

EPURON

**White Rock Park Wind Farm
Community Consultation Committee
Meeting No 1**

19 November 2012

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2. **White Rock Wind Farm**
 - Project overview
3. **Draft NSW Wind Farm Planning Guidelines**
 - Overview of Guidelines and current position
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 - Overview of project consultation plan
5. **Next Steps**
 - Alternative power line
 - Grid Connection

Epuron – Background and History

- Founded 2003
- ~15 staff based in North Sydney
- 100% Australian-owned company
- In-house expertise in wind development; planning; grid; wind modelling; GIS; wind monitoring; instrumentation; solar PV design and construction
- Extensive wind monitoring network (>50 masts)

Track record of NSW wind farm developments

Cullerin Range	Sold to Origin: Operating	30MW
Snowy Plains	Sold to Origin: Approved (lapsed)	30MW
Conroys Gap	Sold to Origin: Approved	30MW
Gullen Range	Sold to Goldwind: Approved	73 turbines
Yass Valley	Sold to Origin: seeking Approval	>100 turbines
Silverton	Sold to AGL	
	Stage 1 Approved	<430MW
	Stage 2 Concept Approved	600+MW
White Rock	Seeking approval	119 turbines
Eden	Seeking approval	7 turbines
Other	>10 sites under development	



30MW Cullerin Range Wind Farm (Goulburn, NSW)

- Developed by Epuron
- Constructed by Origin Energy in 2008/09
- Peak workforce of 100, 60 from local area
- 15 x Repower turbines = 30MW
 - net yield 47% Jul to Dec 2009 – in top 3 wind sites in Australia
 - Highest yielding wind farm in National Electricity Market, 2010
- Community fund established

Epuron - Key Markets

- Large-scale wind (“Utility scale”)
 - 80-120 wind turbines, 150-360MW
 - power for 60,000 - 210,000 homes
 - investment \$350-\$750M each
- Small-scale wind (“Community scale”)
 - 7-15 wind turbines, 15-30MW
 - power for 8,000 -17,000 homes
 - investment \$30-\$60M each
- Solar photovoltaics (PV)
 - 1-10 megawatts off-grid (diesel grid)
 - e.g. TKLN Solar, 1MW supplying 3 remote communities in the NT
 - investment \$5-\$25M each



Eden Wind Farm - Photomontage



TKLN Solar Project Northern Territory

Epuron – Wind Monitoring Technology

Conventional approach – Met-mast



New approach – SODAR Fulcrum 3D



- ▶ Australian designed and built SODAR
- ▶ Range to 150m in 10m height bins
- ▶ Full3D wind data analysis
- ▶ Can be towed by any car (~350kg)
- ▶ Tow to site; level; switch on
- ▶ No weather delays

White Rock Wind Farm – Project Overview

- Project located on freehold rural land approximately 20km west of Glen Innes
- Up to 119 wind turbines and associated infrastructure
- Capital cost of approximately \$450m
- Project received planning approval in July 2012 from NSW Department of Planning & Infrastructure
- Three active wind monitoring masts across site - predicted wind speed and energy yield at hub height supports feasible project
- Grid connection to existing TransGrid 132kV transmission line near Gwydir Highway
- Alternative grid connection to TransGrid 330kV transmission line being investigated
- Project details available at website www.epuron.com.au/projects/white-rock

Draft NSW Wind Farm Planning Guidelines – Overview

- Draft NSW Wind Farm Planning Guidelines exhibited 23 Dec 2011 to 14 Mar 2012
- Government intends finalising Guidelines by mid 2012 (still outstanding)
- Policy Statement released 18 April identifying interim arrangements for existing State Significant Developments and transitional Part 3a wind farms
- The transitional arrangements vary depending on the stage of an application in the assessment and determination process

Stage 1 - New applications for which DGRs have been issued

Stage 2- Applications for which DGRs have been issued but are yet to be exhibited

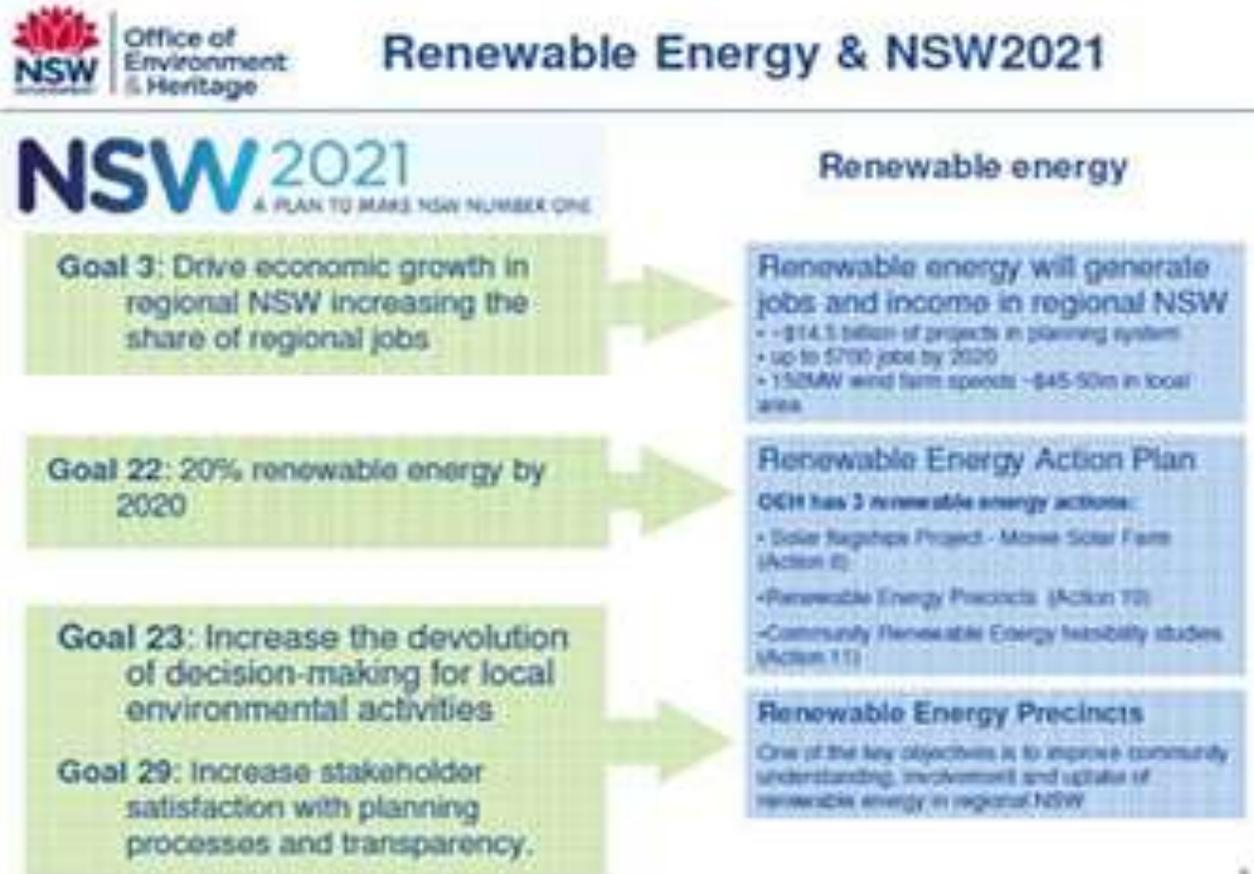
Stage 3 - Applications that have been exhibited but not yet determined  **White Rock Wind Farm**

Stage 4 - Applications that have been approved

Draft NSW Wind Farm Planning Guidelines – Stage 3 Transitional Arrangements

- Recommended that proponents consider relevant provisions of the guidelines
- Establishment of CCC recommended
- Department considered relevant provisions of the guidelines in developing conditions of consent

NSW Renewable Energy Policy



Community Consultation Committee - Purpose and Objectives

- To enable Epuron to formally provide the local community with information about the proposal;
- To enable the community to express and for Epuron to understand any concerns regarding the potential impacts of the proposal;
- To enable Epuron to consider whether and how to incorporate any suggestions and feedback into the design of the proposal;
- To demonstrate how and where feedback has been incorporated and resulted in amendments to the proposal;
- To formally advise potential community benefits that can be integrated into the proposal; and,
- To establish and strengthen good working relationships between the proponent and the local community.

Consultation – Communication and Feedback

- Consultation is a two-way-street and we're always listening
- Feedback and suggestions are important to us
- Available communication channels include;
 - Epuron corporate website: www.epuron.com.au
 - White Rock project website: www.whiterockwindfarm.com.au
 - Mailing address: White Rock Wind Farm
Level 11, 75 Miller Street
North Sydney...NSW...2060
 - Phone: 02 8456 7400
 - Fax: 02 9922 6645
 - Email: WhiteRock@[epuron.com.au](mailto:WhiteRock@epuron.com.au)
 - Construction Manager: Andrew Wilson
a.wilson@epuron.com.au
 - Meetings Arranged by appointment

Other Reference Documents

- NSW Draft Wind Farm Planning Guidelines - December 2011
- NHMRC (National Health & Medical Research Council) Review of Wind Turbines & Health - July 2010
- NSW Valuer General - Impact of Wind Farms on Property Values – August 2009
- DECCW (NSW Department of Environment, Climate Change & Water - Community Survey: “Community Attitudes to Wind Farms” – December 2010
- Clean Energy Council - Wind Farm Investment, Employment and Carbon Abatement in Australia (SKM) – June 2012

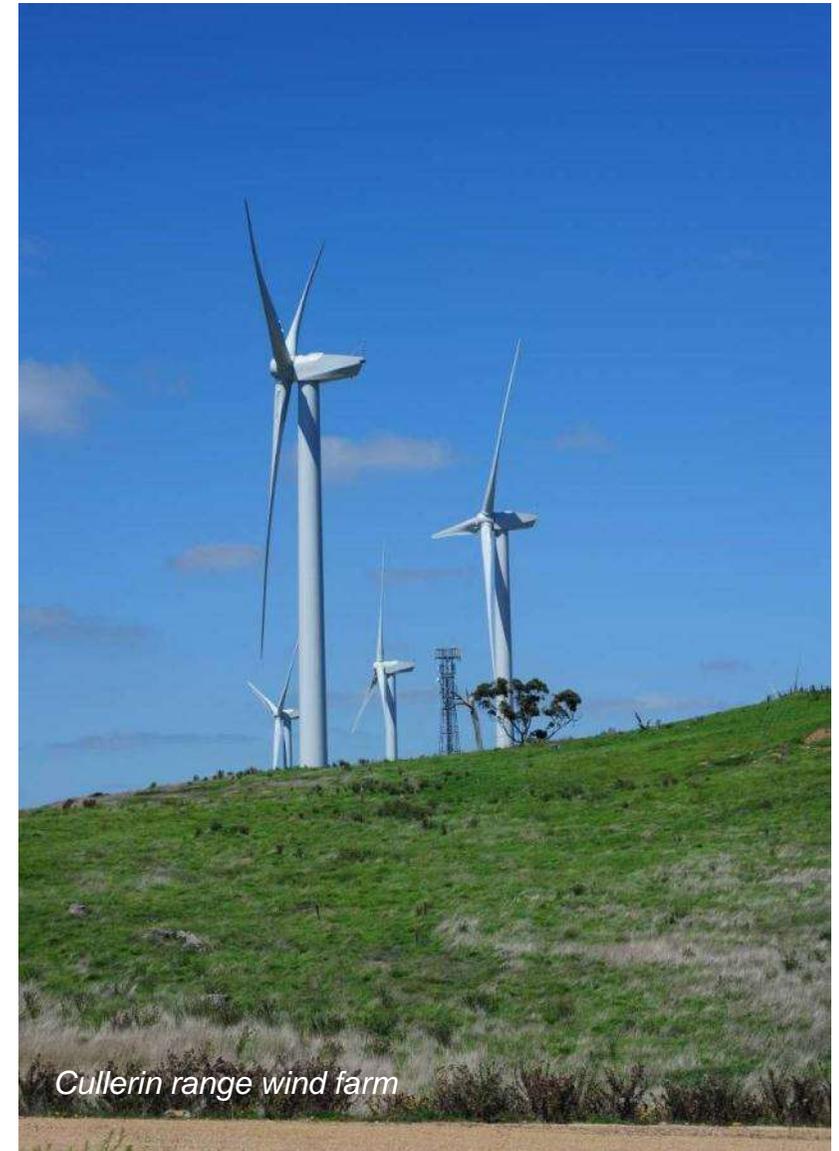
Next Steps For The Project

- Alternative powerline route to TransGrid 330kV line
 - Land Agreements
 - Planning Modification

- Grid connection process
 - TransGrid feasibility studies
 - Static and dynamic grid studies
 - Connection Application & Generator Performance Standards
 - Offer to Connect

- Pre-Construction
 - Turbine & BOP Procurement
 - Construction Management Plans
 - Offtake Agreement
 - Investment Decision

Thank You



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