# Mt Barker Power Supply Project
# New 66kV Line and Substation
# Project Information Fact Sheet

## Project Overview

SA Power Networks is currently investigating options for the provision of power supply for the future planned expansion of the Mt Barker township on its eastern outskirts.

To meet the anticipated demands of the redevelopment proposed under the Ministerial Development Plan Amendment (DPA), SA Power Networks will need to undertake the following works in the next six to seven years (or by about 2020):

- New 66kV/11kV Substation - Mt Barker East, to supply the development in the eastern sector of Mt Barker
- New 66kV overhead line to join existing Mt Barker South substation to the proposed new Mt Barker East substation
- Provision of the required 66kV overhead line easements (of a minimum width of 26 metres) between the substations and to the proposed Mt Barker South bulk supply substation
- Provision of underground supply to residential, commercial and community development.

Planning indicates that a new substation near Nairne with a connecting 66kV Line to the new Mt Barker East substation, may also be required. The demand for this infrastructure may not eventuate for another twenty years or more, depending on future electricity usage rates.

Four options are currently being considered for the 66kV line route, running from the Mt Barker South substation to a new substation at Mt Barker East, which also has two potential locations. The cost of these different options varies between $60 million to $80 million.

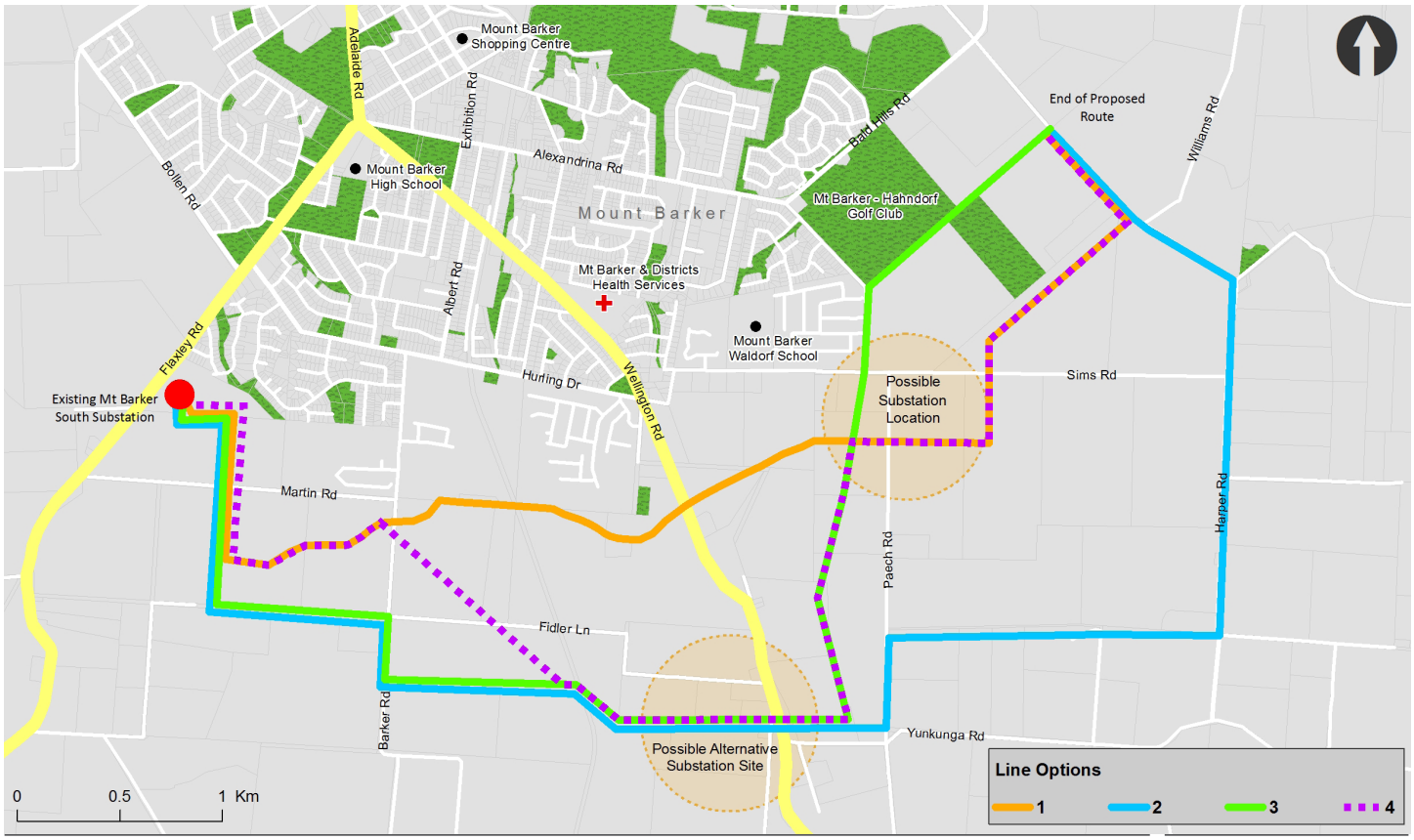
SA Power Networks has been working with the District Council of Mt Barker and a project Steering Group to develop options for the line route and substation location and we are now seeking community feedback to inform a final decision.

The line route and substation site will be assessed based on:

- Feasibility (addressing engineering, construction and maintenance)
- Appropriate locations within the Ministerial DPA land

SA Power Networks will also consider a range of additional factors in its decision making process including:

- visual amenity;
- alignment with the Ministerial DPA;
- linear route of poles and wires;
- accessibility of poles and wires;
- environmental impact;
- cost; and
- feedback from directly affected or adjacent landowners.



| Option | Option 1 | Option 2 | Option 3 | Option 4 |
|---|---|---|---|---|
| Description | Follows the connector road route with overhead 66,000V line within the road reserve. | Overhead line built in buffer zone around edge of development. | Follows the buffer zone before running through the middle of the eastern development area. | Utilises the first section of the connector road to the ElectraNet corridor and will follow the corridor through the middle of the eastern development area. |
| Route Distance | 7km | 10.3km | 8.3km | 8.6km |
| Indicative Cost | $60.4M | $70.6M<br>Additional $5M if industrial site is used for substation. | $61.0M<br>Additional $5M if industrial site is used for substation. | $62.0M<br>Additional $5M if industrial site is used for substation. |
| Construction, maintenance & emergency response access | The easiest access once the road is completed. | Difficult access, which could potentially require additional access tracks. | Moderate access difficulty - need access tracks until public roads established. | Moderate access difficulty - need access tracks until public roads established. |
| Visual Effect | Low visual impact using poles along the road. | Visual impacts on land owners on the perimeter. | Partial impact on land owners on the perimeter and visual impacts on developments through the middle section. | Utilises existing transmission route which already has electrical power structures. Partial impact on land owners on the perimeter and visual impacts on developments through the middle section. |

## Line Options

Seven options for the line route were initially selected for consideration. Two options were eliminated early as they are outside the development area. A further option to underground lines along the proposed connector road was eliminated due to engineering feasibility and additional cost. Four remaining overhead line options are now being considered. They are outlined in the table above.

## Proposed Substation

The proposed substation will convert supply from 66kV to 11kV. This will then be connected by underground feeders to supply future residential developments.

The size of the substation will be similar to other distribution substations across our network with an approximate area of 100 metres by 100 metres. Depending on site conditions and location, SA Power Networks will minimise the visual impact of the new substation at its perimeter. If adequate land is made available, landscaping and other screening treatments may be installed.

## Overhead Line Structures

The 66kV line supplying the new substation will be above ground, reflecting current Regulatory requirements. The 66kV line will be carried on Stobie poles, which are approximately less than half the height and of considerably less visual impact than the metal towers already in the area and utilised by ElectraNet for transmission supply. The Stobie poles planned for the 66kV line are around 23 metres above ground, whereas tower structures are closer to 55 metres in height.

## Community Feedback

The final decision on the most appropriate route for the 66kV line will be determined based on community feedback, submissions from Council and the recommendation of the Steering Group established to oversee the development.

SA Power Networks is inviting landholders and the local community to provide input into options for supplying electricity to the Mt Barker redevelopment area.

We are open to all feedback on the routes shown. At the same time, we are required by the Regulator to ensure a cost efficient and workable overhead solution for the 66kV line.

**How to contact us:**

You can phone our General Enquiries number on 13 12 61 Monday–Friday, 9am–5pm

If you require interpreter services please call 13 14 50

Or you can write to us:

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**National Relay Service**
If you are deaf, or have a hearing or speech impairment, contact us through the National Relay Service:
TTY users phone 133 677 then ask for SA Power Networks
Speak and Listen users phone 1300 555 727 then ask for SA Power Networks. Internet relay users connect to the NRS then ask for SA Power Networks