## Powerlink Feedback - AER Draft Economic Benchmarking Report

22-Aug-14

Topic	Page Ref	Issue	Suggested Action by AER
System capacity	ElectraNet Non-financial BoP, p42	ElectraNet has included generator step-up transformer capacity in variable TPA0504 while other TNSPs have not. This will overstate ElectraNets performance for any metrics that include the system capacity measure.	Consider asking ElectraNet to resubmit data excluding generator step-up transformer capacities and redo calculations
Connection points	ElectraNet	ElectraNet have recorded CP voltage level on the basis of the high voltage side of the transformer supplying the CP. Powerlink and others have reporting the CP voltage as being the voltage at the asset boundary. Connection point voltage are weighted by their voltage level (to reflect relative importance) and this affects results in figure 10 of the report.	AER to clarify the interpretation of connection point that it wants TNSPs to adopt. The Rules definition is the agreed point of supply which is typically the asset boundary between the TNSP and the customer.
Connection points	SPAusNet	AER (or consultants) have derived CP numbers for Victoria from AEMO MLF reports. The number of connection points appears abnormally high.	AER to review Victorian data consistant with methods described in other TNSP BoPs.
Output and input measures	AER p12	A key input is increase in maximum demand as well as the actual maximum demand itself	Consider whether maximum demand, increase in maximum demand or network capacity should be used as an output
Output and input measures	AER p12	Network outputs should also include circuit line length. Circuit line length is used by economic insights in their MTFP analysis.	Include circuit line length as a network output. Circuit line length The circuit line length is the length in kilometres of lines, measured as the length of each circuit span between poles and/or towers. This represents the distance over which transmission networks are required to transport electricity between generators and downstream users and varies to route line length as sometime two circuits are installed on a transmission tower.
Input costs	AER p 19	WACC	Review Table 2 information in relation to WACC. Provide further clarification if required.  If it is the same WACC as stated on p24 why is Powerlink's Asset Cost lower than Transgrid. Powerlink's asset cost is always above Transgrid's in Figure 5.

Graphs	AER p25	Asset costs - no indication as to network performance for this measure.	Provide further information to clarify network performance under this measure. Figure 5 presents the total asset cost of the transmission networks. This is much less volatile than the capex over the period. Further, asset costs generally reflect the number and value of assets in place.[1] This is illustrated by the larger transmission networks having larger asset costs. The increase in asset costs overtime is due to the transmission networks capital expenditure to augment or replace the network. For example the increase in asset costs for Powerlink is driven by Powerlink's increased capex from 2008.
Graphs	AER p28	Total cost/kV - no indication as to network performance for this measure.	Provide further information to clarify network performance.  Figure 10 shows the total cost per kilo volts (KV) of entry and exit points. This measure favours the more dense transmission networks rather than the ones which have to transport electricity larger distances. Under this measure, Powerlink has the highest costs per entry and exit point voltage of all the transmission networks.
Graphs	AER p29	Another input to use	Suggest adding another graph of Total cost per km of transmission circuit line length. Circuit line length is favoured by Economic Insights as it provides an alternative view as some networks have double circuit lines.
Graphs	AER p 31	Needs clarification on network performance for this measure.	Provide information/clarification on what the chart shows.  Total cost per MW of non-coincident maximum demand is presented in Figure 12. This measure favours the more dense transmission networks rather than the ones which have to transport electricity larger distances. The ordering of TNSPs under this measure differs to the other PPIs. Under this measure TasNetworks has the highest total cost per MW of maximum demand and TransGrid has the lowest.
Graphs	AER p35	Commentary about TasNetworks and Electranet in Fig 16. Is this statement correct or appropriate in the context of MTFP? ie. the graph appears to show a similar rate of change across all TNSPs. Is the AER's comment reflecting that TasNetworks and ElectraNet start from higher points rather than the rate of change?	Modify the commentary as appropriate.

AER P40 onwards

Multiple charts without explanations.

Include some explanation/commentary about the charts. Could be along the lines of outcomes where measures are within or outside a TNSPs' control. For example, where a TNSP has contol of his asset build and maintance, OPEX is decreasing, eg Opex per MVA or km installed is falling.

Where a TNSP has less control of the inputs eg energy used, the OPEX costs are

Where a TNSP has less control of the inputs eg energy used, the OPEX costs are naturally increasing, ie. as would be the case in a declining economic environment.