Glossary:

Abatement (mitigation)
Decrease or reduction. In the context of greenhouse gas emissions, a wind farm is said to 'abate' the greenhouse pollution which would otherwise have been emitted by conventional fossil fuelled power generation.

Aboriginal archaeological site (Aboriginal site)
A place where physical remains or modification of the natural environment indicate past and 'traditional' activities by Aboriginal people. Site types include artefact scatters, isolated artefacts, burials, shell middens, scarred trees, quarries and contact sites.

Biodiversity
First coined in 1988 as a contraction of "biological diversity", diversity traditionally referring to species richness and species abundance. Biodiversity has been defined subsequently as encompassing biological variety at genetic, species and ecosystem scales (DASETT 1992). The maintenance of biodiversity, at all levels, is acknowledged internationally as a high conservation priority, and is protected by the International Convention on Biological Diversity 1992.

Biota
All the animal and plant life in a given area.

Blade-strike
The phenomenon of avifauna colliding with wind turbine blades resulting in casualty.

Bund
A barrier or wall to contain and control spillage. Normally associated with tank farms, fuel and chemical storage facilities.

Burial Site
Usually a sub-surface pit containing human remains and sometimes associated artefacts.

Commissioning
The final aspect of the construction phase. Manufacturers' and contractors' representatives undertake a series of tests and fine tuning relating to wind farm performance. Environmental impacts such as noise monitoring may be part of the commissioning tests.

Construction Environmental Management Plan
An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the construction phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.

Conservation
The management of natural resources in a way that will benefit both present and future generations.

Consumer Price Index (CPI)
The CPI is a fixed weighted price index that relates to household expenditure on retail goods and services and other items such as housing, government charges and consumer credit charges.

Control Cables
Cables used to send signals to central turbine operation and to monitor turbine and generator performance.

Crown Land
Land that is owned and managed by State Government. Crown land accounts for over half of all land in New South Wales and includes: Crown lands held under lease, licence or permit; community managed reserves; lands retained in public ownership for environmental purposes; lands within the Crown public roads network; and other unallocated lands.

Cumulative Effect
Refers to the accumulation of effects over time.

dB(A)
Abbreviation for A-weighted decibel. The most common measurement of sound pressure levels that approximates the response of the human ear.

Decommissioning
The dismantling of a wind farm at the conclusion of its working life. The whole structure of the turbines and all related above ground infrastructure are removed, and the site landscaped to its original appearance.

Development Consent
Consent under Part 4 of the NSW Environmental Planning and Assessment Act to carry out development and includes, unless expressly excluded, a complying development certificate.

Ecologically Sustainable Development
Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future can be increased.

Ecosystem
An interdependent system of interacting plants, animals and other organisms together with the non-living (physical and chemical) components of their surroundings.

Emergency Response
The reaction by personnel and emergency services such as Fire, Police, Ambulance, Industrial Fire Brigades, etc to an emergency.

Endangered Species
Those plants and animal species likely to become extinct unless action is taken to remove or control the factors that threaten their survival.

Environmental Impact Assessment
The orderly and systematic evaluation of a proposal, including alternatives and objectives, and its effects on the environment, including the mitigation and management of these effects.

Environmental Management
That part of the overall management system which includes organisational structure, planning activities, responsibilities, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining environmental policy. (Refer to the related term- Environmental Management System).

Environmental Management Plan
The control, training and monitoring measures to be implemented during the design, construction and operation phases of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental (being socio-economic, cultural, physical, biological) assessments.

Environmental Management System
The concept and major components of an Environmental Management System (EMS) are set out in the Australian / New Zealand Standard (AS / NZS) ISO 14001. An EMS has several key components as set out below: Organisational commitment, corporate environmental policy, environmental aspects register, objectives and performance indicators, environmental management program documentation (often called an Environmental Management Plan or EMP), operational and emergency procedures, responsibility and reporting structure, training and awareness program, environmental impact, regulatory and legal compliance, and environmental performance review audits performance monitoring and measurement.

Fauna
Animals.

Flora
Plants.

Frequency Control Ancillary Services (FCAS)
Unforeseen variations in generation and demand, and variations that occur within the 5-minute dispatch interval are managed by frequency control ancillary services. As the amount of intermittent generation in the NEM increases, there is likely to be an increase in the uncontrolled variation of generation levels and, therefore, an increase in the usage of these services.

Fresnel Zone
In optics and radio communications, the Fresnel zone is an elliptical region surrounding the line of sight path between transmitting and receiver antennas. Must be obstruction free for a microwave radio link to work properly.

Floristic Composition
The plant species present in a particular community, sub-community or site.

Geotechnical
Relating to the form, arrangement and structure of the geology.

Greenhouse Effect
Predicted global climatic change (e.g. global warming) associated with build up of certain gases such as water vapour and carbon dioxide within the atmospheric environment of the earth.

Greenhouse Gas
A gas which has an effect on the radioactive adsorptivity of the earth's atmosphere and the atmosphere's temperature.

Grid
The electricity transmission and distribution network.

Groundwater

Subsurface water contained within saturated zone.

Heritage (Cultural Heritage)
A term which encompasses Aboriginal and post-contract archaeological sites and material remains (cultural resources).

Hub
Attaches the rotor blades to the driveshaft that drives the gearbox and generator.

Hub Height
The height of the centre of rotor blades above ground level.

Installed Capacity
The capacity of the generating plant installed that is the maximum that can be used at any point in time.

Inter-Generational Equity
Principle whereby the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

Integrated Development
Development that requires development consent and one or more of the approvals listed within section 91 of the Environmental Planning & Assessment Act 1979 (as amended).

Inter-generational Equity
Principle whereby the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

L_{A90}
The noise level exceeded for 90% of the 15 minute interval. This is commonly referred to as the average background noise level.

L_{Aeq}
The equivalent continuous sound level in dB(A); that is, the constant sound level which has the same acoustic energy as the original fluctuating noise for the same period of time.

Lithologies
Rock types.

Load Flow Analysis
An analysis of the potential dynamic effect on the power transmission capacity of a section of the electrical grid.

Mandatory Renewable Energy Target
A target prescribed by Federal Government legislation of 9,500 gigawatt hours per year of new renewable energy generation to be implemented by 2010.

Mean
The average of a set of numbers obtained by dividing the total sum of all their values by the number of individual values.

Mean Annual Wind Speed
The average wind speed experienced at a specific location, at a given height, based on regular measurements throughout the year.

Median
The middle value of a set of values. If there are two middle values, then the median is the average of those two values.

Mitigate (abate)
To lessen in intensity or level.

Monitoring
The checking of impacts of a proposal or an existing activity in order to improve or evaluate environmental management practices. To check the efficiency and effectiveness of the environmental impact assessment process. To determine if the requirements of environmental legislation and associated regulations are being met.

Nacelle
The structure on top of the tower that houses the gearbox and the generator.

Native Vegetation
A broad term for vegetation comprised of plant species which occur naturally in Australia (but which are not necessarily indigenous).

Operational Environmental Management Plan
An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the construction phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.

Phyllite
A green, grey, or red metamorphic rock, similar to slate but often having a wavy surface and a distinctive micaceous luster.

Precautionary Principle
If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Ramsar
Listed wetlands of International significance.

Renewable Energy Certificate (REC)
The mechanism for accounting for the environmental attributes of electricity generated from renewable sources. One REC represents 1 MWh of renewable energy eligible under the Renewable Energy (Electricity) Act 2001 (Cwlth).

Riparian
Of, on, or relating to the banks of a natural course of water.

Scarred Tree
Scars are caused on trees by the removal of bark by Aboriginals for the manufacture of utensils, canoes or for shelter. A toehole tree or possum tree also falls under this category as it is a tree which has had small patches of bark chopped out to provide hand and foot holds for climbers after possums or vantage.

Section 90 Permit
Approvals under the *National Parks and Wildlife Act* regarding consent to knowingly destroy, deface or damage or knowingly cause or permit the destruction or defacement of or damage to an Aboriginal relic or Aboriginal place.

Sediment / Detention Pond
Artificial earthen depression to retain water runoff for a period of time so as to control high intensity runoff and allow settling of sediment prior to discharge.

Shadow Flicker Analysis
An analysis on the potential lighting fluctuations which a proposed wind turbine may cause at a specific location.

Substation
Any premises or place (including a switchyard) in which high-voltage supply is converted, controlled or transformed.

Sustainable Use
Use of organism, ecosystem or their renewable resource at a rate within its capacity for renewal.

Terrestrial
Of, or pertaining to the land as distinct from the water.

Transformer
A device which converts one voltage / current of electricity to a different voltage / current. A transformer at each wind turbine steps up the voltage from 690V to a level of 33,000 volts for supply to the wind farm's substation where a larger transformer increases the voltage to 330,000 volts for distribution by the grid.

Transmission Losses
Electricity losses that occur in the transmission and distribution network, often as heat.

Turbine generator
A mechanical electrical generator.

Visibility
The extent to which particular components of a development may be visible from surrounding areas.

Visual Catchment or Viewfield
In the case of a wind farm this includes the areas from which the wind farm will be visible. For this assessment the area has been computed within 10 kilometres of the nearest turbine and due to lack of detail on vegetation it is indicative only. It is likely that the viewfields shown in this assessment will be conservative.

Weed
Naturalised, non-indigenous plant species which may be noxious weeds (or agriculture), environmental weeds or any other generally undesirable introduced species.

Wind Energy Modelling
Manipulating raw wind data using software tools to develop an accurate understanding of wind energy resources in a particular location.

Wind Turbine Generator
In the context of this project: a large, three bladed wind driven turbine connected via a gearbox to an electric generator.