



Better Regulation Statement for Wind Farm Amendments

**Protection of the Environment Operations
Amendment (Scheduled Activities) Regulation 2013**

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1. Executive summary

This is the better regulation statement for the wind farm amendments contained in the Protection of the Environment Operations Amendment (Scheduled Activities) Regulation 2013 (the Amendment Regulation).

The Amendment Regulation also contains amendments to bring all coal seam gas activities (exploration, assessment and production) into the EPA's licensing regime. However, this document only discusses the wind farm amendments.

1.1 Purpose of wind farm amendments

The purpose of the wind farm amendments contained in the Amendment Regulation is to:

- make the Environment Protection Authority (EPA) the appropriate regulatory authority (ARA) under the *Protection of the Environment Operations Act 1997* (POEO Act) for large-scale wind farms in NSW (see box below)
- enable the EPA to licence these wind farms
- prescribe licence administrative fees.

What is a large-scale wind farm?

For the purposes of this better regulation statement, large-scale wind farms refers to those wind farms that meet the definition of the scheduled activity 'electricity works (wind farms)' in Schedule 1, clauses 2 and 3 of the Amending Regulation (refer to this clause for the precise legal definition).

In simple terms, a large-scale wind farm is one that:

- is approved as state significant development (SSD) under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) (this also refers to approvals granted under the old SSD provisions that were repealed on 1 August 2005)
- is approved under Part 3A of the EP&A Act (now repealed) and/or
- was operational before 1 December 2012 with a capacity to generate more than 30 megawatts of power.

1.2 Background and development of the wind farm amendments

In December 2011, while developing the draft *NSW Planning Guidelines: Wind Farms*, the NSW Government decided the EPA would become the ARA under the POEO Act for large-scale wind farms in NSW. The Government made this decision in order to increase community confidence that the noise emissions from wind farms would be appropriately regulated.

The EPA analysed different regulatory options for carrying out this ARA role and concluded that regulation through the established environment protection licensing regime was the preferred approach. This was supported by the Minister for the Environment and the Minister for Planning and Infrastructure.

A subsequent internal economic analysis of the licensing approach and potential licence fees determined that there would be a minimal financial impact on consumers.

A consultation draft of the proposed amendments to enable large-scale wind farms to be licensed by the EPA was exhibited during late 2011 to early 2012.

Forty-four submissions were received, with the vast majority supporting the proposed wind farm amendments. Most submissions focused on issues of implementation rather than issues warranting a change to the proposed amendments. Issues raised relating to implementation included such things as:

- licensing procedures
- standard conditions
- operational policy
- the need for protocols between the Department of Planning and Infrastructure (DP&I) and the EPA.

Two submissions stated some opposition to the proposed wind farm amendments. However, the EPA believes that the issues they raised can also be addressed during implementation.

Three minor amendments of a technical nature were made to the proposed wind farm amendments following consultation. All other matters raised in submissions can be addressed during implementation.

1.3 Recommendation

The EPA recommends proceeding with the wind farm amendments contained in the Amendment Regulation. It achieves the Government's objectives for regulating large-scale wind farms in NSW at the least cost to the community and is consistent with the way that other industries are regulated under the POEO Act. It is in line with Government policies and will promote:

- community confidence that noise emissions associated with wind farms are appropriately regulated
- regulatory certainty for the wind farm industry
- equity between different types of electricity generators.

2. Need for Government action

The NSW Government anticipates an increase in renewable energy investment in NSW, with a major contribution expected to come from wind farm projects. However, the Government also acknowledges that there are widespread community concerns with some aspects of wind farm developments, particularly operational noise.

2.1 Government support for renewable energy

A *NSW Renewable Energy Action Plan* (www.trade.nsw.gov.au/energy/sustainable/renewable/renewable-energy-action-plan) is being developed by the NSW Government to help achieve the national target of 20% renewable energy by 2020. The draft plan identifies a significant investment in renewable energy between now and 2020.

It also acknowledges a strong interest in developing wind farm projects in NSW. Wind farms are projected to remain the most economical form of large-scale renewable energy over the next decade.

NSW is already seeing a large increase in the number of wind farm proposals. While there are currently only four large-scale wind farms (see box in Section 1.1) in NSW, a further 11 are either approved or under construction and another 16 are under assessment.

2.2 The policy problem

In 2009, the NSW Legislative Council held an inquiry into rural wind farms. The inquiry identified significant community concerns about the project design of rural wind farms and how they will be monitored. In 2011, the Commonwealth Senate Community Affairs Committee held an inquiry on the social and economic impact of rural wind farms, which identified similar concerns.

There are a range of social and environmental issues associated with wind farm developments, many of which are of concern to the community, such as:

- landscape and visual amenity issues
- social issues (e.g. noise, flicker, glint, night lighting, electromagnetic interference)
- ecological and heritage issues (e.g. bird and bat strike, land clearing, Aboriginal cultural heritage impacts)
- hazards and risk (e.g. aircraft safety, bushfire risk).

Most of these issues are best dealt with at the development assessment stage, through appropriate wind farm design and siting. Therefore, the NSW Government has developed and consulted on draft *NSW Planning Guidelines: Wind Farms*, which are due to be finalised and published in 2013. These planning guidelines will provide comprehensive advice and requirements for applicants, consent authorities and the community to strengthen and provide greater confidence in the assessment and approval process for wind farms.

However, once wind farms become operational, the main potential ongoing social and environmental issue associated with them is operational noise.

The POEO Act is the principal legislation in NSW dealing with environmental issues, including noise. Currently, under the POEO Act, local councils are the appropriate regulatory authority (ARA) for wind farms. However, some councils report that they do not have the necessary resources or expertise to deal with complex noise issues from large-scale wind farms. These concerns were raised through NSW and Commonwealth inquiries into rural wind farms (held in 2009 and 2011) and also through developing the *NSW Planning Guidelines: Wind Farms* (2011–12).

Given the expected growth in wind farm developments in NSW over the coming decade, it is anticipated that the resources and expertise required of the ARA to effectively regulate large-scale wind farms will also increase.

2.3 A move towards EPA regulation of wind farms

When developing the draft *NSW Planning Guidelines: Wind Farms* in 2011, the NSW Government decided the EPA would become the ARA for large-scale wind farms under the POEO Act, thus removing this role from local councils. This decision supports the Government's objectives of attracting wind farm investment in NSW, while also strengthening community confidence that noise emissions associated with wind farms will be appropriately assessed and regulated.

The EPA's proposed ARA role was outlined in the consultation draft of these Guidelines, which was on exhibition during late 2011 and early 2012. Numerous submissions on the draft Guidelines referred to the EPA becoming the ARA for wind farms and the vast majority of these were in clear support of the EPA having this role. Noise issues, by nature, are complex and local council submissions claimed that their ARA role is difficult to manage and burdensome on resources. Submissions from community organisations and individuals reflected similar views.

The EPA analysed different regulatory options for carrying out this ARA role and concluded that environment protection licensing is the preferred approach, as it will:

- provide a strong, flexible and fit-for-purpose tool for regulating large-scale wind farms
- provide consistent regulation of all large-scale wind farms (which is not currently the case)
- provide consistent regulation with other types of electricity generators
- provide certainty to the wind farm industry
- improve transparency and increase community confidence that noise issues associated with large-scale wind farms are appropriately regulated.

On 1 May 2012, the Minister for the Environment approved the licensing approach and on 25 July 2012, the Minister for Planning and Infrastructure concurred with this approach.

2.4 Legislative amendments

In order for large-scale wind farms to be regulated and licensed by the EPA under the POEO Act, legislative amendments are required. The wind farm components of the Amendment Regulation will amend:

- Schedule 1 of the POEO Act to list the activity of 'electricity works (wind farms)' that meets specified criteria as a scheduled activity
- Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009 (POEO General Regulation) to set out applicable licence administrative fees for the activity
- Schedule 8 of the POEO General Regulation to extend certain transitional provisions so they apply to any wind farm commencing construction or beginning operations after the Regulation commences (see box in Section 8).

The Amendment Regulation also contains amendments to bring all coal seam gas activities (exploration, assessment and production) into the EPA's licensing regime. However, this document only discusses the wind farm amendments.

Definition of 'electricity works (wind farms)'

The activity of 'electricity works (wind farms)' will be defined in the POEO Act as meaning 'the generation of electricity by means of wind turbines'. Schedule 1, clauses 2 and 3 of the Amending Regulation contains the precise legal definition.

In effect, only large-scale wind farms will be subject to an environment protection licence as the activity of electricity works (wind farms). Refer to the box in Section 1.1 for a simple description of the large scale wind farms.

2.5 The risk of taking no action

If local councils continue to be ARAs for all wind farms in NSW, they will need to commit to developing significant resources and expertise to meet the expected growth in wind farm development proposals in NSW over the coming decade. This is especially true in relation to assessing noise impacts. There is a risk that local councils will not be able to meet this need and/or that inconsistent approaches to regulation will develop across the State.

Under the POEO Act, councils do not have the ability to issue environment protection licences relating to wind farms. Therefore, when issues arise relevant to their ARA functions under the POEO Act, councils have to rely on other powers under the POEO Act, such as powers to issue environment protection notices under Chapter 4 of the POEO Act. Such powers are often limited in complex situations as they are generally more suitable for managing simpler, shorter-term issues.

3. Objective of Government action

The NSW Government seeks to implement effective and consistent regulation of wind farm noise by making the EPA the ARA for large-scale wind farms under the POEO Act and by licensing them. Given that a large increase in the number of wind farms is anticipated over the coming decade, licensing aims to increase industry and community confidence that noise associated with large-scale wind farms will be appropriately regulated.

It is important that this is achieved at least cost to the community and in a way that supports the Government's policy and objectives.

As the regulator, the EPA's objectives will be to:

- improve the transparency and accessibility of information to the community
- provide up-front information and certainty to the industry about the level of environmental performance it needs to achieve
- avoid duplication of regulatory requirements
- ensure the EPA's powers are effective for regulating wind farms,
- ensure the EPA's tools are strong, flexible, proportional and fit-for-purpose
- minimise costs and red-tape for wind farm operators
- minimise the costs and administrative burden to the EPA
- ensure consistent treatment of wind farms.

Licensing enables the Government to appropriately regulate the activities of large-scale wind farms and address potential noise pollution issues should they arise.

4. Options considered

The EPA considered the costs and benefits of three options for implementing the Government's decision that the EPA will be the ARA for large-scale wind farms under the POEO Act:

- the status quo
- making the EPA the ARA without licensing
- making the EPA the ARA with licensing (the recommended option).

Option 1: status quo (not viable)

Maintaining the status quo means that local councils will continue to regulate all wind farms in NSW, as is the current situation. The EPA would not be responsible for regulating any wind farms (unless operated by a public authority). No legislative amendments would be required.

This option is not viable because the Government has committed to the EPA being the ARA under the POEO Act for large-scale wind farms. This is not possible without legislative change.

This option also does not address any of the risks of taking no action, as identified under Section 2.5.

Option 2: EPA as regulator without licensing (not recommended)

Under this approach, the POEO General Regulation would be amended to simply establish the EPA as the ARA for large-scale wind farms. However, these wind farms would not be subject to environment protection licences issued under Chapter 3 of the POEO Act. The EPA would regulate the sector by using certain ARA powers under the POEO Act (such as environment protection notices under Chapter 4 and noise control notices under Part 8.6). Councils commonly rely on ARA powers in carrying out their ARA functions under the POEO Act.

Benefit

The main benefit of this approach is that, while the EPA would be the ARA under the POEO Act for large-scale wind farms, there would be no licensing requirement. This means that there would be no up-front or ongoing administrative burden for the industry. Only when environmental issues arise would the EPA intervene, using regulatory discretion as per the EPA's usual practice. In some cases, certain costs and expenses incurred by an ARA in relation to environment protection notices can be recovered by the ARA.

Costs

However, general ARA powers (notices, directions etc.) in the absence of licensing are limited in their scope and application. They are generally more suitable for dealing with relatively minor or straightforward environmental issues at non-scheduled premises.

While costs can be recovered for some notices, overall this option provides limited opportunity for the EPA to recover its costs associated with exercising regulatory functions.

Under this option, noise abatement orders can be sought under Section 268 of the POEO Act by the occupier of any premises through applying to the local court. The court does not necessarily need to regard the noise limits in an operator's planning consent in making those orders. This creates uncertainty and risk for wind farm operators and has the potential to result in inconsistent performance requirements being applied across the industry.

Conclusion

While this approach provides the least administrative burden to the wind farm industry, it may not effectively achieve the Government's objective of increasing community confidence that noise emissions are appropriately regulated. Also, it would not ensure the equitable regulation of wind farm operations. There are limited opportunities for the EPA to recover its costs associated with regulatory effort.

Option 3: EPA as regulator with licensing (recommended)

Under the POEO Act, the occupier of any premises on which a scheduled activity is carried out must hold an environment protection licence under Chapter 3 of the POEO Act. Also, Part 3.2 of the POEO Act states that a licence is required for work that will enable a scheduled activity to operate (e.g. construction of the premises). Such work is called 'scheduled development work'.

The licensing option for large-scale wind farms would amend Schedule 1 of the POEO Act to include certain electricity generation by means of wind turbines – 'electricity works (wind farms)' – as a scheduled activity. Therefore they will require a licence for construction and operation. This would also have the effect of making the EPA the ARA for these large-scale wind farms.

Benefits

Environment protection licensing is an established regime that is familiar to the community, industry and EPA officers. Licensing is a strong, flexible and fit-for-purpose regulatory tool.

By using a licensing approach, the EPA can tailor a range of site-specific licence conditions for individual wind farm premises including noise limits, monitoring and reporting requirements. By considering each site individually, in consultation with the applicant or licensee, the EPA acknowledges that a one-size-fits-all approach is not necessarily appropriate.

Other types of electricity generators (such as coal- and gas-fired generators) are already licensed by the EPA. Including wind farms in the licensing regime increases the equity between generator types, promoting competitive neutrality.

As a result of existing provisions of the EP&A Act and the Environment Planning and Assessment Regulation 2000 (EP&A Regulation), the Director-General (DG) of the Department of Planning and Infrastructure (DP&I) must consult with the EPA about development applications for state significant developments (SSD) when preparing environmental assessment requirements. As part of this process, the DG must regard key issues raised by the EPA, including requirements for environmental performance.

An environment protection licence for a scheduled activity which is also SSD under the EP&A Act must be substantially consistent with the development consent. This is a requirement under Section 89K of the EP&A Act. It means that the noise limits in the initial environment protection licence must be consistent with the development consent, giving wind farm proponents and operators regulatory certainty. This is required up until the first licence review.

Court noise abatement orders have no force over activities that are the subject of an environment protection licence. This avoids potentially inconsistent requirements being set by the court, which improves regulatory certainty for wind farm proponents and operators.

Costs

Annual environment protection licence administrative fees would be payable for licensed wind farms; however, they would be in the low range compared to general electricity works (coal and gas).

Licensees will also be required to submit annual returns to the EPA, which increases regulatory burden. Nevertheless, this is not an onerous requirement; rather it is an important requirement that means responsibility for the licensee's compliance monitoring is considered and reported at the highest corporate level.

See Section 5.1 for a more detailed analysis and discussion on compliance costs.

Conclusion

On balance, licensing of large-scale wind farms (option 3) was the preferred option because it best meets the Government's and EPA's objectives for regulating wind farms in NSW. It is an established regime that is familiar to the community, industry and EPA officers. The available regulatory tools are strong, flexible and fit-for-purpose. The licensing option increases equity between electricity generators, promoting competitive neutrality.

5. Considering the costs of licensing wind farms

5.1 Compliance costs and competition impacts

There will be an additional regulatory burden placed on wind farm operators through implementation of a licensing approach. Large-scale wind farms (see box in Section 1.1) will be required to apply for an environment protection licence and pay the annual licence administrative fee to the EPA.

Licence administrative fees

The Amendment Regulation prescribes annual licence administrative fees for large-scale wind farms, which have been set based on internal economic analysis. The objectives for establishing the fee structure was:

- to set fees that reflect the degree of regulatory effort required relative to other licensed electricity generators
- to set fees that will minimise, to the greatest extent possible, market distortions between electricity generators.

The fee prescribed in the Amendment Regulation is based on the size of the wind farm and the fee unit amount charged in the relevant financial year (see Table 1 below). This is consistent with the way that other electricity generators are treated, promoting competitive neutrality.

Table 1: Annual licence administrative fees for electricity works (wind farms) compared to existing fees for general electricity works

Annual generating capacity (GWh)	Existing general electricity works		Electricity works (wind farms)	
	Licence administrative fee units	Annual licence administrative fees	Licence administrative fee units	Annual licence administrative fees
< 450	25	\$2,825	15	\$1,695
450–1,000	65	\$7,345	45	\$5,085
1,000–4,000	165	\$18,645	65	\$7,345
> 4,000	420	\$47,460	150	\$16,950

Licence fees are calculated based on fee units multiplied by the fee unit amount, which is currently \$113. The fee unit amount is indexed annually consistent with clause 9 of the POEO General Regulation.

Note that the EPA’s analysis shows that none of the current operational or ‘under construction’ wind farms would fall into the highest fee tier (\$16,950 per annum), and less than 13% of proposed (i.e. ‘approved’ or ‘under assessment’) wind farms would fall into this tier (see Appendix A).

The fee units have been set so that the fee paid per GWh of electricity produced is the same for wind farms as it is for other power generators. It is a neutral fee, which avoids market distortions and promotes competitive neutrality between coal- and gas-fired generators and wind farms.

However, in absolute terms, the fee units for wind farms are less than coal- and gas-fired generators (see Figure 1 in Appendix A), which means that a wind farm will pay lower fees than a coal- or gas-fired generator of similar capacity.

The lower fee (in absolute terms) for wind farms takes into account the fact that wind farms have a much lower capacity factor. Wind farm fee units have been prescribed so that the effective cost per GWh produced (based on capacity factor) for a wind farm is similar to that of coal- and gas-fired generators. The internal analysis assumes an average capacity factor of 30% for wind farms compared to 85% for coal and base-load gas-fired generators.

Capacity factor

The term 'capacity factor' refers to the ratio of the actual output of a power plant over a period of time and its potential output if it had operated at full nameplate capacity for the entire period. Wind farm capacity factors are lower than coal- and base-load gas-fired generators.

This rationale is also consistent with the EPA's risk-based approach to licensing. As the EPA expects to spend less regulatory effort and resources on wind farms compared to traditional coal and gas fired generation, the fees should also be less.

It is not expected that the licence administrative fee will have any significant impact on consumers, industry or investors.

Further detail on how the annual licence administrative fees were derived, including other fee options considered, is at Appendix A.

In summary, the prescribed licence administrative fees for wind farms:

- avoids market distortions
- promotes competitive neutrality between coal- and gas-fired generators and wind farms
- matches the EPA's risk-based approach to licensing.

Polluter pays

Licence administrative fees are not designed to encourage pollution abatement, but rather to reflect the resources required for the EPA to regulate the activity.

The NSW and Commonwealth governments have implemented a number of other mandatory schemes designed to encourage pollution abatement by applying the 'polluter pays' principle; that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement' (Section 6(2)(d)(i) *Protection of the Environment Administration Act 1991*).

Examples in NSW include the Load Based Licensing (LBL) Scheme and the Hunter River Salinity Trading Scheme, both of which are administered by the EPA. More recently, the Commonwealth Government has introduced the carbon pricing mechanism, which is a greenhouse gas emissions trading scheme.

Most crucially, wind farms will not be required to participate in any of these mandatory schemes, while coal- and gas-fired electricity generators are required to participate in one or all of them (depending on circumstances).

For example, the three biggest coal-fired electricity generators in NSW each pay LBL fees of between \$2 million and \$5 million per annum. Wind farms will not pay any LBL fees as they do not produce any assessable pollutants under the scheme.

With this in mind, the EPA's view is that it is not necessary for licence fees to incorporate the polluter pays principle. Rather, fees should be set to achieve competitive neutrality.

Annual reporting

All licensees are required to submit an annual return within 60 days of the end of their annual reporting period. This is a self-reporting system. The complexity of the annual return depends on the level of compliance with the licence, the number of complaints received during the reporting period and the nature of any monitoring conditions.

The form or content of a wind farm annual return is not different to that required of any other licensee. Before the licence anniversary date, the EPA sends the licensee a premises-specific, printed annual return form for completion. The annual return includes the relevant licence details, a statement of compliance with licence conditions, monitoring and complaints summary (details can be included as attachments) and a section for signature and certification.

Any licensee can apply to the EPA to have their annual return reporting period aligned with the reporting period for their planning consent, thereby harmonising the two reporting processes.

5.2 EPA's administration costs

The EPA has estimated that wind farm regulation will require allocating both operational and noise specialist staff.

Regulatory work will include:

- reviewing noise assessments for development proposals and recommending appropriate planning consent conditions
- reviewing information received from licensees and applicants
- developing appropriate environment protection licence conditions
- responding to complaints relating to licensed premises
- conducting licence reviews and other regulatory works as required (e.g. education, inspections, developing pollution reduction programs, compliance audits, investigations etc depending on the circumstances).

The prescribed licence administrative fees for wind farms will only partially recover these costs (as is the case for other licensed activities). Depending on the level of regulatory work required, the EPA may need to fund these regulatory activities from existing resources.

5.3 Other costs

Social costs

It is expected that the fees will be fully passed onto consumers. An internal analysis revealed that, based on an annual household consumption of 5000 kWh, the annual cost to a consumer's bill as a result of the fee will be less than \$0.10. This figure will vary according to the actual output of the wind farm. For the purposes of this analysis, a 30% capacity factor was assumed.

Impacts on the community

The wind farm amendments contained in the Amendment Regulation will support the Government's objective of increasing community confidence that there is effective regulation of large-scale wind farms. It will provide a clear avenue for complaints (through EPA's Environment Line) and documentation that the EPA can use to monitor compliance (through annual returns).

Environmental impacts

The wind farm amendments contained in the Amendment Regulation will provide a way to mitigate unacceptable noise emissions or other types of environmental problems that are discovered as a result of the EPA's investigations. Licensing allows for mandatory environmental audits and pollution reduction programs to be required by the EPA and funded by the licensee.

Costs and benefits for operators

It is not expected the operator's requirements will become a significant cost for their business (e.g. completing a licence application, submitting annual returns, developing a pollution incident management plan and publishing the monitoring data, if applicable). The direct cost of the administration fee was established in line with the fees paid by coal- and gas-fired electricity generators, taking into account that wind farms have a lower capacity factor relative to these other generator types.

Impact on local councils

The wind farm amendments contained in the Amendment Regulation will remove the burden from local councils, particularly those that have been unable to resolve complaints due to financial or knowledge gaps. Where councils previously did have these resources, the amendments will release these resources for other regulatory functions.

6. Consultation

Consultation on EPA's ARA role and proposed licensing approach for regulating wind farms was carried out in two main ways:

- as part of DP&I's consultation on the draft *NSW Planning Guidelines: Wind Farms*
- through specific consultation on the proposed wind farm amendments.

6.1 Consultation on the draft NSW Planning Guidelines: Wind Farms

The draft *NSW Planning Guidelines: Wind Farms* were placed on public exhibition by DP&I in December 2012. The Guidelines highlighted EPA's upcoming ARA role for large-scale wind farms following the Government's decision that this should occur. The Guidelines were not specific on how EPA's ARA role would be implemented.

A large number of submissions were received by DP&I during the consultation period for the Guidelines (late 2011 to early 2012). A number of these submissions, from individuals, community groups, the Local Government and Shires Association (LGSA) and local councils, commented on EPA's ARA role for wind farms. These were all either positive or neutral comments, with some outstanding concerns around the timing of implementation and potential gaps until the EPA's ARA role is established.

The LGSA submission from 22 March 2012 stated:

In particular, the Associations welcome the proposed change of practice that would require the [EPA] to monitor all noise complaints arising from wind farm projects, instead of the current situation where councils are obliged to manage these complaints themselves.

The Shellharbour City Council submission from February 2012 stated:

Currently the [EPA] has no regulatory role in regards to environmental compliance monitoring or auditing of wind farms. The draft guidelines suggest that the [POEO Act] will be amended some time in the future to address this. In the interim it is unclear who enforces conditions of consent. Depending on the specific conditions of consent, Council may have to take on this role with its inevitable resource and funding implications.

6.2 Consultation on the proposed wind farm amendments

The EPA carried out specific consultation on EPA's proposal that this ARA role should be established through environment protection licensing. This consultation was done in the form of a draft Protection of the Environment Operations Amendment (Wind Farms) Regulation 2012, exhibited on the EPA website between 30 November 2012 and 23 January 2013.

To communicate the exhibition of the proposed wind farm amendments, during November 2012 the EPA:

- gave a presentation at the Wind Industry Engagement Day (jointly run by the Office of Environment and Heritage and the Clean Energy Council)
- established a dedicated web page for the proposed wind farm amendments, including a series of questions and answers
- published a notice in the NSW Government Gazette
- advertised in major newspapers (*The Sydney Morning Herald*, *The Daily Telegraph*) and key regional newspapers (*Goulburn Post* and *The Post Weekly*)

- notified key stakeholders directly by letter or email, including:
 - wind farm operators and proponents
 - industry associations
 - key environment and community groups
 - the Local Government and Shires Association (LGSA)
 - individual councils or regional council associations that made submissions on the draft *NSW Planning Guidelines: Wind Farms*.

6.3 Results of consultation

Forty-four submissions on the proposed wind farm amendments were received from a range of stakeholders. Of these, 37 indicated clear support for the proposed wind farm amendments, four (4) did not object to it, two (2) did not support it and one (1) did not specifically address it.

Significantly, those that supported (or did not object to) the proposed wind farm amendments included:

- five (of seven) industry (wind farm operators/proponents) submissions
- the Clean Energy Council (peak industry group) submission
- the Local Government and Shires Association (peak councils association) submission
- the Environmental Defenders Office (peak environment group) submission
- the Planning Institute of Australia (peak planning professionals organisation) submission
- 30 community submissions (individuals, businesses, community groups, religious organisation).

Centralised EPA regulation

The key area of support for the proposed wind farm amendments was around the stated benefits of centralising the environmental regulation of large-scale wind farms (see box in Section 1.1). That is, transferring the ARA responsibilities under the POEO Act from local councils to the EPA.

Benefits acknowledged and supported included:

- the EPA has greater resources, expertise to deal with complex noise issues and community complaints
- councils will be released from their present administrative and compliance burden
- potential for greater consistency and efficiency of regulation across the State by the Government's dedicated environmental regulator.

However, it should be noted that two of the seven industry submissions did not agree that centralised EPA regulation would have these benefits. Rather, these two submissions stated the proposal has the potential to result in duplication of regulatory effort and performance requirements and inconsistencies with DP&I's regulatory role (via the development approval or consent under the EP&A Act). They felt the relevant EP&A Act approval or consent that is applicable to a wind farm is more than adequate to address ongoing issues at wind farms.

The EPA's view is that, with the expected growth in wind farm developments over the coming decade, it is reasonable to conclude that the regulatory work for the ARA (under the POEO Act) of wind farms will increase. The EPA is better placed than local councils to meet this growing regulatory need in an equitable, efficient and consistent manner.

The EPA also acknowledges that there is widespread community concern about operational noise from wind farms and a growing expectation that the Government will improve regulatory oversight.

Other key areas of concern

Table 2: Other key areas of concern raised in submissions

Key concern	Type of concern	EPA response	Action
Discouragement of renewable energy investment in NSW	Overarching	Disagree. Licensing provides an appropriate set of checks and balances to ensure the growing wind farm sector meets appropriate environmental performance requirements.	No change to proposed amendments. EPA to consider what additional information is needed to provide more clarity about these matters and processes.
Interactions between the planning system and the EPA's licensing functions: <ul style="list-style-type: none"> • uncertainty about the process • the risk of inconsistencies • the risk of duplication of regulation 	Lack of information	Noted. Established processes are in place.	No change to proposed amendments. EPA to consider what additional information is needed to provide more clarity about these matters and processes.
Uncertainty about how the EPA will manage noise complaints	Lack of information	Noted. Established processes are in place.	No change to proposed amendments. EPA to consider what additional information is needed to provide more clarity about these matters and processes.
Uncertainty about noise monitoring requirements: <ul style="list-style-type: none"> • potential unnecessary or duplicative requirements • potential risk to commercially sensitive wind-speed data through publishing requirements • responsibility for monitoring (EPA or licensee) 	Lack of information	Noted. Monitoring is the licensee's responsibility. Established processes are in place in relation to publishing requirements (meteorological data does not need to be published). EPA will take a site-by-site approach to monitoring requirements in consultation with the licensee.	No change to proposed amendments. EPA to consider what additional information is needed to provide more clarity about these matters and processes.

Key concern	Type of concern	EPA response	Action
<p>Licence administrative fees:</p> <ul style="list-style-type: none"> • the dollar amount (should be higher/lower) • fee structure (e.g. should be based on pollution output not production capacity) • revenue should be directed towards improving regulation of wind farms 	Technical	<p>Noted. The EPA's cost-benefit analysis considered various options for setting fees. The proposed fees structure is:</p> <ul style="list-style-type: none"> • consistent with the method for assigning fees for other activities (production capacity) • equitable with other electricity generators (promotes competitive neutrality) • based on the anticipated level of EPA regulatory effort (expected lower overall pollution output for this industry compared to other activities). 	<p>No change to proposed amendments.</p> <p>EPA to consider what additional information is needed to provide more clarity about these matters and processes.</p>
<p>Transitional period – the established nine-month transition period for existing wind farms to apply for a licence once the Amendment Regulation commences – should be extended to wind farms about to be constructed</p>	Technical	<p>Agreed. No licence should be required until nine months from commencement of the Amendment Regulation.</p>	<p>Include specific transitional arrangement in the final Amendment Regulation.</p>

The EPA intends to publish a full list of issues and the EPA's response on the EPA website and notify those who made a submission by email.

Changes to the wind farm amendments following consultation

Three minor amendments of a technical nature were made to the proposed wind farm amendments following consultation. All other matters raised in submissions can be addressed during implementation.

The amendments outlined in the exhibited draft Protection of the Environment Operations Amendment (Wind Farms) Regulation 2012 have now been incorporated in the final Amendment Regulation, which also includes amendments related to coal seam gas activities (see section 2.4).

7. Recommendation

Based on the EPA's consideration of options (see Section 4), the consideration of costs (see Section 5) and the results of consultation (see Section 6), the EPA recommends proceeding with the proposed wind farm amendments contained in the Amendment Regulation.

Licensing large-scale wind farms (see box in Section 1.1) under Schedule 1 of the POEO Act together with the prescribed licence administrative fees under Schedule 1 of the POEO General Regulation satisfies the Government's objectives and balances the needs of the local community and the wind farm industry.

This proposal represents the greatest net benefit (and least cost) to the community. The rationale for the proposal can be summarised as follows:

1. There is widespread community concern about operational noise from wind farms.
2. Noise from large-scale wind farms is complex and it requires significant expertise to manage issues when they arise.
3. The Government anticipates – and is committed to – supporting a large increase in the number of wind farms in NSW over the coming decade.
4. There will be increased pressure on the ARA for wind farms to address operational noise issues.
5. Local councils report they do not have the resources or expertise to effectively deal with complex noise issues from large-scale wind farms. Without significant capacity building, councils are likely to continue to struggle to meet the community's and industry's expectations of credible regulation.
6. As the State's dedicated environmental regulator, the EPA is better placed to meet this growing regulatory demand, by becoming the ARA for large-scale wind farms.
7. Bringing large-scale wind farms into the EPA's established environment protection licensing regime is the best approach for EPA regulation of the sector.
8. The licensing regime is well-established, strong, flexible and fit-for-purpose (the alternative regulatory powers available under the POEO Act are much more limited in application and are generally not designed for complex or long-term issues).
9. The proposed licence administrative fees are relatively low and will not place unreasonable costs on the wind farm industry. The fees will increase equity between generator types, promoting competitive neutrality.
10. The proposal will not place an unreasonable administrative burden on the EPA as the regulator and is a more efficient approach compared to local councils continuing to have the ARA role into the future.
11. The benefits of consistent and credible regulation for the wind farm industry and the community outweigh the costs of increased regulatory and administrative burden (which are not significant).

8. Implementation and enforcement

The wind farm amendments contained in the Amendment Regulation will be implemented in two main ways. First, by including the activity 'electricity works (wind farms)' as a scheduled activity in Schedule 1 of the POEO Act. Second, by prescribing licence administrative fees for the activity in Schedule 1 of the POEO General Regulation.

The Amendment Regulation will also amend Schedule 8 of the POEO General Regulation to extend the existing nine-month transitional period provisions to any wind farm that commences construction or operation after the Amendment Regulation commences.

A nine-month transitional period after the Amendment Regulation commences

Section 52(1) of the POEO Act and clause 47 of the POEO General Regulation provide 'transitional' periods regarding licensing requirements for when activities are added to Schedule 1 of the POEO Act. As a result of these provisions, anyone already carrying out the scheduled activity of 'electricity works (wind farms)' on their premises, or undertaking construction works to carry out that activity when the Amendment Regulation commences, will have a nine-month 'window' to obtain an environment protection licence. The Amendment Regulation will include additional transitional provisions in Schedule 8 of the POEO General Regulation, so that the transitional periods identified at Section 52(1) of the POEO Act are extended to all proponents of approved wind farms that intend to commence construction or operation soon after the Amendment Regulation commences.

The EPA is also developing a communication strategy for implementation that will be tailored to meet the needs of the wind farm industry. Issues raised as part of consultation on the proposed wind farm amendments will be specifically considered when developing this information. Information will also be prepared for EPA regulatory officers, local Government, DP&I and the general public.

Penalties for non-compliance with licence or statutory requirements will be in line with the existing provisions of the POEO Act. Compliance and enforcement approaches will be in line with existing EPA policy and procedures.

9. Evaluation and review

The provisions of the POEO Act and POEO General Regulation will be periodically reviewed as per existing legislative requirements.

Ongoing information, policy and procedural needs will be assessed regularly or as issues arise, as per the EPA's existing continuous improvement processes.

Appendix A: Further detail on proposed wind farm licence administrative fees

What are the proposed fees for wind farms?

Table 3: Proposed annual licence administrative fees for the scheduled activity of electricity works (wind farms) (compared to existing fees for general electricity works)

Annual generating capacity (GWh)	Existing general electricity works		Electricity works (wind farms)	
	Licence administrative fee units	Annual licence administrative fees	Licence administrative fee units	Annual licence administrative fees
< 450	25	\$2,825	15	\$1,695
450–1,000	65	\$7,345	45	\$5,085
1,000–4,000	165	\$18,645	65	\$7,345
> 4,000	420	\$47,460	150	\$16,950

Licence fees are calculated based on fee units multiplied by the fee unit amount, which is currently \$113. The fee unit amount is indexed annually in line with clause 9 of the POEO General Regulation.

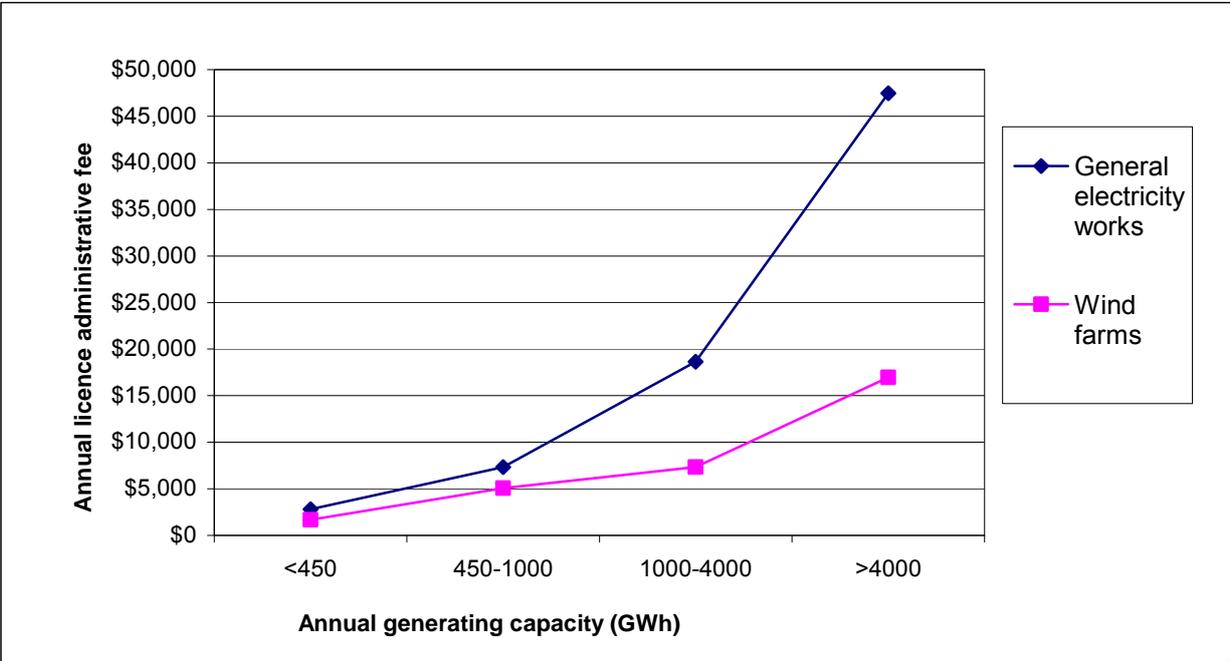


Figure 1: Comparison of annual licence administrative fees

How many wind farms will fall into each proposed fee tier?

Table 4: Number of wind farms in each fee tier

Annual generating capacity (GWh):	< 450	450 – 1,000	1,000 – 4,000	> 4,000	
Annual licence admin fees:	\$1,695	\$5,085	\$7,345	\$16,950	Total
• wind farms ‘installed’	3	0	1	0	4
• wind farms ‘under construction’	0	2	1	0	3
• wind farms ‘approved’	2	2	3	1	8
• wind farms ‘under assessment’	2	4	8	2	16
Total	7	8	13	3	31

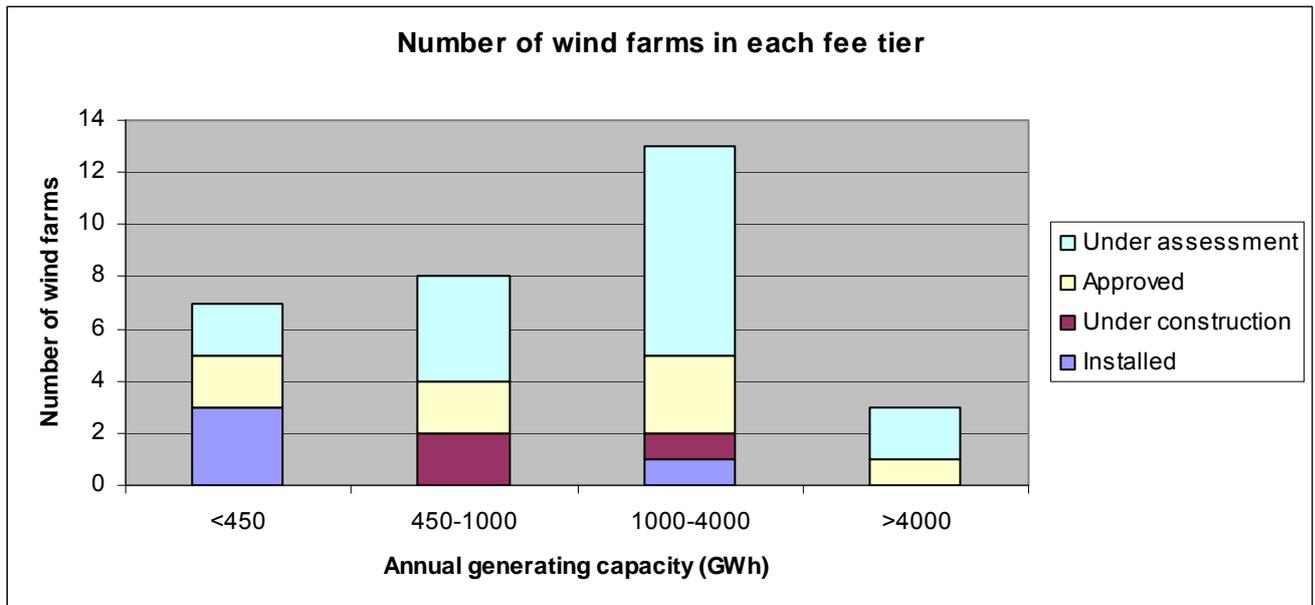


Figure 2: Number of wind farms in each fee tier

What were the objectives for establishing the proposed licence fee structure for wind farms?

- To set fees that reflect the degree of regulatory effort required relative to other licensed electricity generators.
- To set fees that will minimise, to the extent possible, distortions between electricity generators, promoting competitive neutrality.

What fee options were considered?

Three options were considered for setting fees for wind farms. The fee structure proposed under each option was compared to the existing fee structure for coal- and gas-fired generation. Each option was compared based on:

- revenue and regulatory costs
- effective fee per GWh (based on capacity factor – see box in Section 5.1).

Option 1 was a ‘linear approach’ – that is, a simple ‘straight line’ increase in fees in simple increments. The major disadvantage with this option was that there was a large discrepancy between the effective cost per GWh (based on capacity factor) between small and large wind farms, and compared to coal- and gas-fired generators in the same fee scale.

Option 2 was a ‘proportional approach’ – that is, fees are ‘discounted’ for wind farms but increase in proportion to the fees for coal- or gas-fired generators. This option was more equitable than Option 1; however, there was still a large discrepancy between the effective cost per GWh (based on capacity factor) for larger power plants (coal- and gas-fired generators favoured).

Option 3 (the recommended option) was an ‘equivalent approach’ – that is, fee units are set so that the effective cost per GWh (based on capacity factor) for wind farms is much closer to that of existing coal- and gas-fired generation licences. The fees for wind farms have been set to ‘match’ the existing fees for coal- and gas-fired generators. This was the recommended option because:

- it eliminates the market distortions present in the other two options
- it promotes competitive neutrality between coal- and gas-fired generators and wind farms
- the recommendation also matches the EPA’s risk-based approach to licensing. As the EPA expects to spend less regulatory effort and resources on wind farms compared to traditional coal- and gas-fired generation, the fees should also be less. In absolute terms, wind farms will pay less than a coal- and gas-fired generator of similar megawatt capacity.

What is the conversion of megawatt capacity to gigawatt annual generating capacity?

Existing coal- and gas-fired generators are required to convert the MW capacity of their plants to GWh in order to determine which fee ‘tier’ they fall into. This in turn determines the annual licence administrative fee paid to the EPA. The calculation used is a simple conversion of MW to GWh, which does not consider the capacity factor (see box in Section 5.1) of the generator:

$[\text{MW capacity} \times 24 \text{ (hours in a day)} \times 365 \text{ (days in a year)}] \div 1000 = \text{GWh annual generating capacity}$

Wind farms will calculate their annual generating capacity in the same manner.

How has the low capacity factor of wind farms been taken into account in the fee proposal?

In absolute terms, the fee units proposed for wind farms are considerably less than coal- and gas-fired generators. This means a wind farm will pay lower fees than a coal- or gas-fired generator of similar capacity (see box in Section 5.1). This takes into account the fact that wind farms have a much lower capacity factor. Fee units have been proposed so that the effective cost per GWh (based on capacity factor) for a wind farm is similar to that of coal- and gas-fired generators. The analysis assumed an average capacity factor of 30% for wind farms, compared to 85% for coal and base-load gas-fired generators.

What other justifications are there for wind farms paying lower fees compared to other electricity generators?

The proposed fee structure for wind farms is also consistent with the EPA's approach for licensing other activities, which are set according to:

- the nature, size and capacity of the activity undertaken
- the resources required for the EPA to regulate the activity

The EPA considers that the environmental impacts associated with wind farms are likely to be fewer than those for other electricity generation including coal- and gas-fired generation and, therefore, anticipates that the regulation of wind farm operations will be less resource intensive.

