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

# Fact Sheet #2 - August 2015



# **Project Overview**

In 2013, SA Power Networks commenced investigations into 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 power demands of the redevelopment, SA Power Networks identified that the following works would be required by around 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
- Purchase of land 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.

Another substation near Nairne with a connecting 66kV Line to the new Mt Barker East substation will be required in an additional twenty years or more, depending on future electricity usage rates.

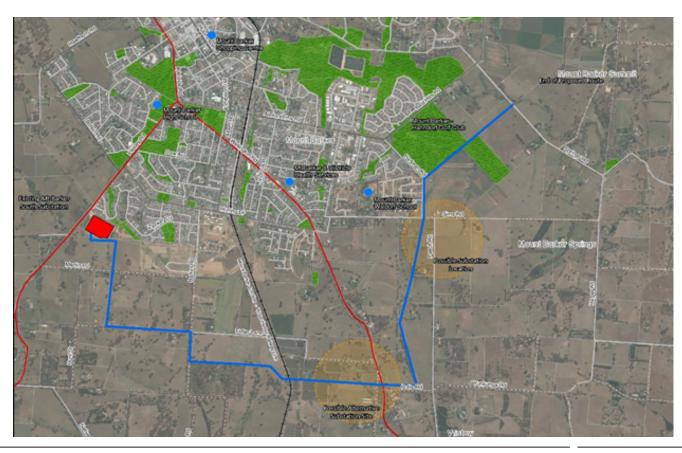
Four options were considered for the 66kV line route and consultation was undertaken with landowners, developers and local community members to inform a final option.

Through this process, SA Power Networks, in coordination with the District Council of Mt Barker and the State Government, identified the Line Option shown in blue in the map below as the preferred route for the new 66kV line. Two preferred substation locations were also identified and are indicated in orange below.

The line route and substation sites were selected based primarily on their feasibility (addressing engineering, construction and maintenance requirements) and appropriateness of the locations within the rezoned land.

SA Power Networks also considered the following factors: visual amenity;

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



#### **Proposed Substation**

The proposed substation will convert supply from 66kV to 11kV. This low Voltage supply 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 Power Line Design

The 66kV line supplying the new substation will be above ground, reflecting current Regulatory requirements. The new 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 used by ElectraNet for transmission supply.

#### **Landowner Consultation**

Following public notification of the decision on the final line route and the two preferred substation locations in November 2014, SA Power Networks commenced detailed discussions with all affected landowners and developers. Feedback was sought on the key issues arising from the new line route including location of buildings, fences and trees, current and future use of the land and amenity issues.

### **Concept Design**

A land survey of the 66kV line route to gain preliminary topographical data was undertaken along the entire length of the alignment between February and April 2015.

This survey information will be used to undertake the detailed design of the line. A concept design will be produced that will specify the line route within each allotment, the number and location of Stobie poles, design of individual poles and necessary clearances from trees, built structures and other physical items.

#### **Next Steps**

Our design team will soon be commencing the concept design for the entire line route. Further site visits may be needed to support this work and relevant landowners will be contacted as required.

We will continue to investigate options for the location of the new substation and will provide further updates when we have new information. At this stage, our preference remains for a site located in the centre of the redevelopment area.

In the meantime, we will continue to meet with Council, landowners, developers and interested community members to provide information on the project generally and possible future impacts on private land, as additional information becomes available.



#### How to contact us:

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