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Via email to: [consultation@electranet.com.au](mailto:consultation@electranet.com.au)

To whom this may concern,

**Regarding Eyre Peninsula Electricity Supply Options RIT-T Project Specification Consultation Report Summary**

Thank you for the opportunity to make comment regarding the ElectraNet, Eyre Peninsula Electricity Supply Options RIT-T Project Specification Consultation Report Summary.

**Introduction:** I would like to add some discussion about the potential of Eyre Peninsula to grow its population and industry and therefore its energy demand. Also about the need for a power main sufficient to carry the potential energy production into the grid from an area of amongst the highest wind power potential in the world. The study doesn't much address this potential, or the potential of Eyre Peninsula to develop more power demand and doesn't mention that the Iron Road Ltd. Central Eyre Iron Project may double the power usage on Eyre Peninsula.

**Background:** Eyre Peninsula has not developed significant new industry or value adding initiatives for its agricultural products and remains a bulk exporter of basic commodities. In researching the reasons for this inertia it has become clear that a **wicked problem** exists whereby there is no spare capacity in either the power or water networks, and freight to markets in Adelaide or beyond is expensive. For a new business with significant power, water and freight demands to establish on EP, it must resolve all three of these problems. Utility providers each won't provide these services without manifest demand.

Moves are underway to resolve these problems in one individual locality and one project to establish a more broad scale solution. These initiatives will be much more likely to succeed if a new power network with much higher capacity is established.

**Opportunities:** Some of the best potential for wind farming in the world occurs along the lower west coast of Eyre Peninsula between Streaky Bay and Port Lincoln, however there is no power line to collect it and no capacity in the remainder of the network to get it into the grid via Cultana. A wind power company is investigating alternatives such as sea water desalination and pumped hydro-electric power production to utilize off-peak power, and another entity to produce hydrogen and urea.

Meanwhile the \$3.4Bn Iron Road Ltd., Central Eyre Iron Project (CEIP) has no mains power supply and proposes to **use diesel generators** to produce as much power again as is currently used on Eyre Peninsula, to operate the mine. It also proposes to use its diesel generators to desalinate four times the amount of water currently used on Eyre Peninsula (via the SA Water network). It is guessed that this diesel infrastructure will cost close to one third the cost of a new power line from Cultana. Here lies an opportunity for cooperation between ElectraNet and Iron Road.

A wind farm company and Iron Road are in negotiation, however if the mine was connected to the electricity grid, it would benefit the mine and the wind farm. It is imperative that Iron Road / CEIP and potential wind farmers be included in network upgrade discussions.

Whilst planning the upgrade of the EP power network, it is also imperative that the potential to connect wind farms into the grid should be addressed. A west coast spur line would greatly improve power reliability and availability for much of EP and make this immense wind farm potential available. A company has mentioned the need for this line from Streaky Bay to Port Lincoln, and its willingness to contribute to its construction. Extra wind power would make pumped hydro power more affordable and the combination would build system inertia to stabilize South Australia's supply.

Eyre Peninsula has plenty of low cost land available in areas of reasonably reliable average rainfall where only small amounts of critical period irrigation water is necessary to reliably grow high value crops. Whilst this water would be expensive from desalinated sources, occasional small amounts of irrigation will give high return on investment. The numbers still need to be studied but it is anticipated that for some crops this would be viable. Local processing of horticulture produce would be preferred to reduce the volume to be transported and therefore the cost, hence increasing the amount of power and water and jobs required to process it on Eyre Peninsula.

Desalinated sea water for stock water would make intensive meat production possible and to supply lamb feedlots would provide a high value return. There is potential to produce enough feedlot lambs to supply an export abattoir on EP which would cut the cost per sheep of transport by 80 percent and value add considerable amounts of grain (lamb fodder), cutting grain transport costs as well. An abattoir is a high user of water and power and it would not be possible on a wide scale if the power upgrade doesn't increase both the volume and the reliability of power on EP. A cluster of milling, smallgoods, composting, meal packaging and other service and supply industries could open surrounding an abattoir, and combined, bring many jobs; each using more power and water.

**Conclusion:** Eyre Peninsula has immense potential to develop its mining, industry, jobs and population and to become a bulk power producer if the proposed power network is properly planned. I urge you to include this potential into all subsequent planning.

Sincerely

Geoff Rayson