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Mr Wayne Lissner
Manager Strategic Planning and Communications
ETSA Utilities
GPO Box 77
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Dear Wayne,

I appreciate the opportunity of making comment on the Public Consultation document: The South Australian Distribution Network: Directions and Priorities and submit herewith what I believe to be the future directions, priorities and strategies for power supplies on the Eyre Peninsula, the west coast and far north of South Australia, (the region) to be considered by ETSA Utilities as they prepare for the next regulatory period.

These naturally overlap with ElectraNet's foundation lines which unless significantly upgraded will negatively impact on your future plans and the future economic development of this vast area of the State. I will address the issues using the headings as set out in the Public Consultation Document August 2008.

Reliability and security of supply

Currently the region is serviced by an ElectraNet owned, 40 year old single 132 KV line between Whyalla and Port Lincoln with a spur to Wudinna that is totally inadequate to provide for its future development. The smaller lines I believe are owned and maintained by ETSA Utilities. There are two leased diesel turbines that provide backup power for the city of Port Lincoln and surrounds in case of emergency. Sources of power are from a 65 MW Cathedral Rocks wind farm south of Port Lincoln and another 70 MW Mount Millar windfarm between Cleve and Cowell

on the east coast, combined with power from the coal fired power station at Port Augusta.

I understand modelling has indicated that should the 132 KV line suddenly fail, the ripple effect on the grid could take out the whole State including Adelaide and because of this risk, windfarms are limited in the amount of green electricity they are able to pump into the system.

A major ring main is needed in the north west to provide stability to South Australia's power supply and enable the intakes of new green energy supplies and off takes of power particularly if mining companies are to come to fruition. I envisage that this ring main would go from Port Augusta to Olympic Dam (where the expansion is said to need another 400MW of energy), across to the mines near Cooper Pedy, down to Wudinna to pick up the wind energy from the west coast (one of the best wind sites in the world), over to Cleve substation and back up to Port Augusta.

Pressure also needs to be put on regulating bodies and governments for a second triangulated line that would provide another route for power supplies to Port Lincoln. This route should preferably be along the west coast that has very poor power supply at present, but where a number of mining developments are expected who will require more power. A 400MW wind farm is already planned along the west coast that could provide green electricity into the grid by connecting into the northern ring main.

No matter how reliable ETSA Utilities design, construction, maintenance and operational standards, procedures and practices are currently, they can be completely let down by the failure of the one inadequate ElectraNet line servicing the region. Much of the region has little or no power supplies at all.

Customer service and community

Thousands of new customers requiring services in a number of existing and new communities will be generated by the mining of the huge Gawler Craton mineralisation that underlies most of this region and other nearby mineral deposits.

Supporting growth in SA

New and upgraded infrastructure will be required and hundreds of new connections to the current network will be generated by the needs of the mining industries across the region.

Minotaur's kaolin mine near Streaky Bay is expected to start production late this year or early 2009 if the power and water issues can be resolved.

Iluka Resources has already indicated massive deposits of high grade mineral sands from their Jacinth-Ambrosia project will be exported over many years from a port

near Ceduna. Their board approved up to \$420 million in expenditure for the project in May this year. They are on schedule to commence mining in 2010 with full production of 300,000 tonnes per year of zircon in 2011. Currently the sands are to be transported to Western Australia for processing because of inadequate power and water in the region. They are also exploring for gold and uranium in the area. They are already about to build 115 new houses in Ceduna for their workforce.

Centrex Wilgerup hematite iron ore project near Lock is expected to begin mining in 2010/12. They have other tenements near Cowell and on Southern and Central Eyre Peninsula.

Adelaide Resources have iron ore projects north of Port Lincoln and at Warrambo with mineral sands, uranium and gold projects across the region. They have launched another company Iron Road to handle the deposit near Lock.

Ironclad Mining have an iron ore deposit near Kimba and there is currently a crew working 24 hours a day at Menninnie Dam site exploring for zinc, lead and copper and possibly iron ore close by.

Oxiana, IMX, Western Plains and a variety of other companies have iron ore and uranium deposits in the north between Cooper Pedy and Olympic Dam that will also need power and water.

Desalination plants to service the mining industry at Ceduna, Streaky Bay, Elliston, Port Lincoln and Port Augusta will need significant power.

Value adding of mineral sands near Ceduna, washing of the kaolin near Streaky Bay and value adding of the iron ore with the building of a pellet plant possibly at Cape Hardy near Tumby Bay will all need significant and stable power.

Addressing demand and capacity balance

A ring main is required to stabilise South Australia's power supply and enable input from more diverse generation sources including more than 400MW of wind energy already proposed on the west coast near Sheringa, solar power near Ceduna and Port Augusta and possibly hot rock power into the grid. To do this, a new link between Wudinna (probably along the Wirrulla to Glendambo road), through to mines near Cooper Pedy, and an upgrade of the lines on the existing routes, is required.

Desalinating water can be used to take up excess supply of power at night or when the wind is blowing. Graphite block and other technology, possibly using salt, can be used to hold excess energy as heat for use as required.

Addressing deteriorating network utilisation

With the building of a ring main in the north and a triangulation of the line on Eyre Peninsula, ETSA Utilities management of the power supply should be much easier. Currently the Mount Millar wind farm's green energy is, I understand, significantly underutilised but this would be overcome and the power could be safely put into the grid.

Renewing SA's ageing infrastructure

A new ElectraNet regulated line triangulating Eyre Peninsula's power supply would allow the old line to be renewed in manageable segments for both the provider and the ETSA Utilities customers.

Adapting to climate change

The northern ring main and the triangulation of the line on Eyre Peninsula will ensure that expected increase in severe weather events will be able to be managed more effectively and efficiently. In addition, the input of significant quantities of green energy from wind, solar and hot rock sources reducing the need for coal based energy sources that cause green house gases will be facilitated. The provision of new water from desalination will enable the growing of Mediterranean crops on fertile soils found across the region to feed people and create micro climate conditions thereby reducing dust and heat and enable green belts to be grown to reduce wind and water erosion and the risk of bushfires.

South Australia's Strategic Plan has six objectives: Growing Prosperity, Improving Wellbeing, Attaining Sustainability, Fostering Creativity and Innovation, Building Communities, Expanding Opportunity. Premier Mike Rann states that: "These objectives were based on the idea of 'creating opportunity' for our people, wherever they are, whatever they do. They were intended to build on our strengths, create new abilities, and ensure that our citizens and our state thrive." ETSA Utilities are an integral part of ensuring that these objectives are fulfilled for the huge region to the north and west of this State, which has languished for far too long. I would hope that governments both State and Federal will assist in developing the potential of this region by providing every assistance.

Gearing up to meet the challenge

I note your statements, "that ETSA Utilities has concluded that a new, broader agenda of action is required for the future.

"The recent pace of change in our 'standard' operating environment, compounded by the looming implications of climate change, infrastructure renewal, SA's new-found economic growth, proliferating new technologies and changes in labour markets, all point to the need to do things differently and better."

I am in contact with a company with a large overseas based partner who are currently building a ring main. They may well have the workforce with the 'new skills and capabilities' that have been identified as possibly being required to fulfil the forecast organisational workloads that you expect will "very significantly exceed the levels of the past" and help meet your "customers and your own expectations". They could possibly work in partnership with you or as contracted services should you need them; I can make an introduction if you are interested.

I hope that my submission assists in quantifying at least some of the 'broader agenda of action' that you have identified. I would be delighted to assist in any way I can to help you to fulfil your goals.

Yours sincerely,

A handwritten signature in black ink, reading "Liz Penfold". The signature is written in a cursive style with a large, looping initial "L".

Mrs. Liz Penfold MP
Member for Flinders