



Wind Farms: regulatory developments in NSW

by Nathan Wales and Daniel Montoya

1. Introduction

The current NSW Government's "[NSW 2021](#)" commits the State to achieving a 20 percent [Renewable Energy Target](#) (RET) by 2020. This target has been a major driver of wind farm development proposals across NSW. To assist in meeting this target, a [Renewable Energy Action Plan](#) will be released for public consultation.

Wind farms figure prominently in renewable electricity projects in Australia, particularly in South Australia, Victoria and to a lesser extent NSW. Owing to strong economies of scale, wind turbines have grown to several megawatts per device, and given the low cost of wind technology compared to other renewables, it is likely to continue to dominate investment in the renewables sector.¹ Australia has some of the world's best renewable energy resources, including some of the best onshore wind resources along the southern coast.² The potential of wind energy as a significant contributor to total energy supply is proven in South Australia, for example, where wind generation accounted for 31 percent of total electricity production in the March 2012 quarter.³

Wind farms have been the subject of much recent public debate. Parliamentary inquiries have been conducted by the [NSW Legislative Council](#) and the [Senate](#). In March 2012, a South Australian Legislative Council Select Committee was appointed to investigate [wind farm developments in South Australia](#).

In 2011, the Victorian Government amended planning regulations to ban the construction of wind farms within two kilometres of a home without the written consent of the owner. This ban was adopted in the [2011 Draft NSW Planning Guidelines](#) subject to certain qualifications, including a "gateway" process. The Draft Planning Guidelines also deal with other matters, such as community consultation, visual amenity, noise and health impacts.

This e-brief starts by presenting background information on wind farms in NSW and identifying key issues in the debate. This is followed by an account of the NSW and Commonwealth regulatory regimes. The remainder of the paper summarises recent wind farm inquiries and policy developments, and closes with an overview of the [2011 Draft](#)

[NSW Planning Guidelines: Wind Farms.](#)

2. Wind farms in NSW

Based on average wind speeds, NSW has relatively low capacity and therefore low potential wind resources in comparison with Victoria, South Australia, Western Australia and Tasmania. Nevertheless, as of April 2012 there were 9 operational wind farms in NSW with an installed capacity of 282MW. A further 28 wind farms are under development.

Wind farms in NSW (April 2012)⁴

	Current	Proposed
Number of wind farms	9	28
Capacity	282MW	5,629MW
Number of turbines	170	2,728
Number of equivalent homes powered	118,297	2,361,326
Total capital investment	\$705m	\$11,958m
Capital investment in Australia	\$423m	\$7,175m
Number of direct jobs	197	3,940

The four major existing NSW wind farms have a total combined capacity of 266MW.

Major existing NSW wind farms (April 2012)⁵

Power station	Location	Capacity (MW)
Capital Wind Farm	Tarago	141 MW
Cullerin Range Wind Farm	Upper Lachlan	30 MW
Gunning Wind Farm	Walwa	47 MW
Woodlawn Wind Farm	Tarago	48 MW

The 28 proposed NSW wind farms have a combined capacity of up to 5,629 MW. The two largest proposed wind farms will be located north-west of Broken Hill (Silverton, 1,000 MW)

and across four shires including the Upper Hunter and Warrumbungle Shires (Liverpool Range, 1,100 MW).

Major proposed NSW wind farms (250+MW capacity) (April 2012)⁶

Power station	Location	Capacity (MW)
Bango	Yass	150-300 MW
Boco Rock	Nimmitabel	270 MW
Golspie	Golspie	150-300 MW
Liverpool Range	Liverpool Range	1,100 MW
Silverton	Broken Hill	1,000 MW
Uungula	Mudgee	500-800 MW

3. Issues in the debate

While the benefits of wind power are acknowledged, various concerns and issues also figure in the debate. The issues involved are of concern to all levels of Australian government and feature as part of the broader debate about the development of renewable forms of energy. These issues include:

- The contribution of wind to emissions abatement and government targets for renewable energy;
- The role of wind energy in ensuring a reliable supply-demand system for electricity;
- Economic competitiveness of wind energy when compared to other electricity generating technologies;
- The proximity of wind farms to residential dwellings;
- Health concerns for those living in the vicinity of wind farms;
- Noise impacts;
- Community involvement in wind farm development; and
- Visual amenity and environmental impacts.

4. NSW planning regimes relating to wind generation

NSW does not have specific legislation relating to wind farm development. Proposals are instead assessed under a number of environmental planning instruments including: the [Environmental Planning and Assessment Act 1979](#); the [Environmental Planning and Assessment Regulation 2000](#); State Environmental Planning Policies (SEPPs), including the [State Environmental Planning Policy \(Infrastructure\) 2007](#); and Local Environmental Plans (LEPs).

[NSW Government Department of Planning & Infrastructure](#) planning approval for renewable energy systems, including wind, occurs within the framework of the [Environmental Planning and Assessment Act 1979](#). The objects of the Act, relevant to planning for wind farms, include:

- To encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment;
 - To promote and co-ordinate the orderly and economic use and development of land;
 - The protection, provision and co-ordination of communication and utility services;
 - The provision of land for public purposes;
 - The provision and co-ordination of community services and facilities;
- The protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats;
 - To promote the sharing of the responsibility for environmental planning between the different levels of government in the State; and
 - To provide increased opportunity for public involvement and participation in environmental planning and assessment.

4.1 Planning and land use zoning

Electricity generating works (including wind farms) are classified as 'permitted with consent' under Clause 34 of [State Environmental Planning Policy \(Infrastructure\) 2007](#) ("*Infrastructure SEPP*") in the following land use zones (or an equivalent zone in a council's LEP):

- RU1 Primary Production
- RU2 Rural Landscape
- RU3 Forestry
- RU4 Rural Small Holdings
- IN1 General Industrial
- IN2 Light Industrial
- IN3 Heavy Industrial
- IN4 Working Waterfront
- SP1 Special Activities
- SP2 Infrastructure

Wind farms may also be permitted with consent in a prescribed residential zone if the turbine has the capacity to generate no more than 10kW and if the turbine is no higher than 18m from ground level (cl 34(5) and 34(6) of the *Infrastructure SEPP*). Wind farms may be 'permitted with consent' in other zones specific to each council's LEP. Where a wind farm is permitted with

consent, the applicant may lodge a development application (DA) with council.⁷ Where wind farms are State Significant Development (SSD), development applications must be lodged with the Department of Planning and Infrastructure.

4.2 The development assessment process

Renewable energy proposals are considered under different parts of the [Environmental Planning and Assessment Act 1979](#). Planning approval for renewable energy covers both small scale and large scale systems. Wind farm proposals may fall under one of three development categories, according to the wind farm's capital investment value:

- local development;
- regional development; and
- State Significant Development.

Local development. Proposals for small-scale wind power systems with a capital investment value (CIV) of less than \$5 million, including small wind turbine systems and wind monitoring towers, are regulated under the *Infrastructure SEPP*. In accordance with the *Infrastructure SEPP*, small-scale renewable energy proposals may be defined as 'development permitted with consent', 'complying development' or 'exempt development' in a local, regional or State planning instrument. Additional provisions may be defined in the relevant local council's Local Environmental Plan (LEP) and/or Development Control Plan (DCP).

Regional development. Wind farm proposals are classified as "regional development" where they meet the conditions set out in [Schedule 4A](#) of

the [Environmental Planning and Assessment Act 1979](#). Development which is included under [Schedule 4A](#) that is relevant to wind farms includes:

- General development that has a capital investment value of more than \$20 million;
- Private infrastructure and community developments that have a capital investment value of more than \$5 million for purposes which include electricity generating works; and
- Developments which are subject to delays in determination and have a capital investment value of more than \$10 million but less than \$20 million.

Development which is excluded from [Schedule 4A](#) includes:

- Complying development; or
- Development for which development consent is not required; or
- Development that is State Significant Development; or
- Development for which a person or body other than a council is the consent authority; or
- Development within the area of the City of Sydney.

State Significant Development. Proposals for large-scale wind power systems are regulated by the [State Environmental Planning Policy \(State and Regional Development\) 2011](#). Under this policy, electricity generating works, including renewable energy proposals such as wind farms with a capital cost of more than \$30 million (or \$10 million in an environmentally sensitive area), are considered as State Significant Development (SSD).

Under [recent changes](#) introduced by the O'Farrell Government, in most cases the Planning Assessment Commission (PAC) will be responsible for determining SSD wind farm applications instead of the Minister for Planning and Infrastructure.⁸

4.3 Summary

Wind farm proposals located outside of an environmentally sensitive area, and with a capital investment value of less than \$30 million, are lodged with local councils. These applications are assessed by the council officers and, if less than \$5 million, are determined by the council, or secondly by the relevant Joint Regional Planning Panel if the CIV is over \$5 million.⁹ At the third level, electricity generating works, including renewable energy proposals such as wind farms with a capital cost of more than \$30 million (or \$10 million in an environmentally sensitive area), are considered as SSD and are determined by the Planning Assessment Commission.

Wind farm proposal development assessment process¹⁰

Capital investment value	Development category	Assessment by	Determination by
Less than \$5 m	Local development	Council	Council
\$5m plus and \$20m plus*	Regional development	Council	Joint Regional Planning Panel
\$30m plus (or \$10m in an environmentally sensitive area)**	State Significant Development	Dept of Planning and Infrastructure	Planning Assessment Commission

*Under Schedule 4A of the [Environmental Planning and Assessment Act 1979](#)

** Under the [State Environmental Planning Policy \(State and Regional Development\) 2011](#)

5. The role of the Commonwealth

Wind farm planning and compliance issues are generally matters for State Governments, although several have devolved some responsibilities to local governments. The Commonwealth's primary jurisdiction over wind farm developments relates to matters of national environmental significance as listed under the [Environment Protection and Biodiversity Conservation Act 1999](#). The Commonwealth also provides incentives for building wind farms, through means such as the *Renewable Energy (Electricity) Act 2000*, which creates a guaranteed market for electricity generated from renewable sources. Relevant, too, is the [Renewable Energy Target](#) (RET) of 20 percent renewables by 2020. Commonwealth involvement in the wind energy debate must therefore be placed within the mix of policies and measures designed to reduce greenhouse gas emissions, notably: the RET; and the carbon pricing mechanism.

6. Legislative Council Inquiry into Rural Wind Farms (2009)

The role of wind energy in contributing to renewable targets, and the challenges associated with wind farm development in NSW, were acknowledged by the Chair of the 2009 [Legislative Council General Purpose Standing Committee No. 5 Inquiry into Rural Wind Farms](#) ("The Inquiry"):

As a readily available and commercially deployable energy generation technology wind farms have an important role in Australia's 2020 Renewable Energy Target.

Wind farms are a central component in Australia's developing clean energy infrastructure and portfolio, essential to addressing the challenges of anthropogenic climate change and energy security. However, during the Committee's investigations, significant community angst and concern about the planning process, project design and monitoring of rural wind farms became apparent.¹¹

The Inquiry examined the development of rural wind farms across NSW, including the challenges and issues associated with such development.¹² The report provides a number of recommendations based on key findings from the Inquiry. While acknowledging the importance of wind farm development in NSW, the report considered that these developments should better balance the needs of all stakeholders, stating:

Local communities feel disenfranchised and uncertain about what they can expect from a wind farm development in their area. Local communities have expressed a particular concern that the current community consultation process for wind farms is not adequate.¹³

Recommendations to address a number of issues raised during the Inquiry included implementing a minimum setback of two kilometres, providing improved certainty for wind farm decommissioning, increasing the period that Environmental Assessments are on public exhibition to 90 days, improving noise modelling and improving the consultation and complaint handling process.¹⁴ While the Committee investigated the possible health impacts of wind farms, no recommendations were made. However, the Committee noted:

... that some health impacts are supported by scientific research,

such as the impact of noise annoyance. However, the Committee also notes that many purported impacts have created little more than unfounded fear in local communities, for example, Vibroacoustic Disease, wind turbine safety, shadow flicker and 'Wind Turbine Syndrome'.¹⁵

In response to the Inquiry, the former NSW Government indicated that it would implement a range of measures to assist with wind farm development. This included the establishment of six renewable energy precincts covering 46 local government areas in those parts of NSW with the best-known wind resources: New England Tablelands; Upper Hunter; Central Tablelands; NSW/ACT Border Region; South Coast; and Cooma-Monaro. The former NSW Government also said they would seek to provide consistent State-wide regulatory and policy settings so as to encourage investment in wind farms in NSW, including:

- Lowering the threshold for renewable energy generation facilities defined as critical infrastructure from 250 Megawatts to 30 Megawatts, and waiving the fees associated with these projects until 30 June 2011;
- Appointment of renewable energy coordinators for each precinct and a statewide coordinator (located within the Department of Environment, Climate Change and Water) and appointment of a specialist renewable energy projects manager in the Department of Planning;
- Reducing red-tape for small scale wind and solar developments; and

- Preparing NSW Wind Farm Planning Guidelines.¹⁶

To assist in addressing the concerns of some of the landowners and communities over wind farms, the former NSW Government committed to establishing a Precinct Advisory Committee for each of the six renewable energy precincts. The purpose of such Committees was to:

- Provide advice to Councils on regionally appropriate and consistent approaches to key wind development assessment issues that are not covered in the National Wind Farm Development Guidelines, being prepared by the Environment Protection and Heritage Ministerial Council;
- Disseminate and promote the economic and environmental benefits of wind energy generation;
- Help Councils within each Precinct to develop regionally appropriate and consistent approaches to developer contributions into community enhancement programs;
- Identify and facilitate renewable energy opportunities within the Precinct; and
- Identify and discuss issues of concern at the Precinct-level in relation to the uptake of renewable energy opportunities.¹⁷

7. COAG Draft Wind Farm Development Guidelines (2010)

In 2008, COAG's former Environment Protection and Heritage Council (EPHC) released its [Report on Impediments to Environmentally and Socially Responsible Wind Farm](#)

[Development](#). The wide-ranging report:

... recognised that one of the most significant impediments to responsible wind farm development is the lack of consistency between jurisdictions as to agreed frameworks and methods for assessing issues unique to wind farm developments. The report also recognised that the wind energy industry, communities, relevant authorities and other interested stakeholders would benefit from the adoption of a consistent set of government endorsed current best-practice guidelines.¹⁸

This report was followed by the 2010 [Draft National Wind Farm Development Guidelines](#) ("Draft Guidelines"), which were developed to complement existing Commonwealth and State planning and development processes relating to wind power. The Draft Guidelines were initially released for a period of 12 months to provide jurisdictions with the opportunity to assess how these guidelines would be incorporated within their existing planning and development processes. The Draft Guidelines provide detailed guidance and methodologies for dealing with a number of key issues, including: community and stakeholder consultation; wind turbine noise; and landscape impacts.

8. Senate Inquiry into the Social and Economic Impact of Rural Wind Farms (2011)

The 2011 Senate Community Affairs References Committee report on [The Social and Economic Impact of Rural Wind Farms](#) examined a number of issues relating to wind farm development. The focus of the report was on:

- Potential adverse health effects for people living in close proximity to wind farms;
- Concerns over the excessive noise and vibrations emitted by wind farms, which are in close proximity to people's homes;
- The impact of rural wind farms on property values, employment opportunities and farm income; and
- The interface between Commonwealth, State and local planning laws as they pertain to wind farms.¹⁹

The report acknowledged the complex interface between the three tiers of government:

The multiplicity of planning systems, and the numerous requirements of each system at the state and local government levels, can cause confusion and uncertainty, with the interface between planning systems not necessarily transparent or well understood.²⁰

8.1 Setback criteria

In respect to setback criteria, the Committee said that:

... the application of scientific measurements for sound and for shadow flicker to alleviate problems for wind farm neighbours may be preferable to prescribed setbacks. Prescribed setbacks are arbitrary and may be too great or too small. In addition, there is also some dispute about the noise standards set by governments and the noise measurements used.²¹

The Committee recommended that:

... further consideration be given to the development of policy on separation criteria between residences and wind farm facilities (Recommendation 3).

8.2 Planning and community consultation

The Committee considered the planning systems and community consultation procedures operating in the States, including those in place at the time in NSW. It concluded:

The Committee acknowledges evidence that some residents feel excluded from wind farm policy decisions affecting their local communities. It considers that affected communities should be informed of wind farm proposals in their area from the outset. It is the responsibility of the wind farm developer to ensure that effective and transparent community consultation is carried out early in the process, including but not limited to an allowance of adequate time to deliberate and provide feedback on the effect that the wind farm will have on the community.²²

8.3 Noise

On the issue of noise, the Committee found that:

Although infrasound from modern turbines may be less than from older models, it is nevertheless present. The relevant standards applied in Australia rely only on the dB(A) measurement which does not take infrasound and low frequencies fully into account. If the Australian standards were to include an appropriate measurement of low frequency noise, including infrasound and vibration, governments and developers may find that at least some of the opposition to wind farms might be alleviated.²³

The Committee recommended that:

... the noise standards adopted by the states and territories for the planning and operation of rural wind

farms should include appropriate measures to calculate the impact of low frequency noise and vibrations indoors at impacted dwellings (Recommendation 1).

As well as recommending that "the NHMRC [National Health and Medical Research Council] review of research should continue, with regular publication" (Recommendation 5), the Committee also recommended that:

... the National Acoustics Laboratories conduct a study and assessment of noise impacts of wind farms, including the impacts of infrasound (Recommendation 6).

8.4 Health

On the issue of possible health impacts, the Committee recommended that:

... the Commonwealth Government initiate as a matter of priority thorough, adequately resourced epidemiological and laboratory studies of the possible effects of wind farms on human health. This research must engage across industry and community, and include an advisory process representing the range of interests and concerns (Recommendation 4).

The Committee further recommended that:

... the draft National Wind Farm Development Guidelines be redrafted to include discussion of any adverse health effects and comments made by NHMRC regarding the revision of its 2010 public statement (Recommendation 7).

9. Draft NSW Planning Guidelines: Wind Farms

In December 2011, the O'Farrell Government released the [Draft NSW Planning Guidelines: Wind Farms](#) ("Draft Planning Guidelines"), the development of which grew out of the recommendations from the 2009 Legislative Council Committee Inquiry into Rural Wind Farms. The Draft Planning Guidelines were prepared in consultation with the community and energy industry to provide a regulatory framework to guide investment in wind farms across NSW, while minimising and avoiding any potential impacts on local communities. Their overall purpose is to:

- Provide a clear and consistent regulatory framework for the assessment and determination of wind farm proposals across the State;
- Outline clear processes for community consultation for wind farm developments; and
- Provide guidance on how to measure and assess potential environmental noise impacts from wind farms.²⁴

The Draft Planning Guidelines identify seven key matters in the wind farm assessment process, some of which are dealt with in more detail below:

- Proximity of turbines to existing residential dwellings (setback criteria);
- Community consultation;
- Visual amenity;
- Noise;
- Health;
- Decommissioning; and
- Auditing and compliance.

9.1 Setback criteria

As noted, a key recommendation of the 2009 Legislative Council [inquiry](#) into rural wind farms was the inclusion of a minimum setback distance of two kilometres between wind turbines and residences on neighbouring properties in the NSW Planning and Assessment Guidelines for Wind Farms.

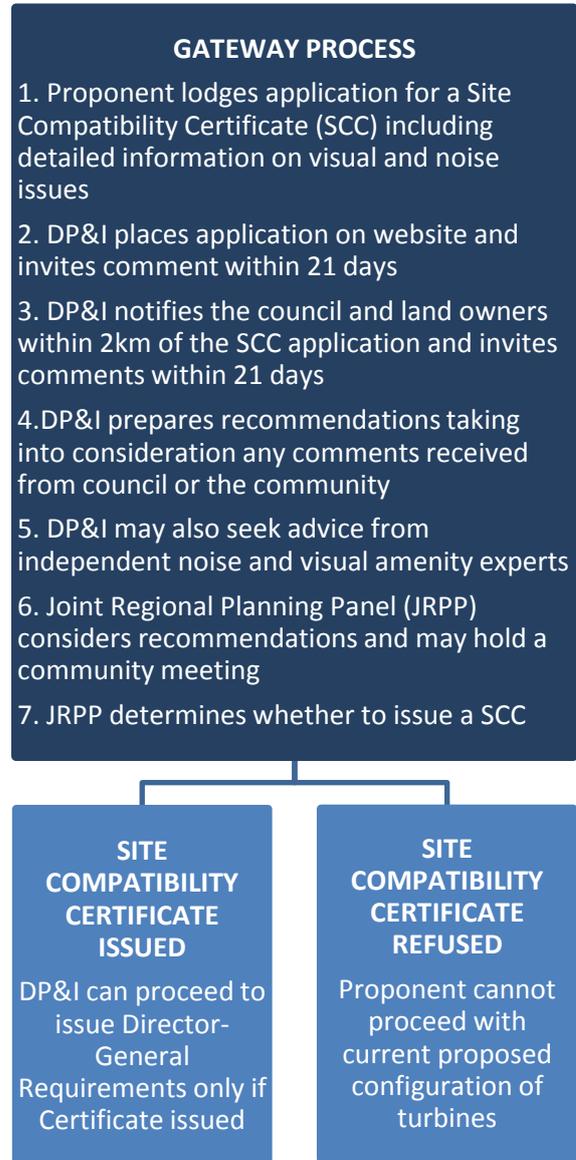
In August 2011, the Victorian Government gazetted new planning regulations restricting wind farm development. The changes meant that wind farms cannot be built within two kilometres of a home without the written consent of the owner. The recent amendment has the potential to limit development of further wind farms and will also impact on already approved wind farms if changes are required to plans or permit conditions. The Victorian Planning Minister [stated](#) that the two kilometre setback is in place for a number of reasons relating to amenity, noise, and strobe lighting. According to the [Clean Energy Council](#), these changes will cost hundreds of regional jobs and lost investment.

The December 2011 [Draft NSW Planning Guidelines: Wind Farms](#), adopt, at least in-part, the Victorian amendment. The NSW Guidelines propose to ban wind turbines within two kilometres of residences unless there is written agreement from relevant landowners, or unless permitted via a 'gateway' process.

The ['gateway'](#) process will require the wind farm proponent to acquire a [Site Compatibility Certificate](#) (SCC). Once a certificate application has been reviewed by the Department of Planning & Infrastructure (DP&I), along with any public submissions received in respect to the application, the relevant Joint Regional Planning Panel

will make a determination as to whether or not to award an SCC.

Proposed Gateway Process for Wind Farm Proposals in NSW



9.2 Community consultation

The Draft Planning Guidelines state that, with respect to wind farms which are considered State Significant Development, DP&I must consult with other government agencies and the local council to prepare Director General's Requirements (DGRs), setting out the issues to be addressed in the proponent's environmental impact statement (EIS). Wind farm

proponents will be required to undertake "comprehensive and genuine" community consultation, including measures such as:

- DP&I must place any SCC application on its website and address the issues raised when determining whether to issue the SCC;
- The wind farm proponent must form a Community Consultation Committee early in the process and, if the development application is approved, maintain effective communication with the community during the construction and operation phases;
- The wind farm proponent must demonstrate in its EIS that effective community consultation took place prior to lodgement of the application; and
- DP&I must exhibit the development application for a minimum of 60 days.²⁵

9.3 Visual amenity

The Draft Planning Guidelines set out a framework for the assessment of the impact of a proposed wind farm on the landscape character, landscape values, visual amenity and any scenic or significant vistas. The assessment must take into account:

- The visibility of the proposed development;
- The locations and distances from which the development can be viewed;
- Landscape values and their significance; and
- The sensitivity of the landscape features to change.²⁶

9.4 Noise

The Draft Planning Guidelines propose strengthening the regulation of noise from wind farms under the [Protection of the Environment Operations Act 1997](#). In addition, under the guidelines the Environment Protection Authority (EPA) will have a regulatory role in relation to wind farms that are [State Significant Development](#).

The NSW Wind Farm Noise Guidelines are included as an Appendix to the Draft Planning Guidelines. These set out guidance on measuring and assessing wind farm noise impacts, including:

- Low frequency noise;
- Tonality;
- Excessive amplitude modulation (including the van den Berg effect); and
- Auditing and compliance issues.

The noise criteria set out in the Draft Planning Guidelines are stringent by both Australian and world standards, being approximately 10dB(A) lower than most European countries.

9.5 Health

The approach to health issues in the Draft Planning Guidelines was developed in consultation with the [NSW Ministry of Health](#). A precautionary approach was adopted, including requiring wind farm proponents to explicitly consider health issues as well as comply with stringent noise criteria.

10 Conclusion

[Responses](#) to the Draft Planning Guidelines have been mixed. On the one hand, a level of uncertainty regarding wind farm development has arisen. Recent media reports from the [Hunter region](#), for example, suggest that the Draft Planning Guidelines are too strict and will threaten future prospects of new wind farms. A particularly contentious element is the proposed two kilometre setback distance between houses and wind turbines. On the other hand, opponents of wind farms argue that the guidelines are not stringent enough. For example, the Waubra Foundation [claims](#) that an inadequate precautionary approach to potential health impacts was adopted in the guidelines.

While the Draft Planning Guidelines are generally consistent with the recommendations made by the 2009 Legislative Council inquiry and the 2011 Senate inquiry, several differences can be identified. First, with regard to setback distance, the Draft Planning Guidelines follow the Legislative Council inquiry, which recommended establishing a minimum 2km setback distance. In contrast, the Senate inquiry argued that prescribed setbacks are arbitrary and may be too great or too small. Second, the Draft Planning Guidelines state that wind farm applications must be exhibited for a minimum of 60 days, whereas the Legislative Council inquiry recommended that they be exhibited for 90 days.

The next stage in NSW will be the release of the final version of the Planning Guidelines for Wind Farms in the middle of 2012.²⁷

¹ P. Simshauser. [The hidden costs of wind generation in a thermal power system: what cost?](#), AGL Applied Economic and Policy Research, Working Paper No.18 - Wind, July 2010

² Australian Government Department of Resources, Energy and Tourism. [Draft Energy White Paper 2011: Strengthening the foundations for Australia's energy future.](#) December 2011

³ EnergyQuest, [Gas-use for Power Generation Down 13%, Big Jump in Wind Power](#), 27 May 2012

⁴ Clean Energy Council, [There's Power in Wind: National Snapshot](#), April 2012

⁵ Clean Energy Council, [Wind Farm Investment, Employment and Carbon Abatement in Australia](#), June 2012

⁶ Australian Energy Market Operator, [Electricity Statement of Opportunities for the National Electricity Market 2011](#), November 2011

⁷ NSW Department of Planning & Infrastructure, [Draft NSW Planning Guidelines: Wind Farms](#), December 2011, p1

⁸ For further information on recent changes to the assessment of SSD, see the following: NSW Department of Planning & Infrastructure, [Assessment of State Significant Development and Infrastructure](#), Planning Circular PS 11-019, 30 September 2011

⁹ n7, p1

¹⁰ This Table is a slightly revised version of a Table included in the [Draft NSW Planning Guidelines: Wind Farms](#).

¹¹ I Cohen. [Legislative Council General Purpose Standing Committee No. 5 Inquiry into Rural Wind Farms](#), Media Release. 16 December 2009, p1

¹² A table listing arguments for and against wind farms can be found in the [Legislative Council General Purpose Standing Committee No. 5 Inquiry into Rural Wind Farms](#). 2009, p17

¹³ n11, p1

¹⁴ The recommendations listed here have been informed by the NSW Government's 2011 [Draft NSW Planning Guidelines: Wind Farms](#)

¹⁵ Legislative Council General Purpose Standing Committee No. 5, [Rural Wind Farms](#), December 2009, p.130

¹⁶ [NSW Government response to the Legislative Council's General Purpose Standing Committee No. 5 Inquiry into Rural Wind Farms](#), June 2010

¹⁷ n16

¹⁸ Environment Protection and Heritage Council, [National Wind Farm Development Guidelines - Draft](#), July 2010, p1

¹⁹ Parliament of Australia, Community Affairs References Committee. [The Social and Economic Impact of Rural Wind Farms](#). June 2011, p1.

²⁰ n19, p31

²¹ n19, p 20.

²² n19, p 41.

²³ n19, p 15.

²⁴ n7, p.iv

²⁵ n7, p4

²⁶ n7, p4

²⁷ NSW Department of Planning & Infrastructure, [Draft NSW Planning Guidelines: Wind Farms - Questions and Answers](#), December 2011

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