



Date: 5/08/2024
Our reference: 20240805-01jp
Your reference: 24019147

SA CFS Development Assessment Services BUSHFIRE PLANNING HAZARD PROTECTION RESPONSE

Application	Crown Development (Energy Infrastructure Facility)
Development	300MW photovoltaic modules, associated infrastructure and ancillary works (temporary and permanent), and connection to the national electricity grid through either Robertstown Substation or Bunday Substation.
Development Number	24019147
Development/Property Name	Robertstown East Solar project
Location	LOT 31 Junction Road, 957 Lower Bright Road, Lot 2 Pipeline Road, Geranium Plains – located approximately 5km northeast of Robertstown.
Owner	D, A, and R Olsen, and A Schmidt
Applicant	Steve McCall (Eps Energy), and Brynne Jayatilaka (Amp Energy)

LEGISLATIVE FRAMEWORK

Instrument	The Planning and Design Code under the <i>Planning, Development and Infrastructure (General) Regulations 2017 – Schedule 9</i>
Overlay	The Hazards (Bushfire – Regional) Overlay
Fire Authority/ Response Area	South Australian Country Fire Service

DECISION/SUMMARY

The South Australian Country Fire Service (SACFS) welcomes and supports development in regional and rural areas of South Australia. SACFS has no direct concerns with the proposal and provide these comments for your consideration.

This advice/comment is relevant to the following documents:

- P0244_Robertstown_East_Desktop_Assessment_Report_SE_V2_Final
- Rob-amp-vegetationClearingPlan-8566576.pdf
- Planning and Design Code Assessment prepared by EPS Energy, June 2024
- Robertstown East Solar Project Transport Impact Assessment, 25 June 2024
- Planning Report, 25 June 2024

An officer of the SACFS has undertaken a review of the aforementioned document(s) provided on the Plan SA portal, for the planning application.

SACFS has regard for the bushfire hazard(s) to and from the site, and any mitigation measures required to prevent spread of fire to the site, or the environment as a result of the activities within the site. SACFS provides the following comments:

Bushfire Hazard Overlay

The site is located within the area designated the Hazards (Bushfire – Regional) Overlay.

The Desired Outcomes (DO) for the Hazards (Bushfire – Regional) Overlay identifies:

DO 1 Development, including land division responds to the relevant level of bushfire risk and is sited and designed to mitigate the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.

DO 2 To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.

Fire Response Capability

The site is within the Robertstown SACFS fire station response area.

Land Use

Performance Outcomes for Land Use do not apply in this hazard overlay.

Siting

The SACFS recommends establishing and maintaining an Asset Protection Zone (APZ) to create a setback/buffer to any infrastructure using mineral earth breaks, roadways and/or areas of managed vegetation to prevent or prohibit the spread of bushfires to and from the site, minimising the risk to life, and or damage to buildings and property and maintain a fuel reduced zone for safe movement of occupants and firefighters.

SACFS notes the current proposal does not meet this requirement.

SACFS recommends all buildings and infrastructure such as Substation, Inverter stations, solar panels, and Control Buildings should be located no less than 17 metres from the property boundaries or existing remnant vegetation being retained, for the purposes of maintaining an APZ.

See Access/Egress and Vegetation Management recommendations for more detail.

Access/Egress

SACFS notes the proposal does not include roads of adequate design to satisfy the desired outcomes of this hazard overlay.

Any future internal road networks should be designed to achieve compliance with the 'Roads' Performance Outcome relevant to the hazard overlay.

Perimeter roads with a minimum formed road width of 6 metres should be incorporated to achieve adequate separation between infrastructure and areas of bushfire hazard to support safer access for the purposes of fire fighting or provide mineral earth breaks for passive protection from spread of fire to and from the site.

All access/egress roads on the project site:

- Perimeter roads with a minimum formed road width of 6 metres should be incorporated to achieve adequate separation between infrastructure and areas of bushfire hazard including areas of remnant vegetation being retained within the boundaries of the allotments to support safer access for the purposes of fire fighting or provide mineral earth breaks for passive protection from spread of fire to and from the site.
- Shall be constructed with a formed, compacted, self-draining, all-weather surface.
- Shall be a minimum width of 6 metres, if constructed less than 6m wide, shall incorporate passing bays with a minimum formed width of 6 metres (including the road or driveway width), and a minimum formed length of 17 metres. The passing bays should be constructed at 200 metre intervals along the driveway. Where it is necessary to provide adequate visibility, such as the nearest point to another passing bay, passing bays may be required at intervals of less than 200m.
- Shall be constructed with a minimum external radius of 12.5m for all road curves.
- Shall not exceed a gradient of 16 degrees (29%).
- Shall incorporate solid all-weather crossings over any water-course capable of supporting fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
- Vegetation overhanging the access road shall be pruned to achieve a minimum vehicular clearance of not less than 4 metres width and a vertical height clearance of 4 metres.
- Shall allow fire-fighting vehicles to safely enter and exit the site in a forward direction by incorporating a loop road around the site.
- All access gates to be readily accessible to attending fire service units, this maybe with the use of a Lockwood 003 type padlocks.

Note: Other fire safety measures pertaining to roads may be prescribed by the National Construction Code.

Vegetation Management (buildings and infrastructure such as Substation, Inverter stations, and Control Buildings):

Vegetation management shall be established and maintained within 17 metres of each Substation/Control Building, solar panels or alike as follows:

- The understorey plants within the VMZ shall be maintained such that when considered overall a maximum coverage of 30% is attained, and so that the leaf area of shrubs is not continuous.
- No understorey vegetation shall be established within 10m of the Substation/Control Building site (Understorey is defined as plants and bushes up to 2m in height).

- Grasses within the zone shall be reduced to a maximum height of 10cm during the fire danger season (e.g. by grazing, slashing or chemical treatment)
- The VMZ shall be maintained to prevent the accumulation of dead vegetation during the fire danger season.

Water Supply

Whilst there is presence of reticulated water in the area reticulated water supplies may be compromised during a bushfire event. Static fire water tanks for both bushfire, and building fires will be required to assist in effective Fire Service intervention and suppression.

SACFS recommends a minimum supply of water for bushfire fighting be supplied in addition to or in conjunction with other fire fighting water that is accessible to the Fire Authority, as follows:

- Water supply capacity of 22 000 litres with a 65mm Storz (small-bore suction outlet).
- The dedicated water supply and its location should be identified with suitable signage (i.e. blue sign with white lettering "FIRE WATER").
- Access to the water supply shall be constructed of all-weather construction, with a minimum formed road surface width of 3 metres.
- Provision shall be made adjacent the water supply for a nominally level hardstand area (capable of supporting fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes) that is a distance equal to or less than 6 metres from the water supply outlet.

Emergency Response Planning


The Bushfire Management Plan and the Emergency Management Plan will need to be established and reviewed and updated every 12 months by the company and/or its operators. Revised versions to be forwarded to the relevant SACFS Regional Office to use as a reference.

The Company and/or its operators will be required to engage on a regular base with on-site training and site inductions for emergency service personnel.

BUILDING CONSIDERATIONS:

All class 2 – 9 buildings will need to comply with National Construction Code (NCC) and to include all the minimum *Deemed to satisfy* fire and life safety provisions.

SACFS, as the referral agency, reserves the right to request additional information and provide further comment, under the Planning Development and Infrastructure Act and Regulations, in particular, but not limited to Regulation 45 (3) during the Building Rules approval process.

Prepared By: Leah Bertholini Manager DAS	Signature: 	Date: 5/08/2024
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