Appendix 1 Parkes Overview and Environmental Constraints Map

The proposal site is located approximately 10 kilometres west of Parkes, within the Parkes Local Government Area. The site is accessed via Henry Parkes Way (locally known as Condobolin Road) and Pat Meredith Drive to the west. The solar farm proposal would connect to the existing Transgrid substation located on Pat Meredith Drive to the north of the site.

The proposal site comprises approximately 240 hectares of freehold land, the majority of which has been cleared and used for grazing or cultivation. There is a small area of native vegetation in the north western area of the site, isolated paddock trees and several rows of planted trees and shrubs across the centre of the site, mostly along fence lines. Four residences are located in the vicinity of the site, the nearest being approximately 400 m from the site boundary.

The proposal comprises the construction, operation and eventual decommissioning of the Parkes Solar Farm. Key infrastructure components would include:

- Solar arrays: approximately 215,000 solar panels supported by approximately 27,000 piles, driven or screwed into the ground in order to support the solar array's mounting system. The panels to be installed would be either:
  - single-axis tracking panels (which would have approximately 2,850 tracker units)
  - north-oriented fixed-tilt panels
  - east-west facing fixed-tilt panels
  - or a combination of these alternatives.
- Approximately 28 PV boxes or PV skids (either containerised or installed on a 'skid' platform), each of them containing an inverter and an 11 kV, 22 kV or 33 kV transformer.
- Onsite cabling and electrical connections between solar arrays and panel inverters.
- One delivery station in a container or on a skid platform.
- Cables and trenches.
- Internal access tracks to allow for site maintenance vehicles, and gravel access road and parking for staff and visitors.
- Staff amenities and offices.
- Perimeter security fencing, approximately 2.3 metres (m) high.
- A vegetation buffer.
- A 66kV overhead or underground power line to connect into the existing Parkes Transgrid substation, approximately 600 m north of the site.

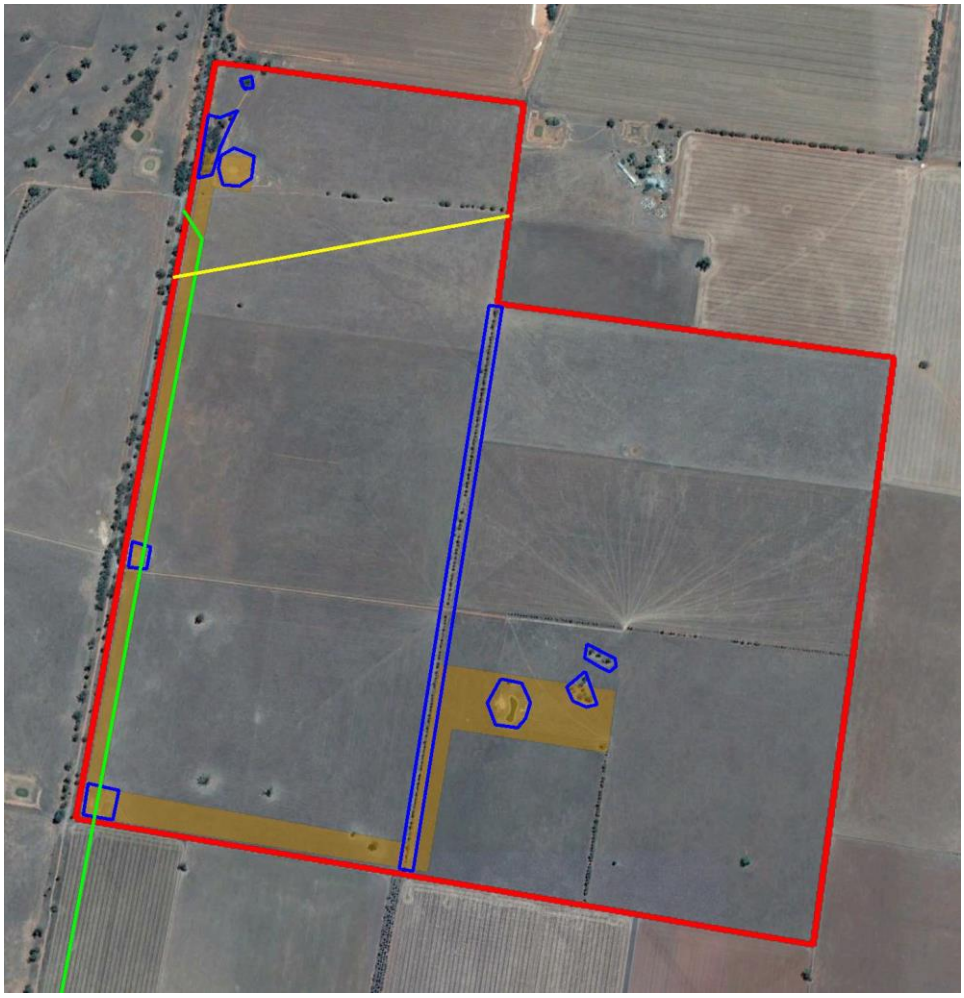
The construction and commissioning phase of the proposal would take approximately nine months. Approximately 40 employees would be required during the first month of construction, rising to approximately 100 employees during the peak construction period. During construction, approximately 0.5 full time equivalent staff would be required on site.

At the end of its operational life, the proposal site would be either reconditioned or decommissioned. Decommissioning would remove all above ground infrastructure, rehabilitating the site to allow for a return to agricultural or other land use for the majority of the site.

ASPECTS

- Heritage artefacts
- EEC and habitat vegetation
- Environmental and noxious weeds
- Soil and Water Management

***Refer to Sub-Plans for specific environmental site management**



- Few patches of trees, one (1) tree line, as well as four (4) dams need to be retained, as shown in blue;
- All other trees within the site boundaries can be cleared if necessary.
- Unless the whole site area is used for the solar plant, at least the orange area (allowing access to all dams + wind mill) should be avoided and left to the current land owner, with all fencing being organized accordingly.
- Sufficient space for at least two (2) rows of vegetation screening should be allowed outside the fences. The final design of this vegetation buffer will be agreed with neighbours at the end of the project construction, and coordinated by the EPC.
- The site of the proposed solar farm does not occur on a floodplain or within Flood Prone Land. There is no Flood Prone Land mapped in the Parkes LGA (NSW Government 2005).
- Two (2) existing overhead lines will need to be taken into account for the design of the plant and its yield assessment.
    - The green line in the map below is a Transgrid 132kV line measuring 21 to 24m high;
    - The yellow line in the map below is a 9m high Essential Energy 11kV line
- Refer to Environmental Sub-Plan PL-EV-03 for Weed Management Measures
- Refer to Environmental Sub-Plan PL-EV-07 for Cultural Heritage Management Measures

Parkes – Development Consent (A pp. No. SSD 6784): General Layout of Development