



## *Commissioner for Kangaroo Island* **KI Energy Security Focus Group**

### **Energy for Kangaroo Island- Our Community Expectations**

#### **Background**

The matter of securing electricity supply to the businesses and community of Kangaroo Island has been considered recently by the Australian Energy Regulator (AER). The AER has made a decision to accept SA Power Networks' assessment that action is necessary during SAPN's current Regulatory Period (July 2015 to June 2020).

The capital expenditure on Kangaroo Island's energy security now has an indicative budget of \$45m calculated on the basis of a new undersea cable being procured and installed **before** the existing one fails.

The energy security project will now be the subject of a separate Regulatory Investment Test in 2016 and more cost effective options may emerge.

This project is expected to be of great interest to Islanders and the Commissioner for Kangaroo Island will ensure that the KI community continues to be informed and represented.

It is imperative that the eventual energy security investments – whether it is a new cable or an alternative - meet the needs of the Island's energy consumers. The *Kangaroo Island Energy Security Focus Group* has been formed to assist the Commissioner and ensure the views of Islanders continue to be heard.

The Focus Group has identified three key issues: Energy Security, Reliability and the Cost of Connection and these are discussed further below:

#### **1. Energy Security**

The International Energy Agency (IEA) defines energy security as “the uninterrupted availability of energy sources at an affordable price”<sup>1</sup>:

*“Energy security has many dimensions: long-term energy security mainly deals with timely investments to supply energy in line with economic developments and sustainable environmental needs. Short-term energy security focuses on the ability of the energy system to react promptly to sudden changes within the supply-demand*

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<sup>1</sup> <http://www.iea.org/topics/energysecurity/>

*balance. Lack of energy security is thus linked to the negative economic and social impacts of either physical unavailability of energy, or prices that are not competitive....”*

Energy security for Kangaroo Island would mean confidence that:

- The risks of a cable failure have been minimised
- Emergency response arrangements are in place
- Consumers are able to access competitively priced energy

The Focus Group has discussed the implications for prices and consumer protection of the island going ‘off-grid’. The Group is concerned that this may not be in the long term interests of the Island’s consumers and would preclude future opportunities for power generated on the island to be sent back to the main grid.

There is strong support for renewable energy and energy storage projects – but as a complement to, rather than a substitute for, a connection to the national grid and the National Electricity Market (NEM). The Focus Group is also aware of the opportunity for a new undersea power cable to incorporate expanded fibre-optic telecommunications capability for the Island.

The Group is also aware that the KI Community is seeking confidence that Emergency Response plans are in place in the event of a cable failure.

## **2. Reliability**

Energy Security refers to the ‘bulk supply’ of electricity to the Island’s distribution network. Reliability refers to the frequency and duration of outages experienced by customers.

Kangaroo Island has a history of long and frequent outages. SA Power Networks have worked hard in recent years to improve the reliability experiences of many customers on the Island and the situation is now much improved. However, for some customers – particularly those served from the Island’s extensive Single Wire Earth Return (SWER) network - reliability could be significantly improved.

Energy Security Investments that also improve reliability for customers would be welcomed.

## **3. Cost of connecting to the grid**

The recent approval of funds to upgrade the Kangaroo Island Airport is expected to catalyse a number of significant Commercial developments on the Island.

A number of these have already sought indicative costs of conventional grid connection and have expressed alarm at the cost of accessing capacity away from the main townships. This is consistent with the challenges facing existing customers.

Energy Security Investments that also reduce the cost of grid connection for new and existing customers would be welcomed.