

ASSESSMENT REPORT MANILDRA SOLAR FARM 10_0122 MOD 2

1 BACKGROUND

The Manildra Solar Farm Project is located in a rural area approximately 1.5 kilometres (km) east of Manildra and 19 km southwest of Molong, in the Cabonne local government area (see Figure 1).

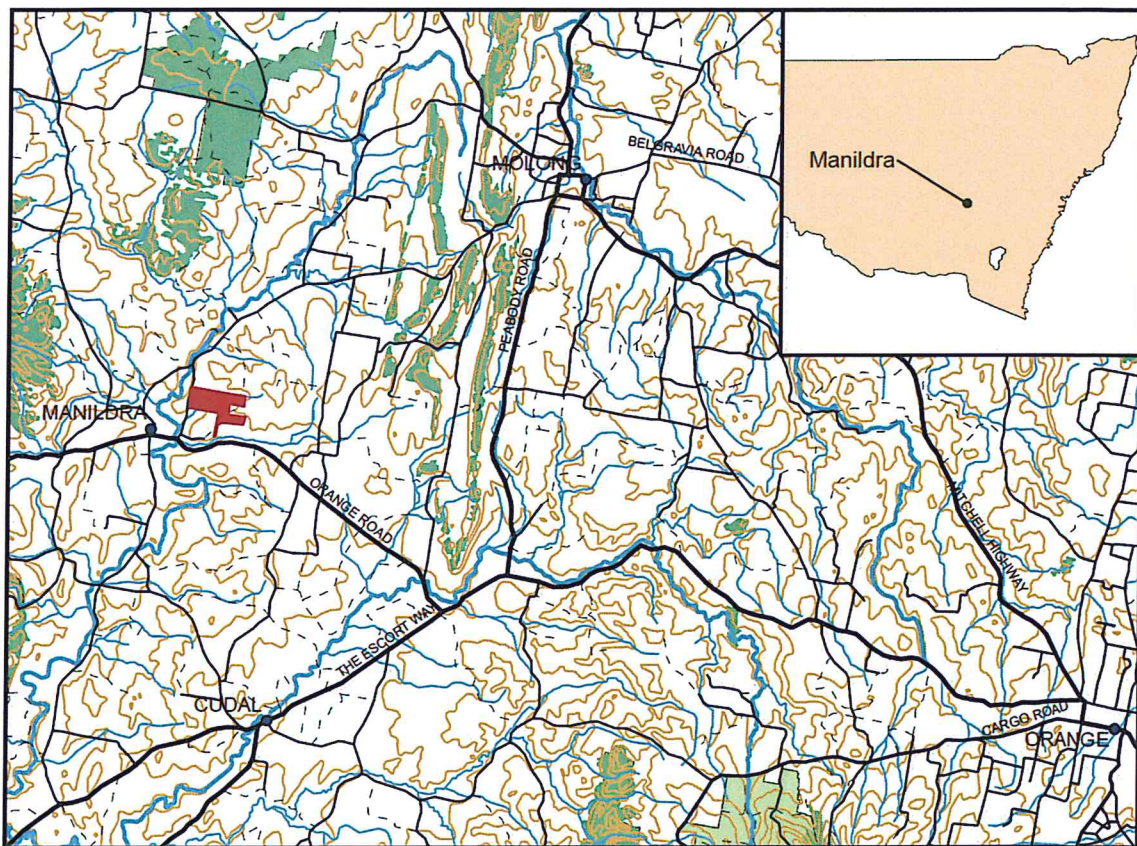


Figure 1: Regional location

It was approved by the Minister for Planning in March 2011, and this approval was modified in March 2015.

The approval as modified allows the development of a 50 megawatt (MW) solar farm and associated infrastructure (see Figure 2). The solar farm would be comprised of fixed and/or tracked photovoltaic (PV) panels mounted on steel support frames. These would be arranged in a series of rows of steel frames of panels over the 120 hectare site. These rows would be between 3 to 4 metres apart, and have a maximum height of 3.7 metres.

The panels would be connected to a series of central inverters and kiosk transformers. The inverters would connect the DC power produced by the PV panels to low voltage AC power. This power would be fed to the adjacent transformer which would convert the voltage from around 350 volts to 33 kilovolts. The power would then be conveyed by transmission lines to the nearby substation and fed into the grid.

The project has a capital investment value of \$150 million, and would employ 50 people during construction and 5 people during operations. It would produce sufficient power for 10,000 homes, and

help Australia meet its renewable energy target. Manildra (the proponent) has not started constructing the solar farm yet.



Figure 2: General layout

2 PROPOSED MODIFICATION

Manildra has requested to further modify its project approval (10_0122 MOD 2). There are four components to the proposal, including:

- extending the lapse date of the approval by 3 years (ie to March 2019);
- allowing string inverters to be installed at the project;
- changing noise monitoring requirements; and
- updating the schedule of land for the project.

The proposed modification is described in detail in the Environmental Assessment (EA) for the application (see Appendix A) and is discussed in Section 5 below.

3 STATUTORY CONTEXT

3.1 Section 75 W Modification

The Manildra Solar Farm was approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). While Part 3A was repealed on 11 October 2011, the project remains a 'transitional Part 3A project' under Schedule 6A of the EP&A Act, and the modification application must be assessed and determined under Section 75W. The Department is satisfied that the application can be characterised as a modification to the existing approval, given that it would not:

- alter the general layout of the project or any of its infrastructure; and
- not materially increase the approved environmental impacts of the project.

3.2 Approval Authority

The Minister for Planning was the approval authority for the original project application, and is the approval authority for this modification application. However, under the Minister's delegation dated 16 February 2015, the Executive Director, Resource Assessments and Business Systems may determine the application as no public submissions were received on the proposal, no reportable political donations have been made, and Cabonne Council did not object.

4 CONSULTATION

Considering the minor nature of the proposal, the modification application was not formally exhibited. However the Department made the relevant documents available on its website on 29 July 2015. The Department also consulted with Cabonne Council, which did not object to the proposal.

5 ASSESSMENT

5.1 String Inverters

String inverters would be housed in small boxes and mounted on the steel frames supporting the PV panels. Their introduction would result in little physical change to the layout of the project, and little change to the project's impacts. The project would continue to comply with the relevant construction and operational noise criteria, and there would be no material change to the visual impacts.

Consequently the Department has no objection to the construction and use of string inverters at the solar farm.

5.2 Operational Noise

The current conditions require Manildra to:

- demonstrate that the design and layout of the facility would meet acceptable noise levels prior to construction (condition C3);
- comply with relevant noise criteria in the *NSW Industrial Noise Policy* (condition F1); and
- carry out noise monitoring to demonstrate compliance with the relevant noise criteria within three months of starting operations (conditions F2 and F3).

Manildra considers these requirements to be onerous given the solar farm is predicted to generate very little noise, and there is no risk of operations at the facility causing exceedances of the relevant noise criteria in the *NSW Industrial Noise Policy*.

The Department has reviewed the original noise assessment and Manildra's further justification for changes to the existing conditions in the EA, and agrees there would be little benefit in requiring Manildra to demonstrate that operations at the solar farm will comply with the relevant criteria under the *NSW Industrial Noise Policy*, particularly since Manildra is already required to comply with these criteria under condition F1.

Consequently, the Department recommends that condition C3 be deleted.

While condition F1 requires compliance with the relevant noise criteria in the *NSW Industrial Noise Policy*, it does not specify any particular criteria for the operations of the solar farm.

This is a potential source of uncertainty for both regulators and the general public.

Given the predicted noise levels of the solar farm during operations are expected to be well below the lowest criteria in the *NSW Industrial Noise Policy*, the Department recommends that condition F1 be amended to include a specific noise limit for operations at the facility, and that this limit be set at 35dB(A) (the lowest criteria under the policy).

Finally, the Department accepts that the risk of exceedance of this noise limit is extremely low. However it does not agree that compliance monitoring at the solar farm should be removed entirely, as this monitoring would allow regulators to be satisfied that the project as constructed is operating within its approved noise limits.

5.3 Changes to the Schedule of Land

Manildra has requested to modify the Schedule of Land in the approval, to include reference to three new lots created within the project site following the purchase of Crown roads by the landowner. The Department does not object to this change, and has accordingly modified the Schedule of Land to reference the new lots.

5.4 Lapse Date Extension

The benefits of the project remain as current as they were at the time of the original approval: Australia needs renewable energy; this project would produce 50 MW of solar power or enough power for 10,000 homes, and it would help Australia meet its renewable energy target. Further, it would attract \$150 million dollars of investment, and create employment for the region.

In addition, there has been no material change on site or in the surrounding area that would render the original assessment of the merits of the project invalid, and there has been no change to the environmental standards governing the project that would warrant substantially changing the current conditions.

Consequently, the Department supports extending the lapse date of the current approval by 3 years to March 2019.

RECOMMENDED CONDITIONS

The Department has drafted a Notice of Modification for the proposal (see Appendix B). The recommended conditions allow:

- string inverters to be installed;
- operational noise management requirements to be clarified;
- the Schedule of Land to be updated; and
- the approval lapse date to be extended by 3 years.

5 CONCLUSION

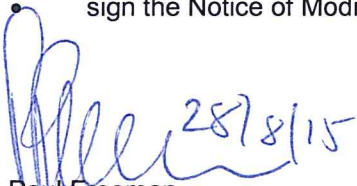
The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act.

The Department acknowledges the rural context within which the project is located, and is satisfied that the proposed modification would not change the approved impacts of the project. The Department believes the benefit of the proposal outweighs any residual impacts, and that the modification should be approved, subject to conditions.

6 RECOMMENDATION

It is RECOMMENDED that the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister:

- consider the findings and recommendations of this report;
- determine that the modification is within the scope of section 75W of the EP&A Act;
- approve the application under section 75W, subject to conditions; and
- sign the Notice of Modification (Appendix B).



Paul Freeman
A/Team Leader
Resource Assessments



David Kitto
Executive Director
Resource Assessments & Business Systems

APPENDIX A: ENVIRONMENTAL ASSESSMENT

APPENDIX B: NOTICE OF MODIFICATION