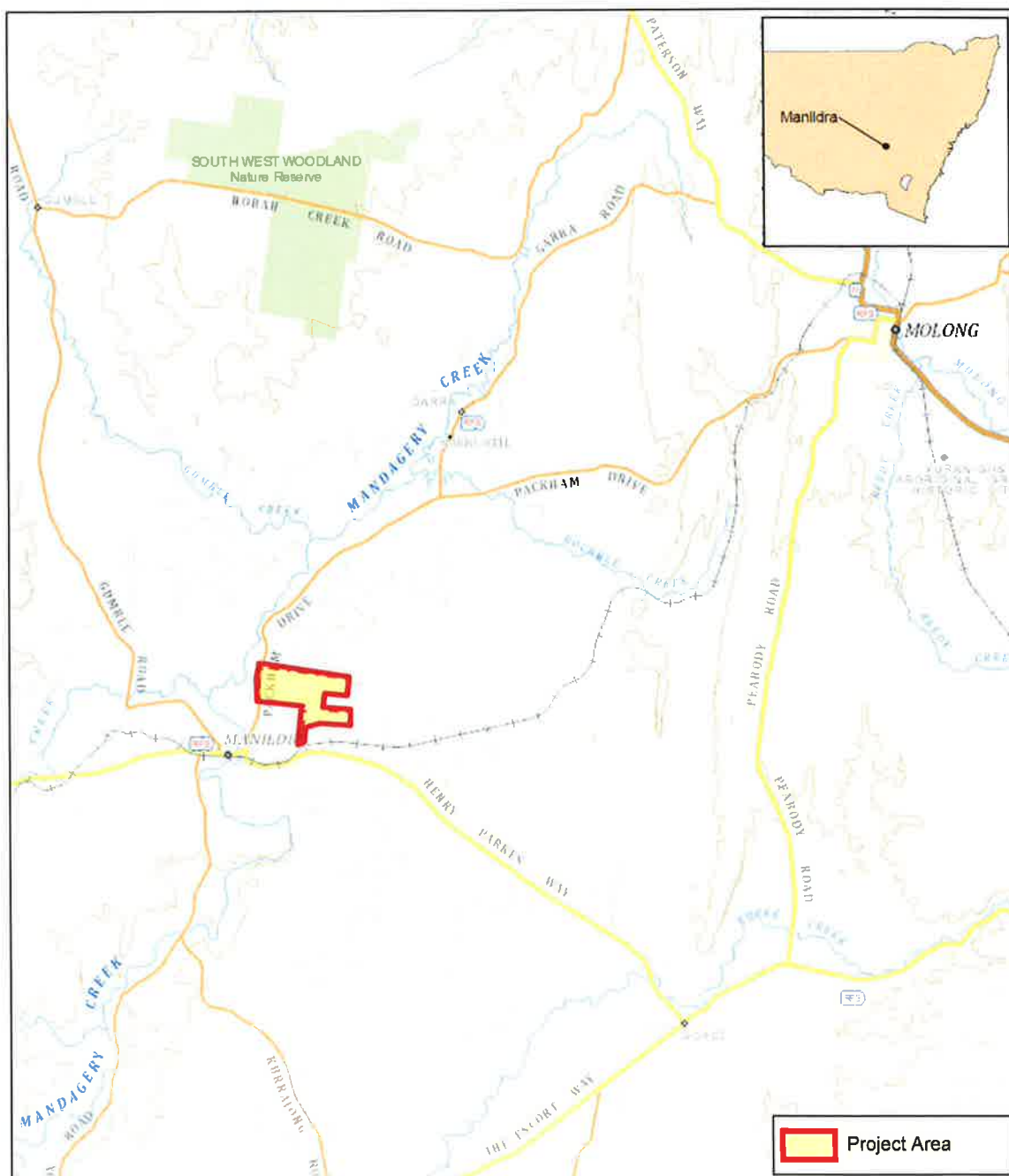


## MANILDRA SOLAR FARM - MODIFICATION

Tracking Solar Photovoltaic Arrays  
(10\_0122 MOD 1)

### 1 BACKGROUND

Manildra Solar Farm Pty Ltd (Manildra Solar), a subsidiary of Infigen Suntech Australia Pty Ltd, has approval to construct and operate the Manildra Solar Farm, located approximately 1.5 kilometres (km) east of Manildra in the Cabonne local government area (see **Figure 1**).



**Figure 1: Location of the Manildra Solar Farm**

On 3 March 2011, the then Minister for Planning granted project approval for the Manildra Solar Farm (MP 10\_0122). This approval allows for:

- construction and operation of a 50 megawatt (MW) photovoltaic (PV) array, consisting of fixed arrays to a maximum height of 3.5 metres;
- underground cable connection to the Manildra substation; and
- construction of internal access tracks, offices, temporary construction facilities, and other ancillary infrastructure.

The project has yet to commence construction.

## 2 PROPOSED MODIFICATION

Manildra Solar has identified refinements which would increase the efficiency of electricity production for the project, and is seeking to modify its project approval to allow either tracking PV arrays or the approved fixed arrays to be installed on the site. The final configuration would be subject to more detailed design and would occur prior to construction.

The advantage of the tracking arrays is that they can track the movement of the sun thereby increasing efficiency in comparison to the approved fixed arrays. Although reasonably similar to the fixed arrays, the tracking arrays increase the maximum height of the panel by around 1.5 metres (3.5 metres compared with 5 metres) during the morning and evening periods, when they would be in their most upright position (see Figure 2).

The proposed modification would not change the approved disturbance footprint, or any of the ancillary infrastructure associated with the project.

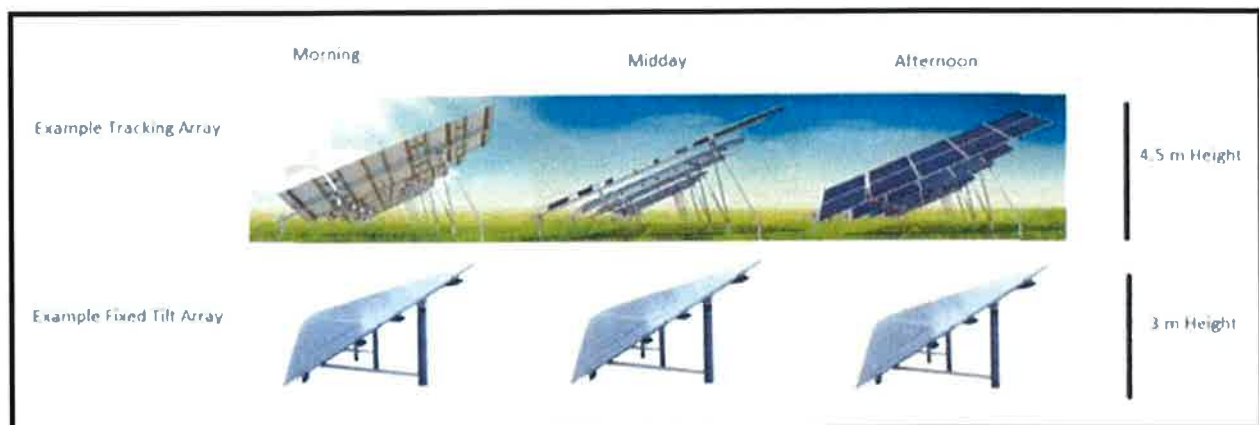


Figure 2: Indicative Comparison of Fixed and Tracking Arrays

## 3 STATUTORY CONTEXT

### 3.1 Section 75 W

The Manildra Solar Farm was originally approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Although 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 hence any modification to this approval must be made under the former Section 75W of the Act.

Based on its assessment, the Department is satisfied that the application can be characterised as a modification to the existing approval (rather than a new project in its own right) as the proposal would:

- not alter the approved footprint or general layout of the project;
- not alter the ancillary infrastructure; and
- not significantly increase the environmental impacts of the project.

### 3.2 Approval Authority

The Minister for Planning was the approval authority for the original project application, and is therefore 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. This is because less than 10 public submissions were received on the proposal that were

in the nature of an objection, reportable political donations were made, but only in respect to the original application, and Cabonne Shire Council (Council) raised no objections to the proposal.

#### **4 CONSULTATION**

Under Section 75X of the EP&A Act, the Secretary is required to make the modification application publically available. In accordance with this provision, the Department placed the application and accompanying information (see Appendix B) on its website. The Department also consulted with Cabonne Shire Council. However, Council did not raise any concerns about the proposal.

#### **5 ASSESSMENT**

In assessing the merits of the proposal, the Department has considered:

- the modification application;
- EA and conditions of approval for the original project;
- relevant environmental planning instruments, policies and guidelines; and
- the requirements of the EP&A Act.

The Department considers that the proposed modification would be unlikely to result in any significant impacts. Notwithstanding, the Department notes the potential for some minor additional visual impacts, which are discussed below.

The Application includes a visual impact assessment prepared by Moir Landscape Architecture. The assessment considers the potential impacts from 9 representative locations surrounding the project area, which include public roads and a number of isolated rural residences (the closest of which is approximately 700 metres from the site boundary). The assessment concludes that the increased height of the PV array would be unlikely to result in any change to the impact of the project at any of these receivers.

The Department notes that an increased height of 1.5 metres would be barely noticeable from nearby residences and that this impact would only occur at certain times of the day depending on the angle of the PV arrays. Consequently, the Department considers that the increased height associated with the proposed tracking arrays would have a negligible change to the visual impact of the project.

The Department also notes that the conditions of approval require Manildra Solar to submit a Landscape Plan as part of the Construction Environmental Management Plan, and a Visual Impact Verification Report for the project. These documents must identify all reasonable and feasible measures to reduce the visual impacts of the project to surrounding residences and public roads.

The Department is satisfied that these conditions are adequate for managing and mitigating the minor visual impacts of the proposed modification and that no further conditions are necessary.

#### **6 RECOMMENDED CONDITIONS**

The Department has drafted a recommended notice of modification (see Appendix A). These conditions would allow Manildra Solar to construct and operate tracking PV arrays in accordance with the information provided in the modification application. Various definitions in the project approval have also been updated to reflect recent changes to government departments.

#### **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 recognises that the proposed modification would not result in any significant changes to the Manildra Solar Project. Given that the Department's assessment has shown that the proposed modification would not result in any significant environmental impacts, the Department is satisfied that the Manildra Solar Farm would generally continue to operate within the bounds of the existing conditions of approval.

In summary, the Department believes it is in the public interest to allow the construction of tracking PV arrays, particularly as it would maximise the production of renewable energy whilst having negligible environmental impacts. Consequently, the Department believes the modification should be approved, subject to conditions.

## 8 RECOMMENDATION


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

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



Mike Young  
A/Director  
Resource Assessments

24.3.15



25/3/15

David Kitto  
Executive Director  
Resource Assessments and Business Systems

**APPENDIX A: NOTICE OF MODIFICATION**

# Notice of Modification

## Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the project approval referred to in Schedule 1, as set out in Schedule 2.



David Kitto  
Executive Director  
Resource Assessments and Business Systems

Sydney **25 MARCH**

2015

### SCHEDULE 1

The project approval (10\_0122) for the Manildra Solar Farm, granted by the Minister for Planning on 3 March 2011.

### SCHEDULE 2

1. Delete the reference to "*Department of Planning*" in the footer and replace with "*Department of Planning and Environment*".
2. Delete the description of the project in schedule 1 and replace with "Manildra Solar Farm".
3. Delete the definitions for "Act, the", "EA", "Conditions of Approval", "DECCW", "Department, the", "Director-General, the", "Director-General's approval of the agreement or satisfaction of the Director-General", "Environmental Assessment", "I&I NSW", "LPMA", "Minister, the", "NOW", "Reasonable and feasible", "RTA", and "Submissions report", and insert the following in alphabetical order:

Act  
Conditions of this approval  
Department  
EA

*Environmental Planning and Assessment Act 1979*

The conditions in Schedule 2

Department of Planning and Environment

Environmental assessment which includes:

- The Environmental Assessment titled *Environmental Assessment Manildra Solar Farm* dated October 2010 and associated response to submissions titled *Manildra Solar Farm Submissions Report* dated December 2010; and
- The application to modify the project approval (Modification 1) dated 5 December 2014 and supplementary visual impact assessment titled *Manildra Solar Farm – Modification (MP 10\_0122 MOD 1)* dated 22 January 2015.

Feasible

Relates to engineering considerations and what is practical to build

Minister

Minister for Planning, or delegate

NOW

NSW Office of Water

OEH

Office of Environment and Heritage, within the Department of Planning and Environment

Proponent

Infigen Suntech Australia Pty Ltd, or any person who seeks to carry out the development approved under this approval

Reasonable

Relates to the application of judgement in arriving at a decision, taking into account mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements

RMS

Roads and Maritime Services

Secretary

Secretary of the Department, or nominee

4. Delete all references to "Director-General" and replace with "Secretary".
5. Delete all references to "RTA" and replace with "RMS".
6. Delete all references to "DECCW" and replace with "OEH".
7. Delete condition A1 of schedule 2 and insert:

- A1. The Proponent shall carry out the project generally in accordance with the:
- (a) EA; and
  - (b) conditions of this approval.

*Note: The general layout of the project is shown in Appendix 1.*

8. Delete condition A2 of schedule 2 and insert:

A2. In the event of an inconsistency between the above documents, the most recent document shall prevail to the extent of any inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
9. In condition C13 (h) of schedule 2, delete "documents referred to under conditions A1(b) and A1 (c) of this approval" and replace with "EA".
10. In condition E2(g) of schedule 2, delete "documents referred to under conditions A1(b) and A1(c) of this approval" and replace with EA.
11. Insert the following after Schedule 2:



# INFRASTRUCTURE LAYOUT: MANILDRA SOLAR FARM SITE

Prepared for:

**infigen**



- Site boundary
- Development envelope
- Existing substation
- ★ Public road access
- Existing track
- Proposed roads
- Modules and inverters
- Laydown areas
- Temporary laydown areas
- Site office

## Notes

1.0 Infrastructure layers extracted from CAC files prepared by Terra  
 2.0 Additional layers prepared by nfigen/Environmental  
 3.0 Aerial image supplied by infigen

0 50 100 200 Metres

1:8000 @ A3  
 Reference: 1338-12  
 Coordinate system: GDA 94

Prepared by:

**nfigen** environmental





# INFRASTRUCTURE LAYOUT: MANILDRA SOLAR FARM SITE

Inspector:

**infigen**



- Site boundary
- Development envelope
- Existing substation
- ★ Public road access
- Boundary fence
- Lot boundaries
- Cable trench 1
- Cable trench 2
- Transformers
- Site office

Notes:

1. Infrastructure layers extracted from CAD files prepared by TenneT
2. Additional layers prepared by infigen
3. Aerial image supplied by infigen

0 50 100 200 Meters

1:8000 @ A3

Reference: 1338-13

Coordinate system: GDA 94

Prepared by:

**infigen**



## **APPENDIX B: ENVIRONMENTAL ASSESSMENT**