#### ACCC PUBLIC FORUM

#### South Australian

Transmission Revenue Cap 2003 – 2007/08

4 October 2002

### **Introduction**

- TransÉnergie's comments are limited to ElectraNet's request for additional capital expenditure to support the Riverland network.
- TransÉnergie supports the Commission's decisions to exclude from ElectraNet's capex program:
  - The \$34.9m capital expenditure required to construct the Robertstown to Monash 275kV transmission line component of Project No.1.36; and
  - The \$30.9m capital expenditure required to construct the section of SNI from the South Australian border to Monash (Project No. 1.52).
- However, TransÉnergie urges the Commission to reconsider the decision to defer, rather than exclude, the \$9.8m capital expenditure for the Monash substation component of Project No.1.36.

### **ElectraNet Project No.1.36**

- A \$44.7m Project of 2 Components:
  - New Monash Robertstown 275 kV transmission line (\$34.9m)
  - 275/132kV substation works at Monash (\$9.8m)
- Required to augment capacity to supply the Riverland area
  - Ongoing load growth in the Riverland
  - Ensure compliance with SA Transmission Code
  - ESIPC studies confirm major limitations do exist in the Riverland

# **ElectraNet Project No.1.36**

- TEA does not agree that a new transmission line is required to provide the necessary support to the Riverland. Earlier Meritec and ESIPC studies concluded that:
  - Murraylink (through a network support agreement) in combination with the existing network can provide the necessary support to the Riverland region.
- ESIPC has confirmed that Murraylink has sufficient power transfer capability to resolve the limitations until approximately 2007/08 and has therefore recommended:

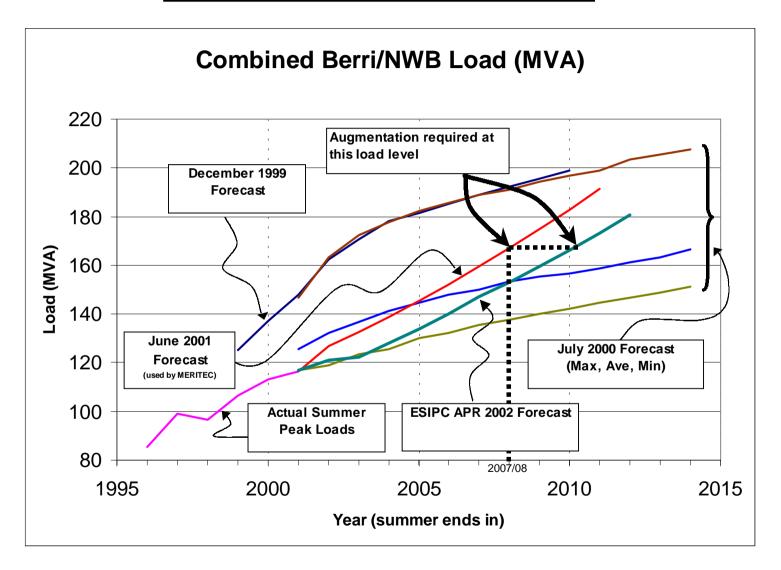
"a Riverland support facility is required to operate in conjunction with Murraylink in order to fully meet requirements."

- Meritec's studies concluded Murraylink could provide the necessary support until 2007/08, but incorrectly assumed it would be unable to enhance the network's capacity to meet voltage requirements after this time.
- TransÉnergie believes Murraylink can in fact provide the necessary support for an additional 5 years until 2012/13 because:
  - More recent load forecasts show lower load growth in the Riverland, and
  - Relatively low cost capital expenditure on shunt capacitors could defer the need to construct a new transmission line.

#### **Revised Load Forecasts**

- New load forecasts ESIPC's 2002 Annual Planning Review
  - Load forecasts have been adjusted downwards since Meritec's analysis for the original Riverland Review
  - Revised figures show the load levels that previously occurred in 2007/08 do not now occur until after the summer of 2009/10
  - Given peak load occurs in the summer, additional supply options are not expected to be required until the summer of 2010/11

#### **Revised Load Forecasts**



# **Shunt Capacitors**

- Unacceptable voltages should not require construction of new transmission lines
- The preferred solution should be to adopt Vencorp's approach of calling for 'Ancillary Service Contracts'
- Delivers SA consumers a lower cost solution able to provide voltage support to the Riverland by deferring the higher costs of a transmission line and substation upgrades for at least several years.
- TransÉnergie believes the installation of shunt capacitors for enhanced reactive support could defer the proposed ElectraNet works by a further 2 years.
  - Initial estimates indicate a deferral of only one year is worth in the order of \$2.9m, considerably more than the cost of a 100 MVar shunt capacitor

# **Shunt Capacitors**

• ESIPC has accepted that options other than new transmission lines are viable to enhance the Riverland's voltage requirements:

"The Planning Council also accepts that reactive compensation may supplement and prolong the life of a power system's assets."

"...Murraylink supplemented by a Riverland support facility is adequate for Riverland requirements until year 2007-08. At this time, the 132 kV lines cannot provide adequate voltage performance under the contingency of a Murraylink outage as both lines become heavy loaded and are close to their thermal limits. Nevertheless, the scope exists to provide some additional Riverland static capacitors thus extending the life of the 132 kV lines past year 2007/08 enabling adequate Riverland performance under network N-1 contingencies."

#### **Substation Works**

- Meritec proposed and the ACCC has accepted that:
  - ElectraNet's proposal for a new Robertstown to Monash 275kV transmission line should be excluded on the basis that TransGrid's proposal for diverting Monash is technically robust and less expensive;
  - The substation component of Project No. 1.36 should be allowed, but deferred until 2007-08, based on the use of Murraylink to support the network until then.
- TransÉnergie believe the substation works should also be excluded because:
  - As the Commission has noted in regards to ElectraNet Project 1.52, TransGrid is the proponent of SNI. Any additional substation works required to accommodate an SNI-Monash connection should form part of TransGrid's SNI costs and there is no basis for ElectraNet seeking the required funding.
  - The alternative TransGrid proposal is based on an extension of SNI connecting in and out of Monash substation but this connection component has not been approved as part of the SNI regulatory process.

# **ElectraNet Project No.1.52**

- Involves \$30.9m of capital expenditure to construct the section of SNI from the South Australian border to Monash substation.
- TransGrid is the proponent of SNI and the party who should seek regulated funding for the project should it proceed.
- Irrespective of any arrangements that TransGrid and ElectraNet may have reached between themselves, ElectraNet does not replace TransGrid as the proponent of any part of SNI and therefore has no basis for claiming any regulated funding associated with SNI.

# **Conclusions(1)**

- Ongoing load growth in the Riverland, albeit lower than originally forecast, still means limitations in the adequacy of supply need to be addressed quickly.
- Murraylink has the transfer capability (through a network support agreement) in combination with the existing network to provide the necessary level of support to the Riverland until at least 2007/08.
- Revised load growth forecasts and minimal capital expenditure for reactive support could extend this capacity by a further 5 years until 2012/13.
- A costly new transmission line to Robertstown and associated substation works can be deferred until the capacity of Murraylink and the other network enhancements has been fully utilised.
- TransGrid is the proponent of SNI and ElectraNet should not seek funding in its revenue cap application for capital expenditure works associated with SNI.
- SNI has not been approved pursuant to the Regulatory Test to connect into and out of Monash.
- In the absence of either the ElectraNet 275kV transmission line to Robertstown or the approved connection of SNI at Monash, there is no new supply injection at Monash, thereby negating the need for any substation upgrade works.

# **Conclusions(2)**

- On the basis of the conclusions above, TransÉnergie recommends that in it's final determination, the Commission reaffirm its decisions in the draft determination to exclude from ElectraNet's capex program:
  - The \$34.9m capital expenditure required to construct the Robertstown to Monash
    275kV transmission line component of Project No.1.36; and
  - The \$30.9m capital expenditure required to construct the section of SNI from the South Australian border to Monash (Project No. 1.52).
- Furthermore, TransÉnergie also urges the Commission to reconsider the decision to defer, rather than exclude, the \$9.8m capital expenditure for the Monash substation component of Project No.1.36 on the basis that no new 275kV transmission lines have been approved for connection at Monash.