

22 December 2016

**NSW Planning Assessment Commission Determination Report
Silverton Wind Farm Project Approval (08_022 MOD 3) and Concept Approval (08_0022 MOD 2)**

1. INTRODUCTION

On 25 November 2016, the Planning Assessment Commission (Commission) received from the Department of Planning and Environment (Department) modification requests from AGL Energy Limited (the Proponent) to modify the project approval and concept approval for the Silverton Wind Farm.

The Department has referred the modification request to the Commission for determination in accordance with the Minister for Planning's delegation dated 14 September 2011 because the Department received a reportable political donations disclosure.

The Commission to determine the modification request consisted of Lynelle Briggs AO, Chair of the Commission, and Annabelle Pegrum AM.

1.1 Background

Silverton Wind Farm Developments Pty Ltd, a wholly owned subsidiary of the Proponent, has project and concept approval to construct and operate the Silverton Wind Farm, located approximately 5 kilometres north of Silverton and 25 kilometres northwest of Broken Hill, within the Unincorporated Area in the far west of New South Wales.

The Silverton Wind Farm was approved by the then Minister for Planning on 25 May 2009. The approval comprised two stages – a project for Stage 1 and a larger concept approval for Stage 2. The Wind Farm is also declared to be a “critical infrastructure project” under the *Environmental Planning and Assessment Act 1979* (EP&A Act), being an energy generating development with the capacity to generate at least 250 MW.

1.2 Summary of Modification Request

The modification application proposes to modify the project and concept approvals to:

Project Approval

- reduce the maximum number of turbines in Stage 1 from 282 to 172*;
- increase the maximum turbine tip height from 155 to 180 metres and rotor diameter from 110 to 140 metres;
- increase the maximum individual turbine generation capacity from 3.6 to 5 MW to produce approximately 700,000 MWh of renewable electricity per year; and
- take water for construction from an existing pipeline between the Stephens Creek and to the Umberumberka Reservoir (instead of a temporary pipeline to the Umberumberka Reservoir);

Concept Approval

- remove Stage 2 of the project for the construction of a further 316 turbines and the associated 305 kilometre transmission line infrastructure.

* Since the application was lodged, the Proponent has removed a further two turbines (B009 and B013) from the proposed layout to reduce visual impacts on the caretaker's residence at the Umberumberka Reservoir (VL6) and the public viewpoint at VL8. As a result of these changes, the total number of turbines proposed is 170.

1.3 Need for modification

The Proponent's justification for the proposed modification is to enable similar energy outputs to be achieved with fewer, larger turbines. This reflects the general industry trend where developers are taking advantage of improvements in technology where larger turbines are able to generate electricity at lower wind speeds and therefore increase efficiency. In this instance, the Proponent advises that increasing the dimensions and capacity of the turbines would increase their individual efficiency by around 10%.

The Commission notes the contraction in the expected socio-economic benefits of the project. The wind farm involves the capital investment of \$500 million and the creation of up to 150 construction jobs and 10 operational jobs. The Commission notes that this now represents 530 less construction jobs and 110 less operational jobs.

2. DEPARTMENT'S ASSESSMENT REPORT

The Department assessment report identified visual amenity, biodiversity, noise, heritage, soil, water, aviation, traffic, transport, communication systems and community contributions as the key impacts associated with this proposal. The Department had regard to the public submissions, government agency advice and the existing conditions of approval (among other things).

The Department's assessment report states that the modifications *would reduce the overall scale of the project at a broader landscape level*, and would have improved environmental and visual amenity outcomes for the local community. The Department concluded that, *"any increase in the turbine heights would be more than compensated for by the significant reduction in the number of turbines, especially the targeted deletion of the turbines closest to Silvertown and other residences in the area"*.

The Department recommended the project approval conditions be updated to align with the improvements in standard conditions made since the 2009 project approval.

2.1 Legislative context - Section 75W

Project and Concept Approval was approved on 24 May 2009, pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Department has provided advice that in accordance with Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* and the transitional arrangements of Schedule 6A of the EP&A Act, Section 75W of the EP&A Act provides the power to modify the approval.

The Commission considers the proposed modification of the Silvertown Wind Farm does not fundamentally change the essential intent of the existing approved development. The development, if modified, would still provide a wind farm for the generation of electricity but with 112 fewer turbines, a 31 km reduction in the length of internal access tracks and a reduction in the disturbance footprint of some 11 hectares. In the Commission's view, the proposed changes are within the broad scope of Section 75W as it applies to the development, and therefore the request to modify may be considered under Section 75W.

In determining the proposed modification, the Commission has the legal power under Section 75W(4) to modify the approval, with or without conditions, or refuse the modification.

3. CONSULTATION AND COMMISSION MEETINGS

The project was referred to the Commission for determination as the Proponent submitted to the Department a reportable political donations disclosure and, under the Minister's directions, all wind farm projects are referred to the Commission for determination.

The Department received fewer than 25 submissions during its exhibition of the modifications.

The Department publically exhibited the application from 5 August until 29 August 2016, and received 12 submissions, including 9 from government agencies and 4 from the general public. Of the 4 community submissions, 3 objected to the proposed modification and one provided comments. Following the exhibition, the Department met with the Silverton Village Committee and neighbouring leaseholders on 27 September 2016 to develop a better understanding of the key concerns associated with the proposed modification. These concerns included the landscape, biodiversity, heritage and tourism impacts on the Barrier Ranges, which the project is located in, and Silverton. A petition with 56 signatures was received on 11 October 2016 by the Department raising similar concerns to the public submissions. The submitted petition raised concerns with the difficulty of attracting 30 signatures to warrant a public meeting due to the small population of Silverton.

Holding of a public meeting, regardless of the number of submissions, is a discretionary aspect of the Commission's determination function. The Commission considered that given the reduced project scope, small number of public submissions, community consultation undertaken at the site by the Department and the Proponents 2016 consultation through the Community Consultative Committee, a public meeting on this occasion was not required to inform its deliberation

On 6 December 2016 the Commission invited Broken Hill City Council to meet to discuss this proposal. Council declined the invitation.

The Commission did not (and is not required to) invite submissions as part of its determination process, however, a submission was received on 19 December 2016 which raised concerns with regard to the potential for disruption to radio communication pathways through the wind farm site, and perceived unreasonable solutions presented in the conditions of the modification. Alternative solutions to these issues were outlined in the submission.

4. ADDITIONAL INFORMATION

The Commission contacted the Department to seek additional information on the following:

- the application of the Department's draft Wind Energy Planning Framework 2016 in assessing the modification;
- visual impact mitigation for the caretaker's residence;
- community contributions in relation to mobile phone reception;
- clarification of the consultation with the Office of Environment and Heritage (OEH) and aviation authorities on the draft conditions of approval; and
- clarification of the assessment of any impact on radio communications from the wind farm.

5. COMMISSION'S CONSIDERATION

In this determination, the Commission has carefully considered:

- information provided by the Proponent;
- the Department's assessment report;
- advice and recommendations from government agencies;
- written submissions from the public;
- additional information provided to the Commission as outlined in Section 4; and
- relevant matters for consideration specified in Section 75W of the EP&A Act.

The key matters considered by the Commission include visual impacts, biodiversity, aviation, community contributions in relation to the Community Enhancement Fund, and radio communications.

The Commission is satisfied with the Department's assessment of other matters including noise, heritage, soil and water and traffic and transport.

5.1 Visual Impacts

Concerns over the potential visual impacts to non-associated residences and the Silverton community, as well as impacts for the broader Barrier Ranges landscape have been raised through public submissions during the assessment of the original project. The Commission appreciates the ongoing concerns of many community members regarding these visual impacts.

While acknowledging that the proposed remaining turbines would be larger than approved, with an increased hub height from 100 to 110 metres and blade length from 55 to 70 metres providing for turbines up to 180 metres in height (measured from above ground to blade tip), the modification also proposes the removal of 112 turbines from Stage 1 and 316 turbines from Stage 2. This would result in a material reduction in the overall density of turbines within the landscape and increase the setback from residences and key viewing locations.

The Commission acknowledges that the Department previously raised concerns about the visual impacts of the larger turbines on the caretaker's residence (VL6). The Department also notes that the caretaker primarily expressed concerns about the potential noise impacts and to a lesser extent visual impacts relating to shadow flicker. The Proponent responded by deleting two of the closest turbines (B009 and B013). The nearest turbine is now 1.63km away (B15) from the caretakers residence. The Department considers that the visual impacts on the residence would be similar or slightly less than the approved project.

The Commission sought clarification from the Department regarding the application of the *Draft Wind Energy Framework 2016* in the consideration of this modification. In response the Department noted that this framework is yet to be finalised and that while "*not strictly applied* (to this visual assessment) *it does incorporate principles that would apply to the visual assessment of any wind farm*".

The Department's current *Draft Planning Guidelines: Wind Farms 2011* require additional assessment of turbines within two kilometres of a residential dwelling. In this modification there are three turbines (B15, B17 and B21) within two kilometres of the caretaker's residence. With larger turbines proposed in this location there would be an increased visual impact on this residence. The Commission considers that this is unacceptable.

The Commission has deleted the three turbines closest to the caretaker's residence (B15, B17 and B21) to mitigate the visual intrusion and cumulative visual impact of the turbines on this residence.

5.2 Community Enhancement Fund

The Commission acknowledges that the Proponent has been progressing a community enhancement program in consultation with the Silverton Village Committee that involves:

- provision of 5 kW solar PV systems for residents in Silverton (up to \$140,000);
- provision of domestic water tanks for the residents of Silverton (up to \$100,000);
- a community fund of approximately \$15,000 per year to assist in funding local community and environmental projects; and
- a feasibility study into improving mobile reception in the local area and up to \$50,000 towards any recommended works.

In the original application the Proponent expected that at least \$20,000 - \$30,000 per annum would be spent in the community to fund beneficial projects, but did not limit itself to that amount. With the proposed reduction in project size the community would receive a lesser amount of \$15,000. The residents of Silverton will continue to benefit from solar PV systems but would not receive the energy efficiency or solar water heating packages offered in the original application.

The Commission has secured agreement from the Proponent that the local community will benefit from the \$50,000 committed by the Proponent to improving mobile phone reception should the outcome of the feasibility study conclude that mobile phone reception cannot be achieved in the area. This amount could then be used for funding other community improvement projects, in consultation with the Silverton Village Committee. The Commission is satisfied with all other aspects of the community enhancement program provided by the Proponent.

5.3 Biodiversity – Bird and Bat strike

The Commission notes that the larger 140m rotor diameter would increase the rotor sweep area of each turbine from 9,499 m² to 15,386 m². The modified design would also result in a minimum ground clearance of 29.5m which is 4.5m lower than the approved turbine design.

Concern was raised in submissions and by OEH about an increased collision risk to birds and bats from the larger turbines. The Commission notes that total rotor swept area for the modified project represents a reduction from 2,678,577 m² to 2,646,392 m² (32,185m²) which has been assessed (by NGH Environmental) as resulting in a lower collision overall risk to birds and bats than the approved project.

However, the assessment also noted that the larger swept area for each turbine and lower ground clearance *“may mean an increased collision risk in specific locations”*. The Proponent proposes to manage any increased risk with appropriate micro-siting of turbines, and monitoring and mitigation measures as part of a Bird and Bat Adaptive Management Plan (BBAMP).

The Department considers that the modification would reduce overall biodiversity impacts compared with the approved project and that any residual impacts can be managed through careful design and micro-siting of turbines and other infrastructure. The Commission notes that Condition 19 of the Department’s modified project approval requires the Proponent to prepare a BBAMP prior to the construction of any wind turbines in consultation with OEH, and to the satisfaction of the Secretary.

The Department has provided evidence that OEH is *“supportive of the (final) conditions (noting that) the BBAMP has been returned to pre-construction (rather than pre-operation).”*

The Commission is satisfied with the proposed management as conditioned.

5.4 Aviation

The Commission notes that Airservices Australia (ASA) and the Civil Aviation Safety Authority (CASA) provided submissions to the Department’s exhibition of the modification request which considered the revised layout. The submissions advised that aviation procedures at Broken Hill Airport would be affected by the turbines. Further agreements to changes of airspace with ASA and the Airport operator would be required, as well as mitigation measures to accommodate the wind farm.

The Department’s assessment concludes that risks to aviation are limited and residual impacts can be managed through consultation with appropriate authorities and standard conditions of consent.

The Commission sought clarification from the Department regarding the satisfaction of the relevant aviation authorities with these conditions. In response the Department stated:

“in their submissions on the modification, CASA and Airservices Australia recommended that AGL be required to notify the operators of Broken Hill Airport to ensure airspace procedures (i.e. the Lowest Safe Altitude) are adjusted to cater for the modified layout”.

This recommendation has been incorporated into the draft conditions, and as such, no further consultation was considered necessary by the Department. Furthermore, Broken Hill City Council as the operator of Broken Hill Airport, did not comment on this matter in its correspondence with the Department.

The Commission notes that the Proponent will be required, prior to the construction of any wind turbines, to provide relevant aviation authorities (including CASA and ASA) with the coordinates and final heights of each wind turbine and mast.

5.5 Radio Communications

The Commission notes that the relevant MOD 2 project approval condition requires the Proponent to consult with registered communications licensees including emergency services, to ensure risks to communication services are minimised. This proposed MOD 3 condition removes the requirement to consult with registered communications licensees.

The Commission noted the Department’s view that the modified layout would not result in any increased risk of interference with radio and telecommunication services but sought clarification from the Department regarding potential community impacts.

The Department provided the Commission with further clarification of their assessment of the risk of interference with radio and telecommunication services, and has provided justification as to their modification of the conditions. In its assessment, the Department considered:

- the conclusion from the original Environmental Assessment from 2008 that any impacts on communication services from the wind farm would be negligible;
- removal of a further 112 turbines would be unlikely to change the original assessment findings;
- that the NSW Telco Authority advised that the development of the wind farm poses no threat to any government agency owned point to point telecommunication link; and
- that the nature and extent of any disruption of services (should they occur) is usually only identified once the turbines have been constructed.

The Department advised that they now focus on performance-based outcomes and instead of requiring the Proponent to re-assess potential impacts the Proponent is required to rectify any impacts should they occur.

The Department also noted that the Proponent’s *Statement of Commitment No. 123* from January 2009 still applies to this application:

“AGL would undertake a baseline assessment of communications (including television) to assess the pre-existing signal strength at residences within 5 kilometres of the site, prior to construction. As per the mitigation, where investigations determine that the interference is caused by the wind farm, establish appropriate mitigation measures at each of the affected receivers in consultation and agreement with the landowners”.

In light of this commitment, consultation undertaken and the NSW Telco Authority's submission, the Department has amended Condition 30 as follows:

"Prior to the commencement of construction, the Proponent must undertake a baseline assessment of radio communication services to assess the pre-existing signal strength at any residence within 5 kilometres of the site, in consultation with registered communications licence holders (including emergency services). If this assessment identifies the potential for interference as a result of the project, the Proponent must identify and implement reasonable and feasible mitigation measures to address any potential disruption in consultation with the landowner (where applicable). These measures must be implemented within 3 months of the completion of the baseline assessment, or as otherwise agreed by the Secretary."

The Commission is satisfied that the impact of the wind farm on radio communications can be minimised subject to the amendment of condition 30.

6. COMMISSION'S FINDINGS AND DETERMINATION

The Commission has carefully considered Proponent's proposal, the Department's assessment report and the relevant matters for consideration under Section 75W of the EP&A Act. The Commission has also noted the advice and recommendations to the Department from government agencies and organisations including OEH and CASA.

The Commission appreciates the concerns raised by the Silverton community and neighbouring residents in relation to the visual impact of the project. The Commission considers that in relation to visual amenity the increase in turbine heights would be compensated for by the significant reduction in the number of turbines, including those closest to Silverton, and overall reduction in the project disturbance footprint.

The Commission has determined that the visual impact of the proposal on the caretaker's residence should be adequately minimised and has added the following modified condition further reducing the total number of turbines from 170 to 167:

The Proponent may construct, operate and replace or upgrade as necessary up to 167 wind turbines, but must not construct wind turbines B15, B17 and B21.

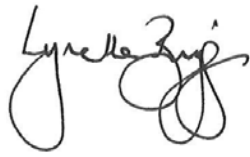
The Commission has secured agreement from the Proponent that should the outcome of the feasibility study into improved local mobile phone reception conclude that no feasible improvement works can be made, the associated \$50,000 will be provided to the community fund such that it will continue to be available to the residents of Silverton.

The Commission has accepted the Department's assessment that the proposal *"would reduce biodiversity impacts compared with the approved project, and that any residual impacts can be managed through careful design and micro-siting of turbines and other infrastructure"*. The Commission also accepts that the risk of bird and bat strike would be adequately managed through a Bird and Bat Adaptive Management Plan, undertaken in consultation with OEH.


The Commission sought assurance from the Department with regards to the wind farm's impact on aviation services in the area and is satisfied with the Department's consultation with aviation authorities and subsequent conditions.

The Commission is satisfied that the impact of the wind farm on radio communications can be minimised subject to the relevant condition.

For the reasons set out above, the Commission has determined to grant approval to the modifications for the project approval (08_022 MOD 3) and concept approval (08_0022MOD2) subject to the conditions set out in the instrument of approval.

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Ms Lynelle Briggs AO (Chair)
Member of the Commission

A handwritten signature in black ink, appearing to read 'Annabelle Pegrum', with a large loop at the end.

Ms Annabelle Pegrum AM
Member of the Commission