wind Farm site as previously proposed
- upgrade of the intra wind farm collection circuit from 22 kV to 33 kV
- installation of a third 33 kV/330 kV transformer at Capital Wind Farm substation
- inclusion of two temporary and two permanent 80 metres meteorological masts
- use of existing gravel borrow pit
- temporary increase to access track width from 6 to 10 metres during construction
- no wind turbine lighting installed
- strengthening of the Capital Wind Farm substation access road causeway

A detailed description of the proposed variations to the project and associated construction works is provided in Chapter 3.

1.3 Project location

The Woodlawn Wind Farm site is located on the Great Dividing Range, within the South Tablelands of NSW approximately 50 kilometres north-east of Canberra and approximately 37 kilometres south of Goulburn (Figures 1.1 and 1.2). It is close to the site of the former Woodlawn Mine and the operating Woodlawn Bioreactor that is using waste to fill a former mine void and produce energy from the methane gas that is released from the waste. The project area extends from the wind farm site in the north to the Capital Wind Farm substation in the south (Figure 1.3). The nearest town is Tarago about seven kilometres to the east of the wind farm site.





Most of the wind farm site and the surrounding lands are used for grazing purposes and/or form part of the Pylara Conservation Reserve. Rural residences are also scattered through the land at low density and are setback from the wind farm site. The ridgeline on which the wind farm will be located forms a catchment divide between the Wollondilly River catchment to the east and Lake George catchment to the west as well as being the local government boundary between the Goulburn-Mulwaree and Palerang Shires (Figure 1.3 and Figure 1.4). Figure 1.5 provides an aerial photo of the wind farm site. The original proposal involved two privately owned properties, Woodlawn and Pylara. The application for a modified application involves a lesser extent of land associated with the wind farm site and additional lands associated with the grid connection. Details of the properties associated with the project are provided in Chapter 2 of this SEE and in Figure 2.1.

1.3.1 Local Government Areas

As the project is on the boundary of the Goulburn Mulwaree and Palerang Shires it can potentially be subject to different planning provisions of the two councils in respect of different parts of the development. The revised grid connection arrangement is wholly within Palerang Shire (Figure 1.4).

The two shires were formed in 2004 through a process whereby the NSW Government redefined shire boundaries and amalgamated a number of former Local Government Areas (LGA). The process of amalgamations was based on retention of the former local government zoning provisions but with a program to develop new Local Environment Plans (LEPs) based on the new shire boundaries.

The project is subject to three Local Environmental Plans as indicated below (Table 1.1). In 2009, the Goulburn Mulwaree Shire issued a new LEP that addresses the boundaries following amalgamation and this will be applicable for parts of the project within the Goulburn Mulwaree Shire. The former Mulwaree LEP 1995 will apply to most of the parts of the project within Palerang Shire apart from the Capital Wind Farm substation and grid connection, which fall within the former Yarrowlumla LGA and hence under the Yarrowlumla LEP.

Table 1.1 – LEPs relevant to the modified Woodlawn Wind Farm project

Shire	Former LGA	Relevant LEP	Project elements
Goulburn Mulwaree	Goulburn Mulwaree	Goulburn Mulwaree (July 2009)	Turbine sites, access tracks, underground cables, site entry from Collector Road and viewing area
Palerang	Goulburn Mulwaree	Mulwaree (1995)	Turbine sites, access tracks, underground cables and 33 kV transmission line from Woodlawn Wind Farm to Capital Wind Farm substation
Palerang	Yarrowlumla	Yarrowlumla (2002)	Capital Wind Farm substation and grid connection to TranGrid 33 kV/330 kV line

Relevant planning provisions for the applicable LEPs in respect of the proposed variations are described in Chapter 4 and Appendix C.