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Dear Sebastian

2016 Draft Annual Benchmarking Report – Electricity TNSPs

Powerlink provides the information below for the AER's consideration in response to the AER's Draft 2016 Annual Benchmarking Report for electricity transmission network service providers (TNSPs).

Background

Powerlink recognises the importance of benchmarking and supports the development and application of a robust benchmarking framework.

Powerlink has previously raised two issues regarding the AER's underlying approach to the development of its Annual Benchmarking Reports:

- further work is required to achieve greater consistency of input data provided by each TNSP for benchmarking purposes; and
- the AER's analysis of benchmarking results does not fully take into account operating environment factors particular to each network business that drive differences in expenditure.

With regard to the consistency of input data, Powerlink has made a number of public submissions to the AER[1] which flagged a need for greater scrutiny and alignment in the preparation of input data. Powerlink has been working with other TNSPs to achieve greater alignment. However, the AER's Draft Annual Benchmarking Report for 2016 is based on data submitted in October 2015 for the 2014/15 year and does not yet have a consistent set of input data. Powerlink also notes that in a number of instances the data used as input to the benchmarking analysis is materially different to the RIN data published on the AER's website. This impacts the ability of businesses to validate the AER's analysis and reduces transparency. The most significant variances are in the revenue data for AusNet Services and energy throughput for TransGrid.

[1] http://www.aer.gov.au/system/files/Powerlink%20submission%20on%20draft%20transmission%20annual%20benchmarking%20report%20%28submission%202%29%20-%2028%20October%202015.pdf

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In relation to operating environment factors, Powerlink considers that its low load and energy density (i.e. the amount of load or energy served as a function of the number or scale of assets needed to supply electricity) has a material impact on its benchmarking performance. Powerlink's transmission network must traverse the longest distances between generation and load centres in the NEM. Its network also serves the geographically largest and sparse customer base of any transmission business. Hence, Powerlink will invariably be required to make higher capital investments to transport electricity over longer distances compared to other TNSPs.

In addition, Powerlink considers that differences in capitalisation policy between network businesses are likely to distort relative comparisons of operating expenditure efficiency. The benchmarking approach adopted by the AER does not explicitly recognise annual capital expenditure. As such, businesses that capitalise a greater proportion of their total expenditure will invariably perform better under the AER's total operating expenditure benchmarks and related productivity measures. An analysis of historical RIN data highlights that Powerlink allocates a greater portion of its controllable operating expenditure to refurbishment activities compared to most other TNSPs. In its recent Draft Decision for Powerlink, the AER also recognised that differences in capitalisation policy creates a fundamental limitation on the application of benchmarking for determining the efficiency of base opex or an alternative opex forecast.[2]

In its Annual Benchmarking Reports, Powerlink considers that the AER should provide greater context regarding key operating environment factor differences and the limitations this can place on making relative comparisons between TNSPs.

2016 Draft Report

Powerlink provides the following information for the AER's consideration. Many of these items were raised in Powerlink's 2018-22 Revenue Proposal, which was lodged with the AER in January 2016.

Overall productivity growth (Multilateral Total Factor Productivity - MTFP)

The AER measures overall productivity growth using a Multilateral Total Factor Productivity (MTFP) specification. The MTFP is a ratio of the annual input of capital and operating expenditure (with physical measures of the size and capacity of a transmission network used as a proxy for capital expenditure) against a basket of outputs delivered to network users (including energy consumption, maximum demand, circuit kilometres of transmission line, voltage weighted entry/exit points and reliability).

In both its 2014 TransGrid Transmission Determination and 2015 Draft Annual Benchmarking Report for Transmission, the AER emphasised that it is not particularly confident in the specification used for the MTFP[3] and that caution should be exercised when interpreting the MTFP results. As with any type of benchmarking, it is important to recognise that there are a very small number of TNSPs under comparison (five) and each operates in a different environment.

In its recent Draft Decision for Powerlink the AER and its consultant, Economic Insights, also acknowledged the limitations of its output specifications, small sample

2 Powerlink transmission draft determination 2017-22 (Attachment 7), September 2016, p.15-16

[3] MTFP uses an annual user cost of the regulated asset base, which includes both a return on and of capital investment. Hence the MTFP specification is largely driven by the historical investments made by a network business.

size and the need to gain a better understanding of the impact of operating environment factors.[4]

Notwithstanding these limitations, Powerlink acknowledges that its MTFP performance has still fallen between 2010 and 2015. Powerlink considers this is primarily as a result of actual demand and energy consumption from its network reducing compared to that forecast at the time significant capital investments were made.

Powerlink notes the material improvement in MTFP results achieved by TasNetworks in the most recent year, which has affected the relative performance of all other transmissions networks. In 2014/15 this appears to have been driven in large part by a 24% reduction in operating expenditure from 2013/14. This is also a similar amount lower than the operating expenditure allowance for 2014/15 in the AER's Revenue Determination that was made on 30 April 2015.

Since the early 2000s, Powerlink made significant capital investments to augment its network in response to demand growth, which increased the annual input of capital captured in the MTFP. Outturn demand and energy consumption in more recent years has not increased in line with forecasts (having in fact fallen) and hence outputs measured by the MTFP have not increased in proportion to the historic capital inputs. This has resulted in Powerlink's MTFP score reducing in recent years. While most TNSPs also experienced a significant increase in capital inputs over this period, Powerlink's performance was exacerbated by the long distances from where generation is located to where the load growth was experienced, which is characteristic of the Queensland geography. This required greater capital investment than if the same need for network capacity were delivered over shorter distances. In essence, the AER's MTFP measure does not fully account for differences in operating environment.

Capital expenditure Partial Factor Productivity.

Powerlink notes that since 2013/14 its capital productivity has stabilised under the AER's measure, which reflects a significant curtailment of its actual capital expenditure in an environment of flat or falling demand growth. As noted above, Powerlink expects its capital productivity to remain stable or further improve over the next regulatory period based on reductions in its forecast capex and the continued ramp up of LNG demand and energy consumption in the Surat Basin. This will also be dependent on forecast demand and energy consumption across the balance of Queensland remaining consistent with Powerlink's current forecasts.

Operating expenditure Partial Factor Productivity

The AER's draft 2016 Annual Benchmarking Report shows that Powerlink's operating expenditure productivity has declined during 2014/15. This can be attributed to increases in operating expenditure related to:

- business restructuring costs, specifically redundancy related costs associated with reducing resources within the business in line with workload commensurate with a flat or falling demand forecast outlook; and
- the write-off of expenditure on early capital project development works no longer required due to reduced demand growth.

[4] Powerlink transmission draft determination 2017-22 (Attachment 7), September 2016, p.15-16 and Economic Insights Memorandum on Review of Submissions on Powerlink's base opex, memorandum to the AER dated 14 July 2016.

From a benchmarking perspective, Powerlink also notes that its operating expenditure productivity is generally lower than most other network businesses in relative terms. In its 2018-22 Revenue Proposal, Powerlink explained that this is due to the AER's benchmarking specifications not taking into account important operating environment factors, particularly load and energy density, population density and capitalisation policy[5]. When these factors are taken into account, Powerlink and its independent consultants (Huegin) considers that its operating expenditure benchmarking performance is comparable to its peers.

Notwithstanding this, Powerlink has recognised that its operating expenditure performance can still be improved. In its Revenue Proposal, forecast operating expenditure for the 2018-22 regulatory period has been reduced by 7% in real terms compared to actual expenditure in the current regulatory period.

AER Draft Determination

In late September 2016, the AER released its Draft Decision on Powerlink's 2018-22 Revenue Proposal. Having had regard to the information provided in Powerlink's proposal and conducted its own review and assessment of the efficiency of Powerlink's forecast expenditure, including benchmarking, the AER accepted Powerlink's forecast operating expenditure for the next regulatory period.

Partial performance indicators

Total cost per kilovolt (kV) of entry and exit points

In its draft 2016 Annual Benchmarking Report, the AER notes that *'(i)n 2015, Powerlink continues to have the highest cost per entry and exit point voltage of all the transmission networks'.*

The AER notes that this measure potentially favours more dense transmission networks. Powerlink agrees with this view, noting that it has the lowest connection density of any network business and hence is required to build, maintain and operate more transmission network to transport electricity to a geographically larger (and more sparse) customer base. It is also the case that this is a measure where inconsistency between TNSPs in the input data leads to material variations in results.

Total cost per km of transmission circuit length

The AER also state that '*Powerlink and TransGrid have the highest cost per kilometre of circuit length*'. Powerlink's declining performance under this measure since 2013 has largely been a function of recent increases in operating expenditure, discussed in an earlier section. This is expected to continue while resource level adjustments are being implemented over the years from 2014/15 to 2017/18. However, forecast total operating expenditure accepted under the AER's recent Draft Decision incorporates base year efficiency adjustments and significant productivity growth which is expected to drive improvements in this measure.

Greater TNSP Alignment

TNSPs recognise the need to achieve greater consistency in the preparation of the Regulatory Information Notice (RIN) data submitted to the AER each year, which is used for benchmarking and other purposes. To assist the AER and other stakeholders in this regard, TNSPs have worked together to improve alignment in

[5] Powerlink 2018-22 Revenue Proposal, January 2016, p.28

data prepared, independently reviewed and lodged as part of their Economic Benchmarking RIN returns for 2015/16. This has occurred in relation to:

- energy delivered to other connected transmission networks (TOPED0101) – which reflects gross exports + gross imports;
- disaggregated RAB values (TRAB08) – which shows the average of opening and closing values each year; and
- installed transformer capacity – where Powerlink and TransGrid's methodology for assigning installed transformer capacities owned by the TNSP to DNSP connection points is aligned.

TNSPs will continue to work together and with the AER to improve the consistency of underlying benchmarking data and to develop benchmarking measures that are more meaningful to TNSPs' operations.

If you have questions in relation to this submission, please contact Jennifer Harris.

Yours sincerely,

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