



Ref.

28 October, 2015

Mr Warwick Anderson
General Manager – Network Finance and Reporting
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Lodged by email: AERInquiry@aer.gov.au

Dear Warwick

AER Reference: D15/100555
2015 Draft Annual Benchmarking Report – Electricity TNSPs

Powerlink provides further information below in response to the AER's draft 2015 Annual Benchmarking Report for Transmission Network Service Providers (TNSPs). This submission further supports Powerlink's submissions to the AER on 6 February 2015, 16 September 2015 in relation to operating expenditure benchmarking and 12 October 2015.

In previous correspondence, Powerlink has communicated to the AER its concerns regarding inconsistencies in the data the AER is using for the Annual Benchmarking Report for TNSPs. The two specific data items that Powerlink has the most significant concerns with are:

- connection point voltage (kV); and
- downstream transformer capacity (MVA).

When these data items are used by the AER to develop and report on Partial Productivity Indicators (PPIs) Powerlink considers the current data sets produce inaccurate and misleading results.

Connection point voltage (kV)

Powerlink appreciates the steps the AER has taken to address some of the data inconsistencies for this parameter. The AER has moved to ensure that multiple DNSP connections to a single transmission connection point are now treated as a single connection at that connection point. This change helps remove the anomaly that exists whereby the industry structure in Victoria results in multiple DNSPs connecting to the transmission

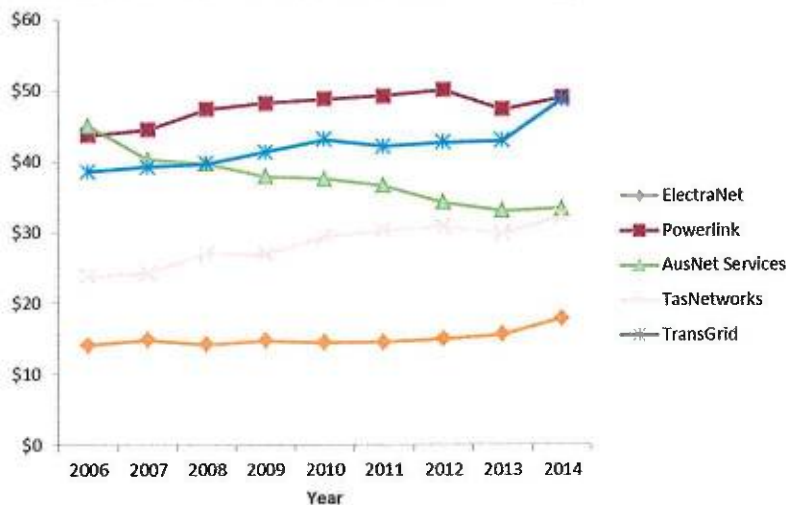
33 Harold Street, Virginia
PO Box 1193, Virginia, Queensland 4014, Australia
Telephone: (07) 3860 2111 Facsimile: (07) 3860 2100
www.powerlink.com.au

network within the Melbourne metropolitan area. In other jurisdictions there is little or no overlap between DNSP connections to the transmission network.

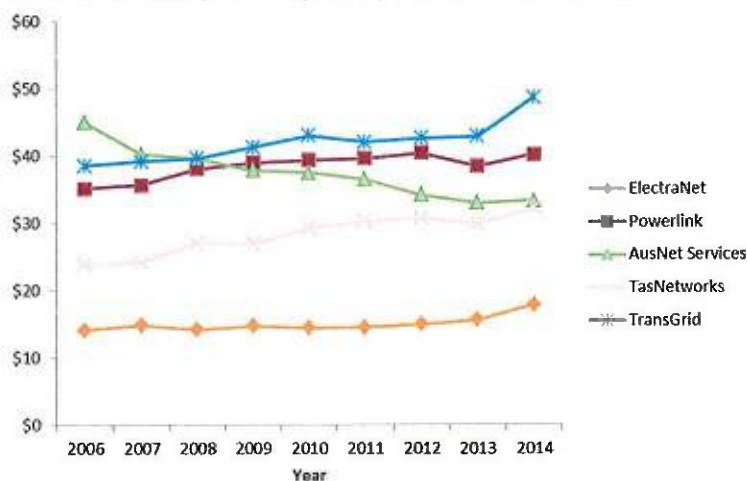
Notwithstanding this welcome change, Powerlink remains concerned that the AER process does not ensure all TNSPs are adopting a common interpretation of the AER's data requirements in this area. Powerlink has examined each TNSP's Basis of Preparation documentation and confirmed that all TNSPs appear to be determining the number of connection points using the AEMO Marginal Loss Factor reports. However Powerlink has identified at least one TNSP that is then taking the connection point voltage to be the high voltage side of the connection transformer rather than the voltage identified in the MLF report.

To understand the impact of this difference in approach Powerlink has recalculated its connection point data to apply the higher voltage for connection points where Powerlink owns the connection point transformer. While this may not capture all of the differences in approach the effect of this change is illustrated in the figures below.

Total user cost per entry/exit point kV – Original data



Total user cost per entry/exit point kV – Updated data



Given the difference in interpretations that have been adopted Powerlink encourages the AER to more clearly articulate what this parameter is intended to measure and work with TNSPs to develop a consistent methodology for providing the data.

Downstream transformer capacity (MVA)

Powerlink remains concerned that the AER has not acted to correct for the clear differences in industry structure between jurisdictions that have driven the reported results. Powerlink has previously advised the AER that the industry structure in Queensland means that much of the downstream (<220kV) transformer capacity in Queensland is not owned by Powerlink and is not located at or adjacent to the connection point with the DNSP networks. In the 2014 Annual Benchmarking Report, when discussing the Total cost per MVA of connection point capacity PPI, the AER stated that "Powerlink performs poorly under this measure with a very high total cost per MVA of connection point capacity. This may be because Powerlink has a significant number of connections to DNSP networks that are through step-down transformers". The AER has repeated these same words in the draft 2015 Annual Benchmarking Report.

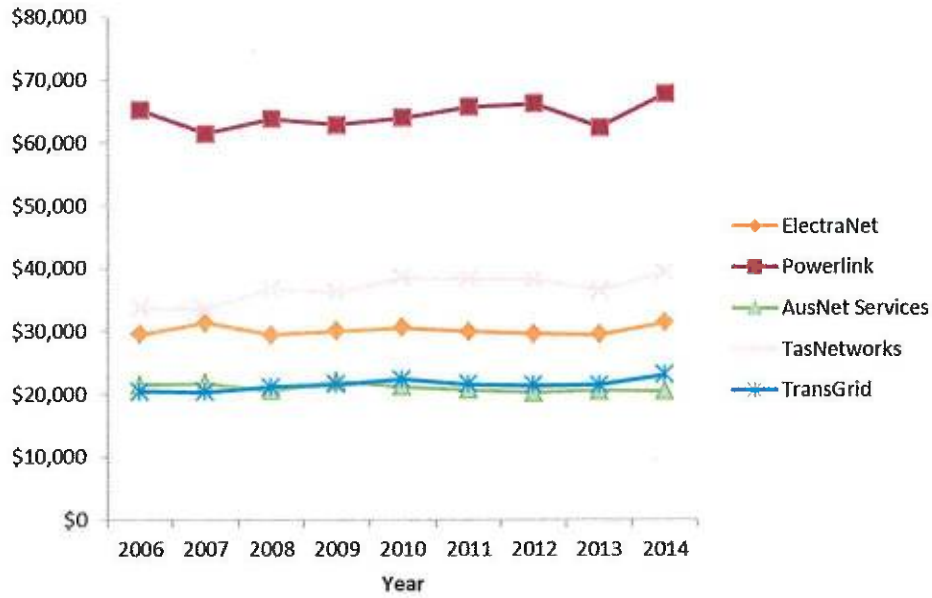
As the AER has not indicated a preparedness to adapt its analysis to the various jurisdictional differences that clearly exist, Powerlink has adjusted its own data preparation methodology to ensure the data is presented on a more like-for-like basis. To do this, Powerlink has developed a methodology to allocate some of its transformer capacity that has previously been reported against transmission substations to the transformer capacity at connection points to DNSPs and directly connected end-users.

This methodology apportions the upstream transformer capacity in proportion to the number of connections to the rest of the Powerlink network and connections to DNSPs and end-users. For example:

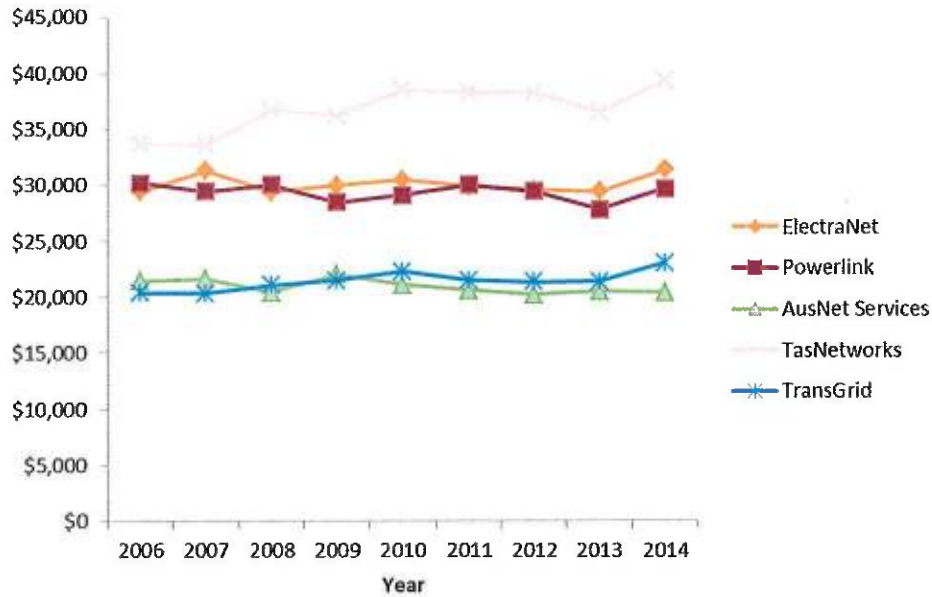
- if a 275/132kV substation supplies only DNSP connections then 100% of the 275/132kV transformer capacity is reallocated; and
- if 50% of the connections to the 132kV bus are DNSP connections then 50% of the transformer capacity is reallocated.

The effect of this new methodology is illustrated in the figures below.

Total user cost per transmission capacity – Original data



Total user cost per transmission capacity – Updated data



Powerlink intends to submit its Economic Benchmarking RIN data for 2014/15 based on this new methodology for transformer capacities and urges the AER to apply historical data based on the new methodology in finalising the 2015 Annual Benchmarking Report.

To assist the AER and other stakeholders in understanding the changes described in this letter, Powerlink has also provided details of the modified connection point voltage data and the transformer capacities derived using the updated methodology in the attachment to this letter. This attachment also includes a complete set of charts for the various Partial Productivity Indicators (Opex, Asset Cost and Total Cost) for each of these parameters (Connection point kV and transformer MVA) for both original and updated data.

If you have any further questions in relation to this matter, please contact Jennifer Harris.

Yours sincerely,



Garry Mulherin

EXECUTIVE MANAGER, INVESTMENT AND PLANNING

Enquiries: Jennifer Harris
Tel. (07)3860-2667
Email: jharris@powerlink.com.au

Table 3 – Powerlink transformer capacity, original Data

| Variable | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| TPA0501 | 15,936 | 16,686 | 18,186 | 21,160 | 21,885 | 21,990 | 23,620 | 25,005 | 25,705 |
| TPA0502 | 5,277 | 5,970 | 6,443 | 7,143 | 7,488 | 7,608 | 7,674 | 8,339 | 8,219 |
| TPA0503 | 525 | 585 | 585 | 600 | 479 | 479 | 479 | 479 | 479 |
| Powerlink Total | 21,738 | 23,241 | 25,214 | 28,903 | 29,852 | 30,077 | 31,773 | 33,823 | 34,403 |
| TPA0504 | 2,559 | 2,619 | 2,699 | 2,910 | 3,158 | 3,158 | 3,446 | 3,454 | 3,633 |
| TOTAL | 24,297 | 25,860 | 27,913 | 31,813 | 33,010 | 33,235 | 35,219 | 37,277 | 38,036 |

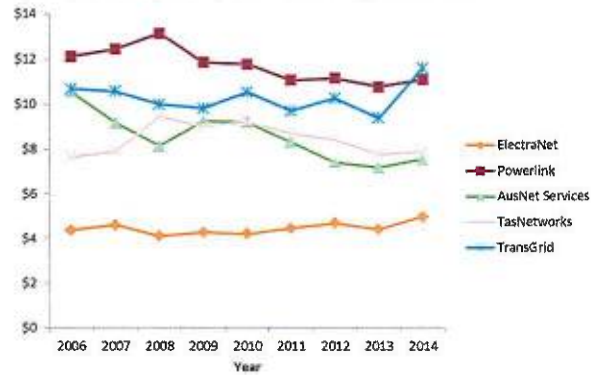
Table 4 – Powerlink transformer capacity, updated data based on new methodology

| Variable | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| TPA0501 | 6,062 | 6,482 | 7,032 | 8,061 | 8,325 | 8,388 | 8,861 | 9,433 | 9,595 |
| TPA0502 | 14,335 | 15,326 | 16,627 | 19,059 | 19,685 | 19,834 | 20,952 | 22,304 | 22,686 |
| TPA0503 | 1,341 | 1,434 | 1,556 | 1,784 | 1,842 | 1,856 | 1,961 | 2,087 | 2,123 |
| Powerlink Total | 21,738 | 23,241 | 25,214 | 28,903 | 29,852 | 30,077 | 31,773 | 33,823 | 34,403 |
| TPA0504** | 2,351 | 2,406 | 2,480 | 2,674 | 2,901 | 2,901 | 3,166 | 3,173 | 3,338 |
| TOTAL | 24,089 | 25,647 | 27,694 | 31,577 | 32,753 | 32,978 | 34,939 | 36,996 | 37,741 |

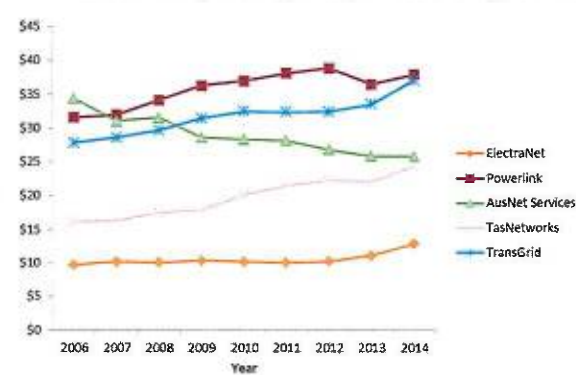
* Numbers may not add due to rounding;

** Where Powerlink's new methodology includes capacity to supply directly connected end-users any capacity previously reported under variable TPA0504 has been removed. This ensures no double-counting occurs.

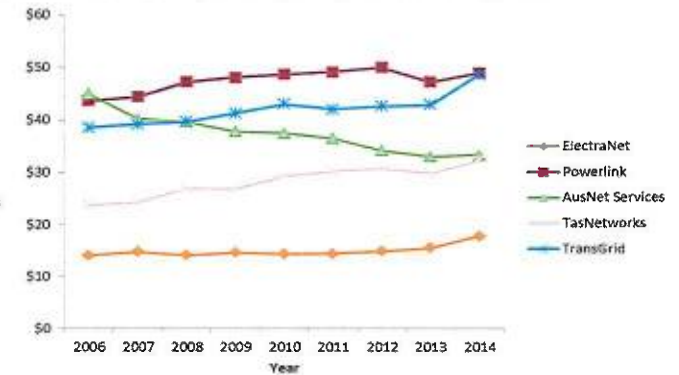
Opex per entry/exit point kV – original data



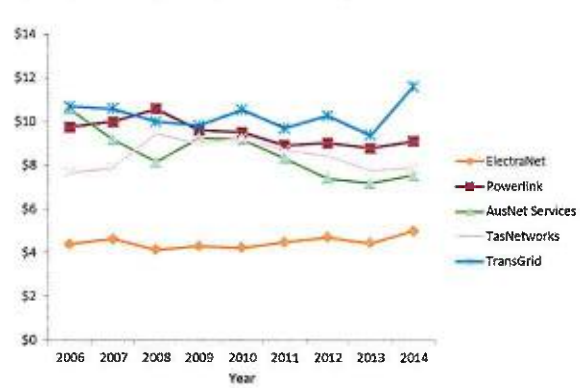
Asset cost per entry/exit point kV – original data



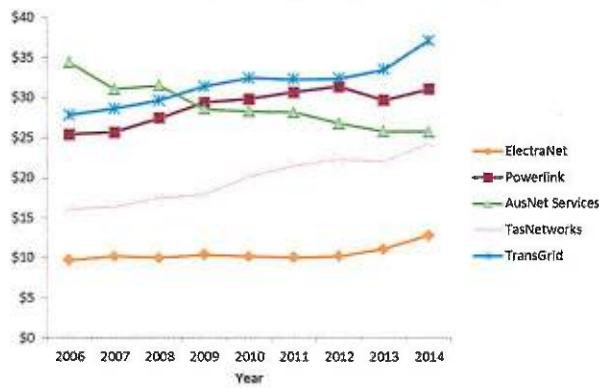
Total cost per entry/exit point kV – original data



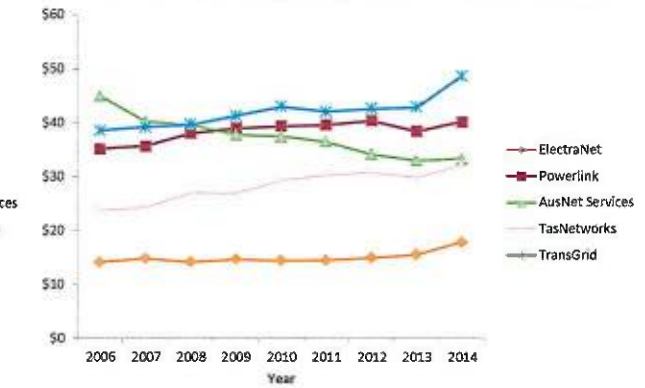
Opex per entry/exit point kV – updated data



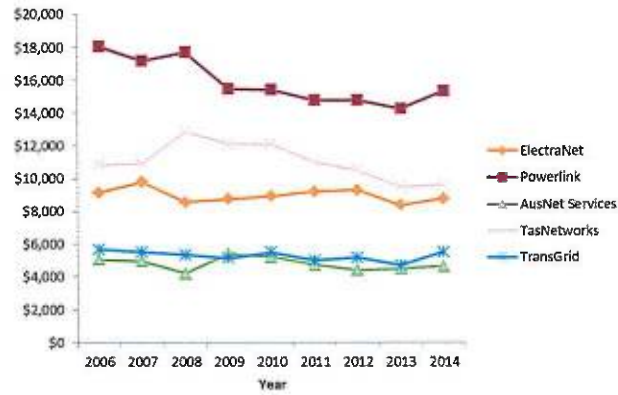
Asset cost per entry/exit point kV – updated data



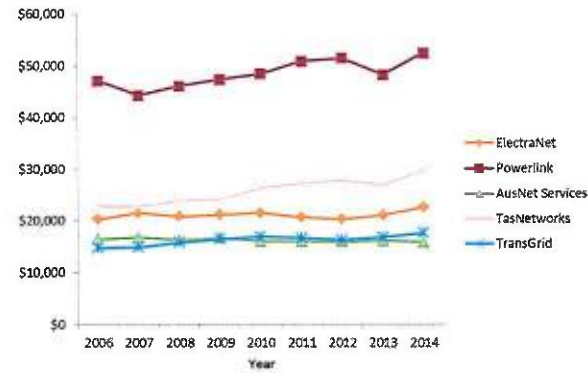
Total cost per entry/exit point kV – updated data



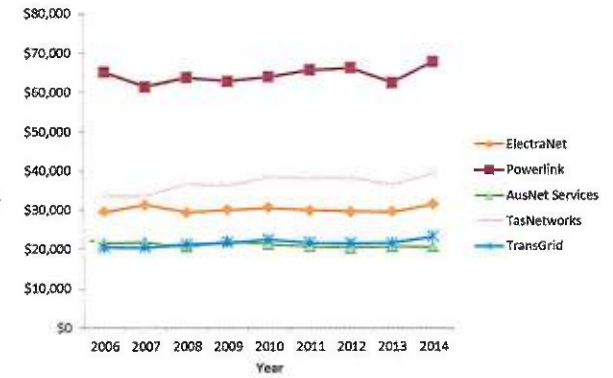
Opex per transmission capacity – original data



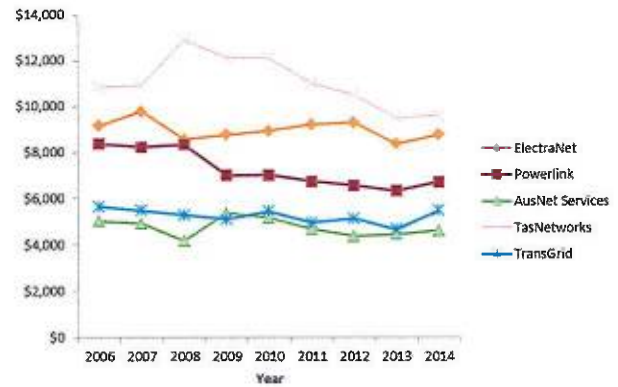
Asset cost per transmission capacity – original data



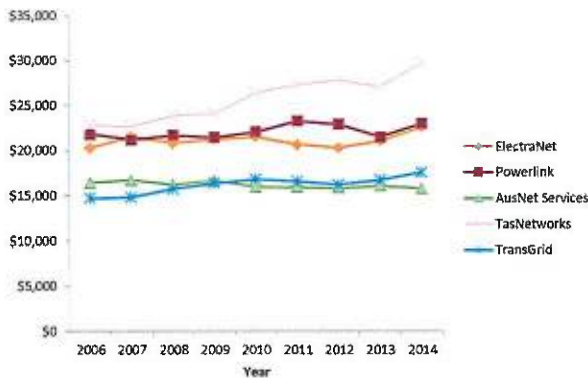
Total cost per transmission capacity – original data



Opex per transmission capacity – updated data



Asset cost per transmission capacity – updated data



Total cost per transmission capacity – updated data

