

**UPPER HUNTER SHIRE COUNCIL  
DEVELOPMENT CONTROL PLAN 2008  
SECTION ON  
(WIND POWER GENERATION)**

Adopted by Council:  
25<sup>th</sup> July 2011

Effective:  
25<sup>th</sup> July 2011

## 1.1 INTRODUCTION

This section of the Upper Hunter Shire Development Control Plan provides controls on the establishment of electrical generating systems which specifically involve the harnessing of wind energy and are not covered by other environmental planning instruments.

The Federal Government has established an Enhanced Renewable Energy Target (RET) to deliver a commitment of ensuring 20 per cent of Australia's electricity supply come from renewable energy by 2020.

There are currently provisions under the State Environmental Planning Policy (Infrastructure) 2007 which permit the installation of *small wind turbine* and *small wind turbine systems* as either exempt or complying development depending on the size of proposal and compliance with the land based requirements of the policy.

It is therefore intended that this section serve as a guide to proposals outside of the above policy.

## 1.2 Aims and Objectives

That wind power generation developments:

- a) do not interfere with the health and amenity of the community within the proposed locality
- b) have a consistent approach in their design and the positioning of wind turbines.
- c) adequately cover environmental issues prior, during and in the operation phase.
- d) achieve a built form that does not interfere with the surrounding context.
- e) do not have an adverse impact on Council's infrastructure.
- f) are afforded an adequate level of public consultation..

## 1.3 Development Applications

Applicants shall refer to the Environmental Planning and Assessment Act (as amended) and associated legislation to determine if their proposal will be considered as Designated or Integrated development and further whether or not the development can be considered under Part 3a (or as replaced) of the Act as major infrastructure and other projects. Under current legislation applications under Part 3a are made directly to the NSW Department of Planning & Infrastructure.

## 1.4 Notification and Advertisement

In addition to any notification requirements contained within the *“Upper Hunter Shire Development Control Plan 2008 – Public Notification and Advertising”* the following where applicable shall apply.

- (i) A notification radius of at least 10km from the site boundary of any major infrastructure development shall be undertaken.
- (ii) A notification radius of at least 5km from the site boundary of any other development other than a major infrastructure development.
- (iii) The applicant must hold at least one public information session to which the public will have access to both during the day and evening per town covered within the proposal and notification radius. In the event no towns are covered by the proposal and notification radius one information session must be held in the nearest town centre.

Public notice of an information sessions must be given at least 21 days in advance and advertised in the local newspapers and on Upper Hunter Shire Council's website.

- (iv) Applicants are encouraged to, at the earliest opportunity to actively engage in public consultation with non-hosting adjoining owners prior to lodgement of an application.

## 1.5 Documentation

Supporting documentation should be provided as a minimum in accordance with the requirements of Schedules 1 & 2 of the Environmental Planning and Assessment Regulations 2000 (as amended).

In addition to the above the planning application must without limitation, specifically detail the following information either as existing, proposed or both where applicable:-

- a) A site plan(s) clearly indicating positions of the proposed wind turbine envelopes, site and property boundaries, land contours, native and existing vegetation, land uses within the proposal area, the location and uses of all buildings on the site, power and transmission lines, sub-stations(s), fences on site, temporary structures including accommodation and extent of ground disturbance.
- b) Wind turbine details in the form of mast and hub heights, blade widths, generating capacity, life span, colour and manufacturers operating specifications.
- c) The proposed route of any transmission lines to the required grid connection if an adequate grid connection is not available on site.
- d) A comprehensive noise impact survey and modelling of the proposed development (worst case scenario) in relation to the existing environmental surroundings. Noise modelling shall as a minimum include all residential dwellings and other likely noise receptors within in a 3km radius of a proposed wind turbine.
- e) Traffic and road management impact assessment including proposed haulage routes, new roads required, proposed upgrading of local roads whether private or Council owned, existing road and bridge weight limits and strategies to overcome deficiencies in the network.
- f) Where wind turbines are proposed to be placed on ridgelines or part of the wind turbine structures will be visible above a ridgeline a visual impact assessment must be undertaken including computer assisted modelling to a minimum distance of 10km from the affected ridgelines. The assessment shall include photomontages which should also depict night lighting in accordance with any requirements of the Civil Aviation Safety Authority (CASA)
- g) The heritage significance of the subject site, nearby sites and surrounds including but not limited to indigenous and non-indigenous cultural, archaeological and built environment issues/items.
- h) A detailed assessment of flora and fauna impacts with specific mention of migratory and threatened species potentially impacted by the development.
- i) Copies of all agreed and proposed noise agreements that have been entered into or are intended to be entered into.

## 1.6 Environmental Considerations.

It is appreciated that wind turbine locations and size of turbines are selected on detailed wind mapping and monitoring, however, the following guidelines are to form part of the design criteria and assessment of any development application for a wind farm or turbine:

- a) The proposed development must take into account the surrounding environment. All elements of the project shall be sited and carried out to minimise impacts on the locality and not conflict with current land uses on and surrounding the proposal.
- b) The applicant must take into consideration and assess the cumulative impact of the proposed development in connection to existing or approved undeveloped wind farms. Ridgelines dominated with wind turbines will not be favoured.
- c) Where wind turbines are proposed to be significantly higher than nearby properties or where the wind turbines will dominate the immediate view from the dwelling or an approved dwelling lot, consideration to be given to increasing the separation distances to reduce the visual impact.

- d) The development as a minimum shall not be located within a distance 1.25 times the height of the turbine (including the tip of the blade) from the boundary of a formed public road or a non-related property boundary.
- e) Distances between proposed wind turbine locations in relation to any dwellings shall be on merit supported fully by aesthetic, acoustic and amenity assessments which shall give due consideration to issues of excessive noise, shadow flicker, infrasound and visual amenity.
- f) Where a non-related property has wind turbines adjacent to more than one boundary of the property, setback distances should be increased above the minimum requirements to the development in order to minimise the visual and noise impacts of that property.
- g) An assessment of the likely impacts on the local, regional and state communications networks (television, radio, mobile phones & two way radios) in operation within the locality shall be undertaken including the establishment of benchmarks on quality and service. Any reduction in either must be suitably addressed to overcome the loss.
- h) The Upper Hunter Shire Council operates a regional airport in Scone. In addition it is likely that there are other airstrips, helipads and aviation facilities within the Shire. An assessment of the likely impacts on such facilities in operation within the locality shall be undertaken.
- i) A bushfire risk assessment is to be provided with the any application prepared by a suitably qualified bushfire consultant and include (but not limited to):
  - (i) the potential for the wind farm to trigger/influence a bushfire; and,
  - (ii) the potential for damage should a bushfire enter the subject site; and,
  - (iii) bushfire management strategies; and
  - (iv) provision of fire retardant devices within the nacelle.
- j) Any development consent will be subject to the inclusion of a condition seeking the dismantling and removal of all structures associated with the development within a period of six (6) months and site rehabilitation of the wind farm or any wind turbines becoming redundant (not used for generation of electricity for a continuous period of 12 months or more).
- k) Any development consent will require the development of an environmental management plan (EMP) to comprise in detail the construction, commissioning, operation and post monitoring of the development. Applications will be assessed on merit and the requirements of the monitoring program identified as a result of the development assessment process.

## **1.7 Contributions**

Council will require the developer to make contributions in accordance with the Upper Hunter Shire Council S94A Development Contributions Plan 2008 (as amended). Council may also consider an offer from a developer to enter into a Voluntary Planning Agreement (VPA), in accordance with S93F of the Act.

Under a VPA the developer may offer to pay money, dedicate land, carry out works or provide other material public benefits for public purposes.

## **1.8 Tourism**

Where a wind farm includes 25 or more wind turbines an area where vehicles and pedestrians (the public) can manoeuvre safely should be provided in a position which allows for the safe viewing of the wind farm and provides information on the development. Consultation with Council's and the RTA (where applicable) should be undertaken to identify a suitable location.

## **1.9 Consultation with Other Authorities**

Applicants are advised to consult first with public authorities that may have a role in the assessment of a development application to ensure the application appropriately addresses all relevant and necessary considerations. Council may consult the following Agencies in connection with the development application:

- NSW Department of Planning & Infrastructure

- NSW Department of Primary Industries
- NSW Office of Environment and Heritage
- NSW Department of Trade and Investment, Regional Infrastructure and Services
- NSW Roads and Traffic Authority
- The relevant Catchment Management Authority
- Civil Aviation Safety Authority (CASA)
- Australian Rail Track Corporation
- NSW Rural Fire Service
- Department of Defence
- Airservices Australia

### **1.10 Reference material**

Development applications under this section shall as a minimum demonstrate knowledge, awareness and reference to the following publications as amended:-

#### **General**

Wind Energy Facilities draft Environmental Impact Assessment Guidelines (Planning NSW 2002)

Draft EIS Guideline "Network Electricity systems and Related Facilities" (Planning NSW, February 2002)

Best Practice Guidelines for implementation of Wind Energy Projects in Australia (Auswind, 2006)

South Australian EPA Wind Farm Guidelines 2003 (or any replacement guidelines adopted for use in NSW).

Draft National Wind Farm Development Guidelines (The Environment Protection and Heritage Council July 2010)

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#### **Visual**

Wind Farms and Landscape Values: National Assessment Framework (Australian Wind Energy Association and Australian Council of National Trust, June 2007)

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#### **Ecology**

Cumulative Risk for Threatened and Migratory Species (Commonwealth Department of Environment and Heritage, March 2006)

Wind Farms and Birds: Interim Standards for Risk Assessment, (Auswind, July 2005)

Assessing the impacts on Birds - Protocols and Data Set Standards (Australian Wind Energy Associations)

Threatened Biodiversity Survey and Assessment - Guidelines for developments and Activities (Working Document) (DEC, 2004)

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#### **Aviation Hazard**

Advisory Circular 139-18(0) Obstacle Marking and Lighting of Wind Farms (Civil Aviation Safety Authority, July 2007) Advisory document only.

Windfarm Policy (Aerial Agricultural Association of Australia, December 2009)

Powerlines Policy (Aerial Agricultural Association of Australia, December 2009)

Information Sheet - Airport Related Development (Air services Australia)

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#### **Water Quality**

National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)

The NSW State Groundwater Quality Protection Policy (DLWC, 1998)

The NSW State Groundwater Dependent Ecosystems Policy (DLWC 2002)

Department of Water & Energy's Guidelines for Controlled Activities (February 2008)

- Watercourse Crossings;
- Instream Works
- Laying Pipes and Cables in Watercourses;
- Outlet Structures; and
- Riparian Corridors

Managing Urban Stormwater: Soils and Construction, Volume 1, 4<sup>th</sup> edition (Landcom 2004)

Managing Urban Stormwater: Soils and Construction, Volume 2C unsealed roads (DECC)