The Environmental Assessment of the proposed Manildra Solar Farm has been placed on public exhibition with submissions to be lodged with the Department of Planning by 13 December 2010.

The applicant for the proposal is Suntech Australia Pty Ltd. It is proposed to construct a 50 megawatt capacity solar farm on cleared farmland at Manildra. The subject land is located to the north east of the town and the development will occupy 120ha of cleared farm land. The solar farm will have an expected operating life of up to 50 years after which the infrastructure is to be removes and the site rehabilitated.

The key infra structure for the project will include:

- A photovoltaic(PV) array incorporating rows of panels and a series of central inverters and transformers
- Cabling between the PV array and the central inverters (underground or frame secured)
- Cable connection to the existing nearby 132kV substation (underground)
- Internal access tracks and upgrades to existing roads
- Site office, operations and maintenance and research office buildings
- Temporary construction facilities such as a site compound and equipment laydown areas.

The PV array will consist of Suntech poly crystalline panels mounted on a fixed steel frame support. The height of the array would be 3.5m. Each panel would be 2m long x 1m wide. The panels are to be arranged in rows, with sufficient spacing between the rows to allow maintenance activities such as weed control or panel washing.

Subject to the approval of the development proposal it is anticipated that construction would commence in April 2012 and would take approximately 8 months to complete. A site manager would be employed to manage the facility.

The site

The selected site is located 1.5km from the Manildra township. The land is currently farmland and is zoned Rural 1(a) under the Cabonne LEP 1991. Solar resource modeling based on satellite imagery correlated with onsite data has confirmed ample solar resource at the Manildra site.

Impacts

The site has been subject to flora and fauns studies, also European and Aboriginal heritage assessments. The site layout has been designed to minimize biodiversity

impacts of the proposal. An offset plan is to be developed to ensure that adequate biodiversity outcomes are achieved.

The solar farm is likely to have a moderate visual impact within the context of its setting. Landscape mitigation methods are to be employed to screen the site from adjoining sites and vistas. Recommended mitigation measures to reduce visual impact include the selection of sympathetic external colours for infrastructure, use of underground cables where possible and boundary planting at affected viewpoints. An area to the south of the site has been identified as a potential location for a formalized public viewing area.

Noise is predicted to be minimal, outside the noise levels possible during construction phase. Traffic and construction noise may impact nearby residents during the 8 moth construction phase. Noise levels are expected to be minimal during the operation of the facility.Site monitoring will occur to assess impact of the development. Consultation with adjoining and nearby landowners and residents will occur throughout the construction phase and during the operation of the site and a Community Consultation Plan is to be prepared.

Traffic to the site will access the area via Henry Parkes Way and Old Orange Road. A private access road leads to the site from Old Orange Road. During the construction phase additional traffic may increase to 1000 trucks over the 8 month period. This would average 3 trucks daily and would include the delivery of railway containers to the site. Approximately 285 containers (12m in length) would be delivered to the site during the construction phase. Between 20 and 40 cars per day would also utilize the site on a daily basis. Required upgrade work may be required to enable queuing of vehicles and a passing lane from Henry Parkes Way, as well as possible upgrading of the railway crossing on Old Orange Road. Cabonne Council and the RTA are to be consulted and a road dilapidation investigation, including consideration of the rail crossing, would be undertaken prior to commencement of the project.

An alternate access would also be considered off Packham Drive. An access gate already exists at this point. This access may be utilized if Old Orange Road access was restricted during the construction phase.

Indigenous heritage – the site has been disturbed by farm use. Artifacts were recorded on site and although identified as having low archaeological significance the proposal has been sited to avoid the artifacts.

European heritage – a stone cottage is located upon the site and may have association with the early settlement of the area. An assessment of heritage significance is to be carried out.

The proposal is unlikely to impact upon hydrology or water quality. Groundwater is not expected to be affected by the development. There will be no impact upon bore water or farm dams water. Management strategies have been developed to address run off and site drainage. Management strategies are required to minimise risk from environmental spills (fuel or chemical spills during the construction phase). The Environmental Assessment indicates that during the construction phase and decommissioning water would be sourced from the local water supply. This would be subject to negotiations with Central Tablelands Water.

Soil and landscape features are to be managed as part of the development. Approximately 55 mature trees are to be cleared to enable the development to proceed. Site disturbance may also impact upon vegetation across approximately 152 ha of the site. Erosion and sediment control measures will be required to be implemented to reduce risk.

Electromagnetic and electric fields would be produced by the infrastructure. Emissions are to comply with the national guidelines. National and international research into health and safety has been considered along with the cumulative impact of the solar farm being ion proximity to the electricity sub station. As an additional health and safety measure it is proposed that there be no public access to the site.

The panels are not fire combustible and pose a low fire threat. Site management including weed control and grazing of the site by sheep are proposed measures to reduce impact of fuel sources. Fire fighting equipment is to be housed on site as a further measure to protect the site.

Waste generated from the site would be conveyed to Council's landfill site for general waste while waste such as sewerage would be transported off site by and licensed trade waste services. A local garbage service is unlikely to be required to service the site.

A local benefit of the project may be the opportunity for employment arising from the construction of the solar farm and its ongoing management. Likewise the development may attract workforce relocation to Manildra and provide additional capital investment in the town.

Areas identified in the Environmental Assessment that have direct concern to Council include traffic and access. In particular the increase of vehicle movements along Old Orange Road has potential to adversely impact upon the road surface and may also impact upon the residential amenity of the immediate area. Road and traffic issues may also extend to the use of the alternate access of Packham Drive. Council would also have an interest in ensuring the environmental controls and site management minimise any risk to the locality. These concerns have been conveyed to the Department of Planning in response to the exhibition phase.

The development proposal recognised a range of environmental measures necessary to ensure, when implemented, protection of the environment, and to

ensure community health and safety. Council will also be involved in negotiations to protect existing infrastructure such as local road, and to ensure the amenity of the Manildra village area is retained.