



14 March 2014

**NSW Planning Assessment Commission Determination Report
Flyers Creek Wind farm Project, Blayney LGA**

Project Application

Infigen Energy is seeking project approval to develop a windfarm west of Blayney. The proposal is for 43 wind turbines and associated powerlines, substation and access roads. The proposal would have a maximum generating capacity of 132 megawatts.

Delegation to the Commission

The project has been assessed by NSW Planning and Infrastructure. On 26 November 2013 the Commission received the project for determination under delegation from the Minister for Planning and Infrastructure.

Ms Gabrielle Kibble AO, Chair of the Planning Assessment Commission nominated Mr Garry Payne AM (Chair), Mr Paul Forward and Mr David Johnson to constitute the commission to determine the application.

Planning and Infrastructure's Assessment Report

The Director-General's Environmental Assessment of the project gave key consideration to the issues of noise, biodiversity, visual impacts and health impacts, other issues considered included traffic and transport, aviation safety, bushfire, Aboriginal heritage, telecommunications, socio-economic and land use, cumulative impacts, consultation and decommissioning.

Planning and Infrastructure found that the project can be designed and operated to achieve acceptable noise outcomes and that impacts on biodiversity could also be adequately mitigated and/or managed. No adverse health impacts are expected. The visual impacts to one residence were considered unacceptable and Planning and Infrastructure recommended removal of two turbines to address this visual impact. Visual impacts to all non-associated residences were considered acceptable.

The report notes that some associated landowners (i.e. landowners whose properties are proposed to have turbines and associated infrastructure on them) had objected to the project and Planning and Infrastructure has recommended deferred commencement conditions requiring that the Proponent must enter into new agreements with these landowners prior to the approval taking effect.

Meetings and Site Visit

Meeting with Proponent

On 13 December 2014 the Commission met with representatives for the Proponent Infigen Energy. The Proponent gave a background to the Company and the project. The Proponent discussed the noise and setback requirements for wind farms in other countries and indicated that the NSW draft wind farm guideline, gateway criteria of 2 km distance from turbines to residences, is the most stringent in the world.

Meeting with NSW Planning and Infrastructure

Following the meeting with the Proponent, the Commission was briefed by representatives from Planning and Infrastructure. The deferred commencement conditions were discussed.

Site Visit and Meeting with Blayney Shire Council

On Thursday 30 January 2014 the Commission met with senior Council officers. Council also showed the Commission the site and surrounding area. The Commission also visited the existing wind farm to the south of Blayney prior to meeting with the Council.

The Commission asked about the Blayney wind farm and the community's position on this existing wind farm. The Council officers advised that it had been constructed over 10 years ago and noted that the Council logo had been changed to include a wind turbine. The Council advised that the existing wind farm did not generate complaints, but noted the turbines proposed for the Flyers Creek Wind Farm would be much larger than those at the Blayney wind farm.

In relation to this proposal, Council raised concerns about the heavy vehicle access routes to be used. Council also indicated that a viewing platform should be provided. The Commission was advised that the draft Voluntary Planning Agreement was to go to Council for exhibition in the coming weeks.

Second meeting with the Proponent

The Proponent requested a further meeting with the Commission. Accordingly a meeting was scheduled for Thursday 6 February 2014. The Proponent raised concerns with the condition requiring it to enter into new agreements with three of the landowners, indicating that the planning conditions should not be interfering with or setting aside existing valid contracts. The condition was also said to serve no planning purpose. In addition to this, the Proponent requested that the recommendation to delete turbines 9 and 12 be rejected and that the turbines be given approval.

Public Meeting

On 11 February 2014 the Commission held a public meeting in Blayney to hear the community's comments on the proposal. The meeting commenced at 3 pm on Tuesday and continued on Wednesday morning. Both sessions were well attended with close to 100 people on Tuesday and about 40 people on Wednesday. 40 registered speakers presented at the meeting (a list of speakers is attached in Appendix 1). Speakers spoke both for and against the proposal. A list of the issues raised at the public meeting is provided in Appendix 2 of this report.

Meeting with Planning and Infrastructure

Following the public meeting the Commission met with representatives from Planning and Infrastructure to discuss the issues raised at the public meeting. The Commission particularly requested advice on the status of the Draft Wind Farm Guidelines. Planning and Infrastructure explained that the finalisation of the guidelines had been deferred. The agency also pointed out that the draft guidelines did not prevent turbines from being constructed within 2 km of dwellings, but required detailed assessment of the impacts to these homes, particularly in relation to noise and visual impacts.

The noise modelling for the substation was discussed, Planning and Infrastructure confirmed that there had been an error in the environmental assessment and that the substation is proposed to be 400 m from the nearest dwelling, not 1200m as indicated in the environmental assessment. Nonetheless, the Proponent had advised that the predicted noise from the substation would comply with the relevant noise criteria at this dwelling. It was also noted that the substation would also be behind a ridge, so it would not be visible from the house.

The Commission asked about the Gullen Range wind farm, as speakers at the public meeting had indicated those turbines had been built outside of the approved locations. Planning and Infrastructure confirmed that the locations of the turbines are not consistent

with the Gullen Range approval and indicated it was considering its options for taking action against that Proponent. Speakers had also questioned the permissibility of the existing monitoring masts on the Flyers Creek project site. Planning and Infrastructure suggested the monitoring masts on the Flyers Creek site would have been built under the provision of *State Environmental Planning Policy (Infrastructure) 2007*.

The issue of monitoring compliance and responding to complaints was discussed at length. The Commission suggested that some additional resource, funded by the Proponent but managed by Planning and Infrastructure or the Council, may be warranted. Planning and Infrastructure noted the requirement for an Environmental Representative and suggested there may be some scope to add to this role, but acknowledged the independence and authority of this position was not always as strong as is necessary.

In relation to roads, the Commission explained it felt that a dilapidation report for the unsealed roads around the site may not be worthwhile, and that it may be simpler to prescribe a standard to which the roads should be repaired to. The agency agreed with this.

The Commission questioned Planning and Infrastructure regarding its recommendation to delete turbines 9 and 12. The agency felt that turbines 9 and 12 would have the most dominant visual impacts due to the topography of the sites and the proximity to residents. It was noted that removal of turbine 12 gave a 2 km buffer to the school, but the agency confirmed its recommendation to delete turbine 12 had nothing to do with the school.

In relation to the deferred commencement condition requiring the proponent to get new agreements with three landowners, the Commission questioned the singling out of these landowners. The option of applying the condition to all landowners was discussed, the agency also indicated it felt confident the requirement to obtain new agreements was justified. The agency subsequently provided a revised condition, as a result of discussions with its lawyers.

Third meeting with the Proponent

On 27 February 2014 the Proponent requested a further meeting with the Commission. A meeting was held on 5 March 2014. The Proponent advised that following the public meeting it had considered options to relocate the substation to provide a larger buffer to the nearest dwelling, and indicated that it would agree to a condition requiring an 800 m buffer between the substation and the nearest dwelling. The Commission questioned whether the substation would be visible from the dwelling at this new location. The Proponent had not determined the best alternative location, but noted that hills on the site would mean a more distant substation may become more visible if it were higher up the slope. The Proponent indicated it would need to balance the need to keep the substation away from any lower flood prone land with the requirement to minimise visual impacts.

The Proponent reiterated its concerns with the recommendation to require it to enter into new agreements with three of the landowners who had originally agreed to host turbines on their properties. The Proponent explained it would be very difficult to construct the wind farm if those landowners who are now opposed to the project continued to hold this view, but indicated it was confident it would be able to resolve its differences with the landowners. Nonetheless, the Proponent indicated that the requirement to enter into new agreements post determination of the project would be unfair and that the legal agreements in the contracts previously signed should not be ignored. The Proponent also requested that the Commission provide the flexibility to allow the north-south power line to be built either above or below ground.

Commission's Comments

The Commission has carefully considered Planning and Infrastructure's assessment of the proposal, as well as the submissions provided during the exhibition of the project and the comments made at the public meeting.

Draft Wind Farm Guidelines and proximity to dwellings

A number of speakers at the Public Meeting raised concerns about the proximity of the turbines to residential dwellings and called for the Draft Wind Farm Guidelines to be finalised. Speakers noted the draft guideline's requirement for an increased level of assessment for any turbine proposed to be constructed within a 2 km radius of a residence. It was suggested that because most turbines would be within 2 km of one residence or another, the project should be refused. The Commission discussed the draft wind farm guidelines with Planning and Infrastructure representatives and was advised that the guideline is currently a draft. The Commission notes that NSW has not finalised its draft guidelines from 2011 and understands that the draft did not prohibit turbines being constructed within 2 km of a dwelling. Consequently the Commission has considered the impacts of the turbines on merit.

Landowner agreements and access to the project site

The question of access to certain parts of the site was raised by both Planning and Infrastructure and by certain landowners within the project site, including at the Public Meeting. The Proponent has assured the Commission it has agreements to operate the project on the sites in question, nonetheless some landowners indicate the agreements have expired. Ultimately whether the Proponent can access the sites will depend on the wording of the agreements it made with the landowners. Given there are differing views on this issue, the Commission has accepted the agency's recommendation to apply deferred commencement conditions requiring the Proponent to provide evidence to demonstrate appropriate access arrangements are in place. Planning and Infrastructure recommended this apply to the three properties where landowners have raised concerns. Given the question about the access arrangements could apply to other parcels of land as well, the Commission considers the requirement should apply to all the land within the project site. The Commission has amended the condition accordingly.

Noise impacts and health concerns

A number of speakers raised concerns about the noise impacts of the project and the potential for health impacts. Planning and Infrastructure's assessment report indicates that the project would comply with the relevant noise criteria and consequently the Commission is satisfied the noise levels would be acceptable. Nonetheless a condition relating to low frequency noise has been included in other wind farm approvals recently determined and the Commission has added this condition here as well.

In relation to health concerns, the National Health and Medical Research Council recently released a draft information paper regarding evidence on wind farms and human health. The findings are consistent with previous advice that noise can cause annoyance and sleep disturbance, but that there is no reliable or consistent evidence that proximity to wind farms or wind farm noise directly causes health effects. As the project will comply with the relevant noise criteria, the Commission is satisfied that noise levels should not cause significant annoyance or sleep disturbance at any non associated residence and accepts the Planning and Infrastructure assessment, that no adverse health impacts are expected.

Visual impacts and the recommendation to delete turbines 9 and 12

Planning and Infrastructure has recommended the deletion of two turbines based on the visual impacts to property number 14. The recommendation was based on a number of compounding factors specific to the location of the turbines and the dwelling. These factors included the height of the turbines (at the top of the hill, in comparison to the dwelling in the valley), the separation distance between the two turbines and the unimpeded view to the

turbines, with a lack of any significant vegetation between the dwelling and the turbines. The assessment found that screening vegetation could be provided, but that to screen both turbines, the views from the dwelling to the north would be entirely lost or enclosed.

The landowner who is to host turbine number 9 spoke at the Public Meeting, questioning the recommendation to delete this turbine. It was noted that if turbine 9 is deleted it would leave a small property at the centre of the wind farm site, in relatively close proximity to a number of turbines, but without the income derived from hosting a turbine.

The Commission has carefully considered the recommendation to delete turbines number 9 and 12. The Commission notes that one of the concerns which led to the recommendation to delete turbines 9 and 12 was the separation distance between the turbines. The loss of views that would result from any vegetation screens was also a factor in the decision to recommend deleting the two turbines.

The Commission notes that if turbine 12 is removed, the level of vegetation screening needed to block views of turbine 9 would be far less enclosing than the screening to block both turbines. The turbine separation distance concern would also be removed. The Commission is satisfied that removal of turbine 12 would reduce the visual impacts to a satisfactory level, particularly if careful consideration is given to the type of screening plantings provided. Consequently the Commission has amended the conditions to delete turbine 12 as proposed by Planning and Infrastructure, but to approve turbine 9.

Substation

The Commission noted the particular concerns about the proposed location of the substation and considered there was ample scope to relocate the substation and provide a better buffer to the residents in the area. The Proponent advised it would be able to find a location at least 800 m from non associated residents and the Commission has imposed this additional requirement in the conditions.

Complaints, micro siting and compliance

The Commission heard a number of concerns about the Planning and Infrastructure agency's ability to ensure compliance with conditions and respond to complaints. Of particular concern was the Gullen Range Wind Farm where turbines are said to have been constructed outside the approved locations. The Commission also heard that complaints had not been investigated due to a lack of available resources.

The Commission acknowledges the community's concerns and has considered this issue at length. The concern regarding compliance is complicated by the provision of micro siting, which would give the Proponent flexibility to build the turbines up to 100 m from the approved location. The Commission acknowledges the benefits this can provide in allowing the turbine locations to be optimised. Nonetheless, the Commission is concerned that turbines could move 100 m closer to residential dwellings, for no other reason than to convenience the Proponent. The Commission has added a condition which prevents any turbine from moving closer to a dwelling, except with the agreement of the owner of the dwelling, and requiring that all micro siting must be approved by the Director General.

With regard to compliance, the Commission considers that in relation to wind farm proposals, the project's construction period represents the greatest risk for incidents to occur. Once operational the impacts would vary in response to the weather, but should largely fall within a particular range and would generally only fall outside this range when a component malfunctions or fails. Consequently, the Commission has added a rigorous independent auditing requirement, to focus on the construction period and the first year of operations, by which time any issues should have been resolved. Nonetheless the Director General can still require additional audits should these be considered necessary.

Further, in response to the concerns about the Gullen Range Wind Farm, the Commission has added a requirement for set out surveys and works as executed surveys to verify that all components have been constructed in the approved locations.

Decommissioning

Concerns were raised about the viability of wind farms and the potential for the Proponent to become insolvent and leave the responsibility of dismantling and disposing of the turbines to others. The recommended conditions include lengthy decommissioning requirements, with a regularly updated Decommissioning and Rehabilitation Plan to cover costs and funding arrangements for decommissioning. The Commission has added to this condition, to ensure the plan is to the satisfaction of the Director-General. Combined with the other decommissioning requirements, including for a Decommissioning Environment Management Plan the Commission is satisfied that mechanisms are in place to ensure decommissioning is undertaken by the Proponent, or any subsequent operator.

Property values and saleability

A number of speakers raised concerns about impacts on property values and saleability of properties. Property values and saleability can be impacted by a wide range of factors and the Commission cannot discount the possibility that the prospect of a wind farm in the vicinity of a property may influence some prospective buyers, however the same could be said of any number of developments. Ultimately landowners have a right to the lawful use of their land. The assessment of the project has found it will not have any significant or unacceptable impact on the amenity or viability of any offsite property.

Road access, traffic and maintenance

Blayney Shire Council representatives initially raised concerns about the construction traffic access routes noting the oversize nature and heavy loads of some of the vehicles and the limitations of the existing roads to handle these loads. The Council has since advised that it is satisfied there are appropriate access routes available. Nonetheless, the draft conditions require an independent review of the traffic routes and the Proponent is to undertake any road improvements identified as necessary in the review, prior to the commencement of construction. The Commission is satisfied this will ensure suitable road access to the site.

Speakers at the meeting also raised concerns that ratepayers would end up bearing the cost of damage to the roads, particularly from the construction traffic. The conditions recommended by Planning and Infrastructure required a road dilapidation report to be prepared prior to construction. The Commission considered that gravel roads did not warrant preparation of a dilapidation report and that instead, the gravel roads should be repaired to a suitable standard, post construction. The Commission has added this requirement to the condition.

Planning Agreement

Blayney Shire Council representatives advised the Commission that Council was in the process of negotiating a Voluntary Planning Agreement with the Proponent. Consequently the Commission has added a condition requiring the Proponent to enter into a VPA with the Council, in accordance with its offer to the Council, or as updated.

Other minor amendments to the conditions

Council also requested the conditions relating to bushfire risk require consultation with the Canobolas Zone Rural Fire Service. The Commission agreed and has amended the conditions accordingly.

The Commission has also amended condition D24 to provide additional time for residents to decide whether to request landscaping plantings to screen views of the turbines. A slight amendment to the timing in condition G4 has also been included.

Commission's Determination

The Commission has carefully considered the proposal, including the assessment report, recommended conditions, submissions made and the matters raised at the public meeting. The Commission is satisfied that, subject to having appropriate access to the project site, the conditions would ensure the project's impact would be minimised and managed to an acceptable level. Consequently the Commission has approved the project, subject to deferred commencement conditions and the deletion of turbine number 12.



Garry Payne AM
Member of the Commission



Paul Forward
Member of the Commission



David Johnson
Member of the Commission

Appendix 1 List of Speakers

PLANNING ASSESSMENT COMMISSION MEETING FLYERS CREEK WIND FARM PROJECT

Date: Tuesday and Wednesday 11 and 12 February 2014, 3pm onwards

Place: Blayney Shire Community Centre, 41 Church St, Blayney

Speakers:

1. Blayney Shire Council, Leon Rodwell
 2. Paul Toole, MP
 3. Waubra Foundation, for Sarah Laurie
 4. Crookwell District Landscape Guardians
Jennifer Price Jones
 5. NSW Landscape Guardians, Humphrey
Price Jones
 6. Clean Energy Council, Lisa Taylor
 7. Bathurst Community Climate Action
Network, Tracey Carpenter
 8. Parksbourne/Mummel Landscape
Guardians, David Brooks
 9. Environmentally Concerned Citizens of
Orange ECCO, Nicholas King
 10. Bodangara Wind Turbine Awareness
Group, Lyn Jarvis
 11. Rachael Young
 12. Simon Wright
 13. Glenys Logan
 14. Mike Logan
 15. David Dixon
 16. Maureen Campbell
 17. Maureen Coleman
 18. Sam McGuinness
 19. Perry Platt
 20. Ross Peters
 21. Dimity McKenzie
 22. Kim Masters
 23. Di Colman
 24. Robert Griffin
 25. Ronald Burton
1. Taralga Landscape Guardians and
Friends of Collector, Malcolm Barlow
 2. National Industrial Wind Turbine
Research Council, Michael Cobb
 3. Central New South Wales
Renewable Energy co-operative Ltd
Patrick Bradbery
 4. Flyers Creek Wind Turbine
Awareness Group, Patina Schneider
 5. Blue Mountains Renewable Energy
Co-operative, Sue Morrison
 6. Bob Hill
 7. Gillian Roweth
 8. Alwyn Roweth
 9. Dr Colleen Watts OAM
 10. Hugh Gould
 11. Jim Steele
 12. Barry Baker
 13. Dwayne Chilcott
 14. Geoffrey Knox
 15. Peter Roffe

Appendix 2 Issues Raised at the Public Meeting

Issues raised in support of the proposal included:

- the economic benefits for turbine hosts, which effectively drought proofs the properties, and/or allows farmers to stay on marginal properties;
- proven technology to reduce greenhouse gas emissions, by displacing coal power production;
- advantages over coal mining and coal power production (as well as alternatives such as hydroelectric, coal seam gas and nuclear), including that it would not emit particulates or toxins; would not rely on subsidised fuel; the electricity is generated without the need for water, it can coexist with agriculture; and it does not generate fly ash or nuclear waste.
- there have been no health complaints about the existing wind farm;
- said to be Ecologically Sustainable Development, and satisfy the precautionary principle and the principle of intergenerational equity and seen as part of the solution for future generations;
- local investment and employment generation, particularly during the mining downturn and with the recent announcements about manufacturing closures;
- potential as a tourist attraction;
- access tracks associated with wind farms were said to provide assistance for any firefighting activities;
- transmission losses would be minimal given the proximity to Cadia Gold Mine, a major power user;
- controls and criteria for windfarms in NSW were said to be the most stringent in the world;
- strong winds were said to be a downside to the area, but at least the wind farm would make some use of the wind;
- the existing Blayney Wind Farm was said to have had no impact on health or property prices;
- some landowners to host the turbines admitted to finding the turbines unattractive and an inconvenience, but suggested they were preferable to other power stations and on balancing the need for electricity, supported the proposal subject to stringent compliance with conditions and controls; and
- some supporters also expressed concern at the level of community division that has arisen through the process. A reconciliation process was called for.

Issues of concern or objection included:

- Social impacts, including: the divisive nature of the proposal and its impacts on the community and social cohesion. An independent social impact study was called for.
- Visual amenity and landscape impacts, the importance and loss of rural amenity, turbines were said to dominate the landscape. The effectiveness of vegetation screening plantings were questioned including, the viability, time and maintenance requirements to establish plantings and the inability to screen the turbines from all parts of properties. It was suggested the life of the turbines is shorter than the time needed to grow the trees that would screen them.
- The perceived industrial nature of the turbines
- Property values and saleability, both while the application is being prepared, and if it is approved. Flow on impacts on rates and calls for compensation were also raised.

- Bushfire and Aviation risks, particularly that the turbines would impede access for light aircraft responding to bushfires, as well as the visibility of the turbines and associated infrastructure;
- Noise, including that existing guidelines are inadequate, particularly in relation to low frequency noise, infrasound, amplitude modulation, turbine array effects if soundwaves converge, wake effects and temperature inversions. It was suggested that natural infrasound is dynamically modulated while wind turbine noise is not. Independent and ongoing noise monitoring was called for.
- Impacts on local roads and concerns that ratepayers would bear the cost of road maintenance and repairs of damage as a result of the project.
- Substation impacts, particularly in relation to noise, the errors made in the noise assessment, the proximity of the substation to houses, and the vehicle access to the substation
- Long term decommissioning costs and mechanisms to ensure the area is rehabilitated by the Proponent, including calls for a bond to be required.
- Size, scale and location of the proposed turbines compared to the existing turbines.
- Health concerns, including from infrasound, low frequency noise, building vibration and annoyance, assumption that inaudible noise cannot effect health was said to be incorrect. Further more comprehensive studies were said to be needed and a precautionary approach adopted.
- Draft wind farm guidelines, particularly in relation to the proximity to turbines noting that 24 homes are within 2 km of the turbines, as well as the primary school, some speakers requested a 2 km buffer to the turbines.
- That not all landowners within the project site agree to the proposal.
- Deficiencies in the Proponents application and its discussions with the community including: uncertainties regarding access routes, where concrete would be sourced from and whether it would be mixed on site, the level of consultation and the divisive approach taken.
- Flora and Fauna impacts, particularly to bats and birds of prey.
- Aboriginal Cultural Heritage, potential impacts and adequacy of the assessment conducted.
- Compliance and complaints management including the Gullen Range example where turbines were constructed in the wrong locations, concerns that the Planning and Infrastructure agency does not have the capacity to enforce compliance and respond to complaints, concerns that the community are left to monitor the development.
- Assessment system was said to be flawed, with errors throughout the documents and proposal constantly evolving and changing so the community is not informed on the current plans. Concerns were also raised about the accessibility of information and the time given to review and provide comment. The permissibility of the exiting monitoring infrastructure on the site was questioned. Lack of landowner agreements was raised. The integrity of the Planning Assessment Commission was said to be questionable.
- Long term viability of industry - particularly the company and also the wind farm business more generally, including in relation to decommissioning and also in relation to subsidies.
- Cumulative impacts, particularly from the wind farm and the Cadia Gold Mine
- The lifecycle costs of the wind farm were questioned and it was suggested that the turbines do not reduce emissions of carbon dioxide (or that there are cheaper alternatives), that turbines would cause electricity price rises and are not in the public interest. Wind farms were said to fail the requirements of legislation relating to the generation of electricity. Solar power was said to be a better alternative.

Specific additional comments regarding the conditions included:

- One landowner objected to the Department's recommendation to delete the turbine proposed to be constructed on his property, suggesting the assessment undertaken to

recommend removal of the turbine was not accurate or objective. The speaker requested the turbine be reinstated.

- Concerns that requests for vegetation screens could only be made during a 6 month period, before residents had a chance to see what the turbines looked like once installed.
- The timeframe to rectify interference with television signals or other connections was considered too long, and should fix these impacts straight away.
- The recommended deferred commencement condition requiring agreements with three property owners to be signed after the date of the determination was supported by the relevant property owners who indicated that the agreements they had entered into previously had expired and they no longer wished to participate in the project. The recommended condition was said to be the only protection for these landowners, otherwise they would have to take expensive legal action.
- Council also requested some changes to the conditions relating to consultation with the Rural Fire Service.