

ASSESSMENT REPORT

Bodangora Wind Farm

Micro-siting Modification (10_0157 – MOD 3)

1 BACKGROUND

The Bodangora Wind Farm (the project) is an approved renewable energy project located approximately 2 kilometres (km) northeast of Bodangora and 15 km northeast of Wellington, within the Dubbo Regional local government area (see **Figure 1**).

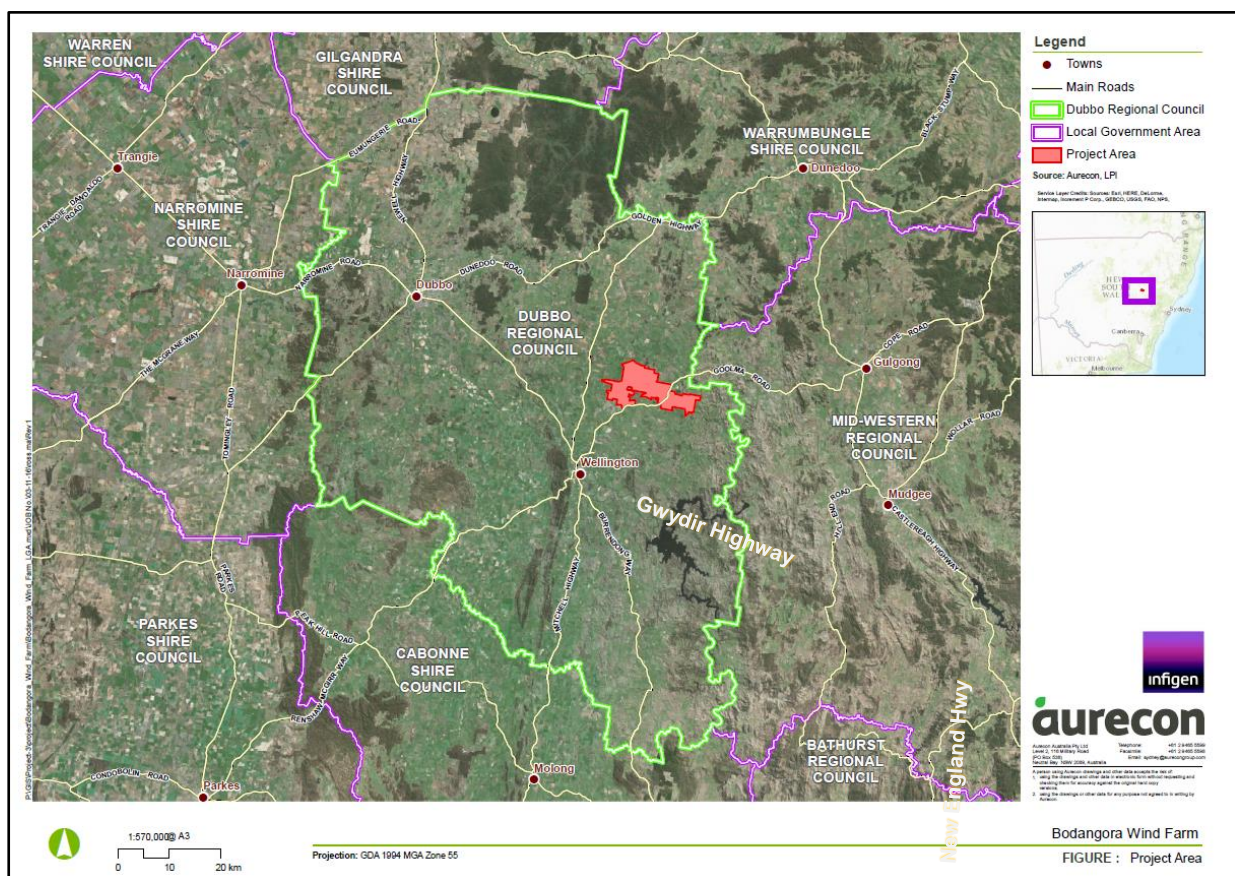


Figure 1: Regional Location

Bodangora Wind Farm Pty Ltd, a fully owned subsidiary of Infigen Energy (Infigen), is responsible for managing the construction and operation of the project.

The project was approved under delegation by the Planning Assessment Commission on 30 August 2013. A modification application to increase the blade diameter was approved in October 2015. Modification 2 was approved in December 2016 and allowed a realignment of the project's transmission line and relocation of the project substation.

The project as currently approved involves:

- construction and operation of up to 33 wind turbines, associated infrastructure and access tracks; and
- a 33/132 kilovolt (kV) substation connecting to TransGrid's existing 132 kV Wellington – Beryl transmission line.

Infigen has yet to commence construction of the project, but has advised that construction is planned to commence in July 2017. The project construction timeframe is expected to be approximately 18 months, with full commercial operations targeted to commence in the second half of 2018.

Once operational, the project is expected to have an installed generating capacity of up to 113 megawatts (MW) of electricity, enough to supply approximately 49,000 homes.

2 PROPOSED MODIFICATION

Infigen is seeking to modify the project approval for the Bodangora Wind Farm to allow for the relocation of two turbines and a small section of access track outside of the approved 100 m micro-siting limit, as described below.

The proposed changes to the project layout are shown on Figures 2 and 3, and described in further detail in the modification application (see **Appendix C**).

Specifically, Infigen is proposing to:

- relocate turbine 28 approximately 259 m from its approved location following consultation with the host landowner;
- relocate turbine 31 approximately 172 m from its approved location to avoid the access track for this turbine crossing a gazetted rail easement; and
- realign a section of access track approximately 150 m from its approved location to avoid an area of native vegetation.

Turbine 28

Infigen advised that following further consultation with a host landowner, it is proposing to relocate turbine 28 further away from the residence. The proposed turbine location would be situated on an area of cleared agricultural land, which is similar to the approved location.

Turbine 31

Following further consultation with Transport for NSW, Infigen identified a gazetted rail easement within the project area. Infigen is proposing to relocate turbine 31 to ensure the access track for this turbine does not cross the gazetted rail easement.

Access Track Realignment

Following completion of updated baseline vegetation mapping within the project area, Infigen identified an area of native vegetation that would require clearing to construct a section of the approved access track connecting turbines 25 and 26. Infigen is proposing to avoid clearing this vegetation by using part of an existing farm track to access the turbine. The proposed access track realignment would not increase the length of the access track and would avoid removal of approximately 0.19 hectares of native vegetation.

As part of its modification application, Infigen also provided additional information clarifying the turbine numbering and coordinates to reflect the final approved number of turbines (see **Appendix D**).

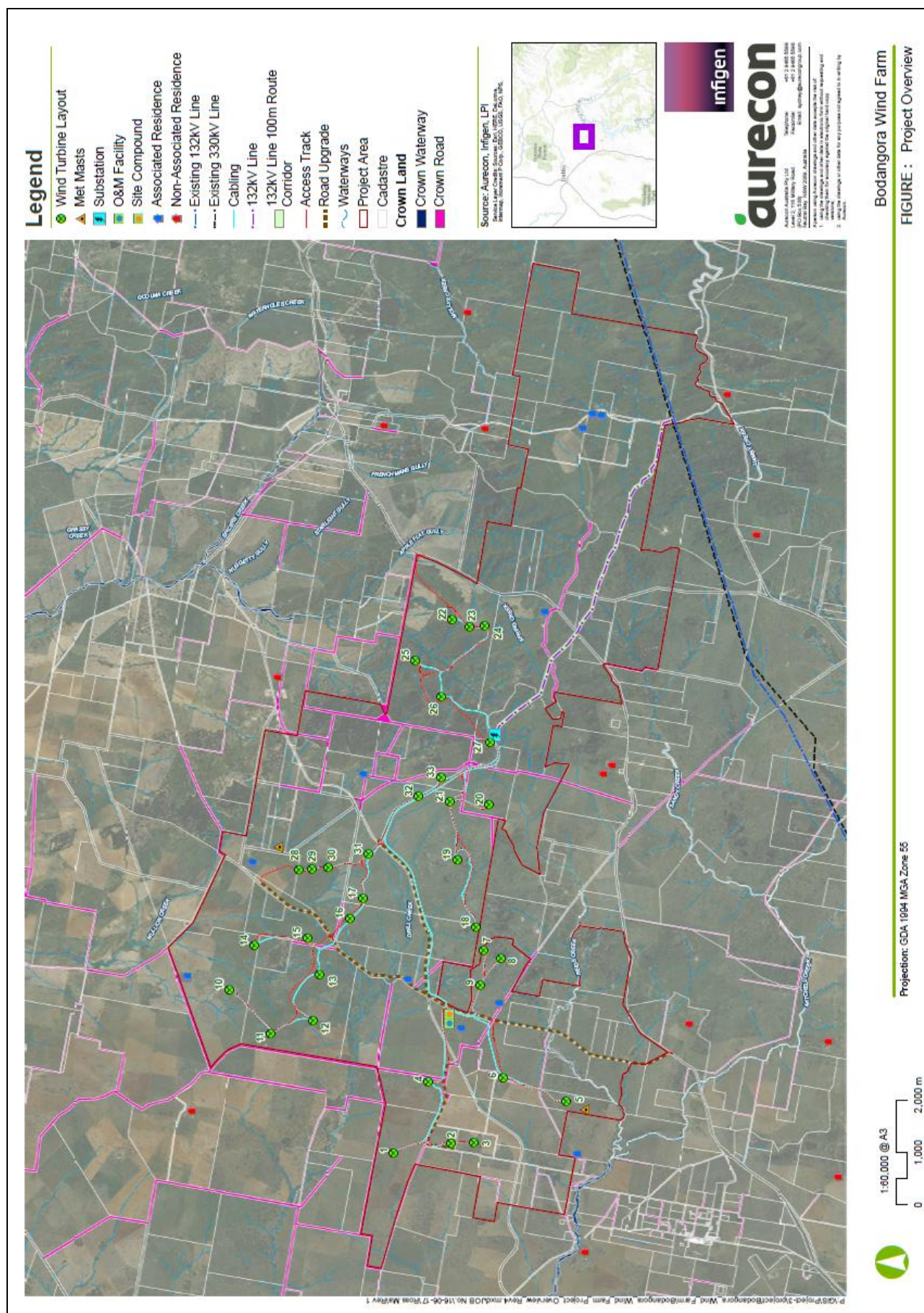


Figure 2: Proposed Modification Layout

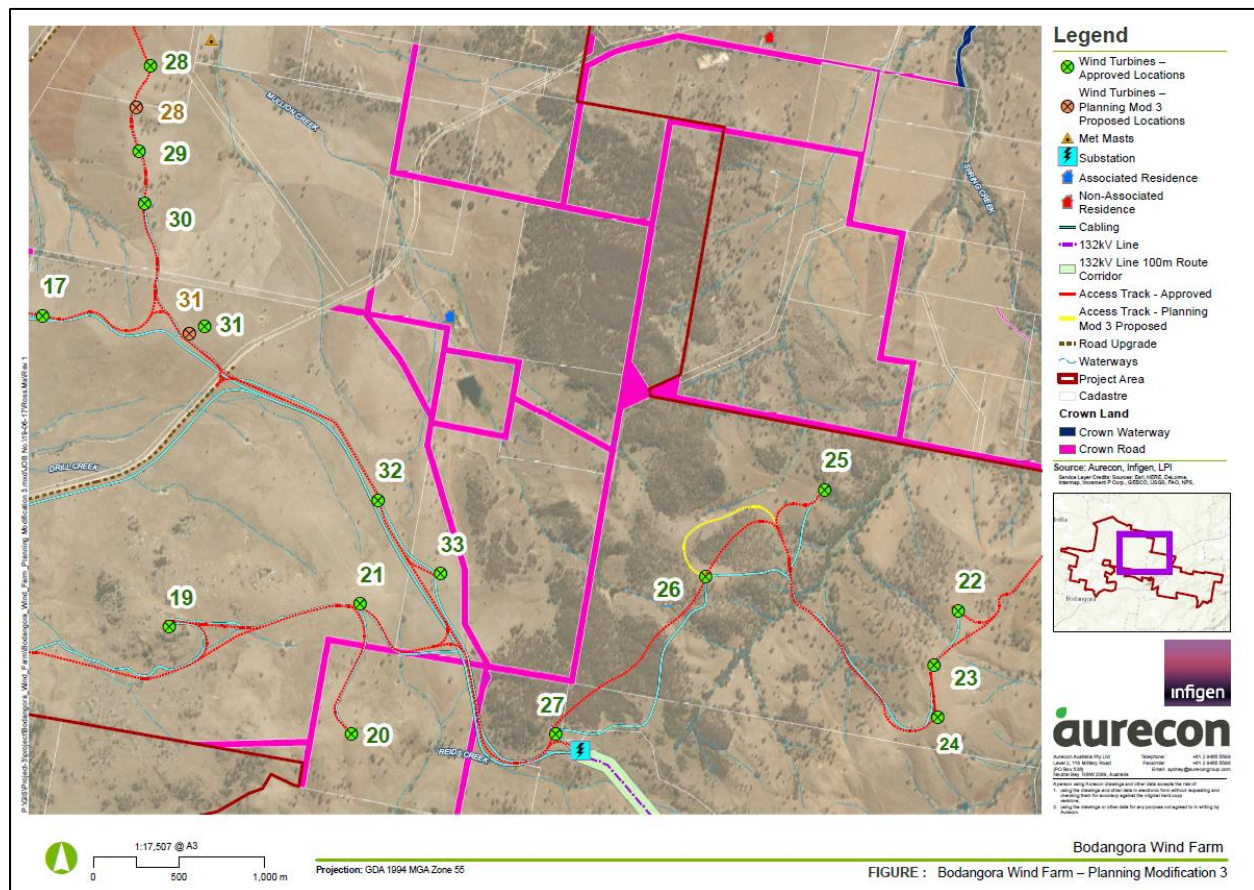


Figure 3: Proposed Modification Components

3 STATUTORY CONTEXT

3.1 Section 75W Modifications

The project was originally approved under the former Part 3A of the EP&A Act. Although Part 3A was repealed on 1 October 2011, the project remains a “transitional Part 3A project” under Schedule 6A of the EP&A Act and is to be assessed and determined under Section 75W of the EP&A Act.

Based on its assessment (see Section 5), the Department is satisfied that the application can be characterised as a modification. The modification request does not seek approval for a new or fundamentally different project, but for a minor adjustment to the location of the project’s turbines and a section of access track. The proposed amendments would not increase the environmental impacts of the project (see Section 5). Consequently, the Department considers that the proposed modification is within the scope of Section 75W of the EP&A Act.

3.2 Approval Authority

The Minister for Planning was the approval authority for the original project application. Consequently, the Minister for Planning is the approval authority for this modification request. However, under the Minister’s delegation of 16 February 2015, the Director, Resource Assessments, can determine the proposed modification, as Dubbo Regional Council did not object, Infigen did not make any reportable political donations and there were no public objections.

4 CONSULTATION

The Department notified Dubbo Regional Council about the proposed modification, and made the modification application publicly available on its website from 19 May 2017.

Infigen also consulted with the host landowners of both turbine 28 and 31, and advised that both landowners are satisfied with the micro-siting of the applicable turbines.

The Department has not received any objections to the modified application.

5 ASSESSMENT

In assessing the merits of the modification application, the Department has considered the:

- existing conditions of approval;
- previous EAs for the project, including previous modifications;
- modification application and supporting information;
- applicable government policies and guidelines; and
- requirements of the EP&A Act.

The Department recognises that micro-siting is an important aspect of wind farm development, allowing applicants greater flexibility during the detailed design phase to adjust the physical location of project components both to improve the efficiency of the wind farm but also to further minimise any environmental impacts. It is often at the detailed design phase that local constraints may be identified that the applicant seeks to avoid, such as areas of uneven/unsuitable ground or important environmental features. Micro-siting may also be required to accommodate specific requests from the host landowner following detailed consultation.

Notwithstanding, the Department recognises that the flexibility to micro-site must be on the condition that the proposed changes do not result in any material changes to the impacts of the project.

The current conditions of approval allow micro-siting of project components within a 100 m radius, as long as impacts remain consistent with those assessed.

As discussed in Section 2, Infigen is proposing to relocate two turbines and a section of access track to areas outside of the currently approved 100 m micro-siting limits. In determining whether the impacts of this change are acceptable, the Department has considered whether the proposed changes would result in any material increases in the environmental or amenity impacts of the project.

The Department acknowledges that Infigen has undertaken further consultation with a host landowner and that the proposed relocation of turbine 28 reflects the agreed location (i.e. further away from the residence). The Department notes that relocating this turbine increases the distance between the turbine and the residence, and introduces a natural buffer in the form of a small hill. Consequently, it is expected that this would result in a marginal reduction in both visual and noise related impacts at the residence.

The proposed micro-siting of turbine 31 would reduce the complexity of upgrades required to access the turbine, by avoiding a nearby rail easement that may otherwise require construction of a rail crossing at some point in the future. In addition, the relocation would position turbine 31 on a slight undulation and increase its relative elevation by 12 m, thereby increasing the overall energy generation of the turbine by around 6%.

The Department notes that the proposed relocation of turbines 28 and 31 would move both turbines further within the project envelope and away from any non-associated residences surrounding the project.

The Department accepts Infigen's assessment that the proposed micro-siting of turbines 28 and 31 would not result in any increased impacts on vegetation or Aboriginal heritage items, given the locations would be in cleared agricultural land with no known sensitivities.

The Department also accepts that Infigen's proposal to realign a section of access track to avoid vegetation would be consistent with the existing conditions of approval that require Infigen to implement all reasonable and feasible measures to avoid native vegetation disturbance during micro-siting and construction of the project. By following an existing farm track, the Department is satisfied the proposed realignment would not result in any additional disturbance, given it has previously been graded and cleared of vegetation.

In summary, the Department considers that the proposed modification would not result in any environmental or amenity impacts beyond those currently approved for the project. In this regard, the Department also notes there were no objections from Council of affected host landowners to the proposed micro-siting changes.

6 RECOMMENDED CONDITIONS

The Department has prepared a Notice of Modification (see **Appendix A**) and consolidated approval (see **Appendix B**) for the proposed modification.

To ensure clarity, the Department has updated the definition of micro-siting to restrict any further movement of turbine 28, turbine 31 and the section of access track from the locations proposed in this modification.

The Department has also updated the project layout map to reflect the new micro-siting allowances.

Infigen has reviewed the proposed conditions and has raised no concerns.

7 CONCLUSION

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act.

The Department acknowledges that the proposed modification would involve micro-siting project components outside of the approved 100 m limit. However, the Department accepts that the proposed changes would avoid unnecessary impacts to vegetation and would provide a beneficial outcome for a host landowner. The Department is satisfied that the proposed modification would not result in any increase in the environmental or amenity impacts of the approved project.

The Department notes the modification application only relates to the micro-siting of turbines 28 and 31 and a section of access track connecting turbines 25 and 26. Importantly, prior to the commencement of construction, Infigen will be required to comply with the existing conditions of approval relating to detailed design and micro-siting, including:

- provision of final layout plans and GPS coordinates to the Department for review;
- preparation of a Construction Environmental Management Plan for the project, that must identify any other proposed micro-siting changes; and
- notification of aviation authorities of the 'as constructed' turbine specifications.

Overall, the Department considers that the proposed modification is in the public interest, and should be approved, subject to conditions.

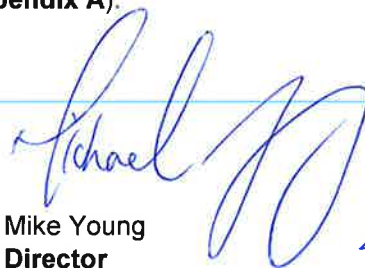
8 RECOMMENDATION

It is recommended that the Director, Resource Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** the application under section 75W of the EP&A Act;
- **approves** the modification application, subject to conditions; and
- **signs** the attached Notice of Modification (**Appendix A**).



Phillipa Duncan
Team Leader
Resource Assessments



Mike Young
Director
Resource Assessments

22/6/17

APPENDIX A:
NOTICE OF MODIFICATION

APPENDIX B:
CONSOLIDATED APPROVAL

APPENDIX C:
MODIFICATION APPLICATION

See the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8469

APPENDIX D:
SUPPLEMENTARY INFORMATION

See the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8469