

Attachment 1: Bushfire Management Plan - Addition of Solar Farm to Site F

Introduction

This attachment updates the Perdaman Bushfire Management Plan (BMP) to include a proposed solar farm in the western portion of Site F. The area, previously cleared and used for temporary laydown and storage, will now host solar infrastructure. It remains within the approved project footprint and is subject to the same bushfire protection measures as the broader site.

The solar farm lies within a BAL-29 zone and is surrounded by Asset Protection Zones (APZs) maintained in accordance with *Schedule 1: Standards for APZs*. Access for emergency and maintenance vehicles is provided via a 6 m-wide road, which links into Site F's internal network. Firefighting capacity is available through hydrants connected to the Site F fire water ring main, with reticulated water supplied by two firefighting tanks (1,800m³ each) at Site C.

The solar farm does not present a high-risk land use under State Planning Policy 3.7 (SPP 3.7), and the proposed development, utilising the firefighting infrastructure already being established as part of the approved construction of administration buildings, warehouses and workshops on Site F, complies with the bushfire protection criteria applied across the wider development.

Bushfire Planning Compliance

Land Use

For the purposes of bushfire planning the solar farm may be considered under the same classification as the Site F administration buildings. While not specified in the original BMP, the solar farm meets the requirements of *State Planning Policy 3.7* and *Guidelines for Planning in Bushfire Prone Areas* (WAPC 2021) and does not introduce additional bushfire risk.

Environmental and Design Considerations

- **Vegetation** – No additional clearing is required. The site is already assessed and approved, with bushfire measures aligned to environmental constraints.
- **Design** – Solar infrastructure is non-combustible (panels, inverters, cabling). The cleared footprint and APZs maintain the site in a low-threat condition compliant with *AS 3959:2018*.

Bushfire Impact Assessment

A bushfire assessment for the Perdaman Project, prepared using *AS 3959:2018* with an FDI of 80, classified vegetation within 150 m of Site F as:

- **Class G – Grassland** (hummock and tussock grass with buffel grass)
- **Class D – Scrub** (sparse scrub with spinifex)

Slopes range from flat to downslope. BAL ratings of BAL-29 or lower were achieved based on APZs and separation distances.

Bushfire Protection Criteria – Solar Farm

Element 1: Location

The solar farm is sited within a cleared, managed footprint of Site F. Surrounded by grassland and scrub, it achieves BAL-29 or lower, confirming suitability for development.

Element 2: Siting & Design

Infrastructure layout incorporates APZs within site boundaries, maintained in accordance with *Schedule 1: Standards for Asset Protection Zones (Guidelines)*. Radiant heat exposure is limited to $<29 \text{ kW/m}^2$.

Element 3: Vehicular Access

A 6 m-wide all-weather access road connects the solar farm to Site F's internal network. It meets *Guidelines for Planning in Bushfire Prone Areas* guidelines, providing:

- Adequate width for emergency vehicles
- Strategic turnaround points
- Safe clearance and visibility for bushfire conditions

Element 4: Water Supply

The site is supported by Site F hydrants supplied by two firefighting tanks at Site C (1,800m³ each), ensuring sufficient supply for first response suppression activities.

Conclusion

The proposed solar farm at Site F is fully integrated into the Perdaman Bushfire Management Plan. Located within a previously assessed and cleared area, the development:

- Achieves BAL-29 or lower through compliant APZs and vegetation separation
- Provides safe emergency vehicle access and firefighting water supply
- Uses non-combustible infrastructure with minimal ignition potential
- Requires no further clearing and aligns with environmental approvals