TRANSPOWER PROCESS FRAMEWORK AND APPROACH

FOR SETTING EXPENDITURE ALLOWANCES, QUALITY STANDARDS AND INDIVIDUAL PRICE PATH FOR 2020 TO 2025

Vector comments

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Transpower process, framework and approach paper

The Commission note the "focus areas" are the following:

- Setting appropriate expenditure allowances
- Asset health and criticality
- Transpower's engagement with customers
- Revenue linked performance measures
- Revenue and pricing impacts

We have provided our comments relevant to the Commission's "focus areas" but tackle the important issues around transmission regulation for the sector.

We believe it is important to address the high level issues we have raised when assessing Transpower's proposal for RCP3 as they are significant for the sector.

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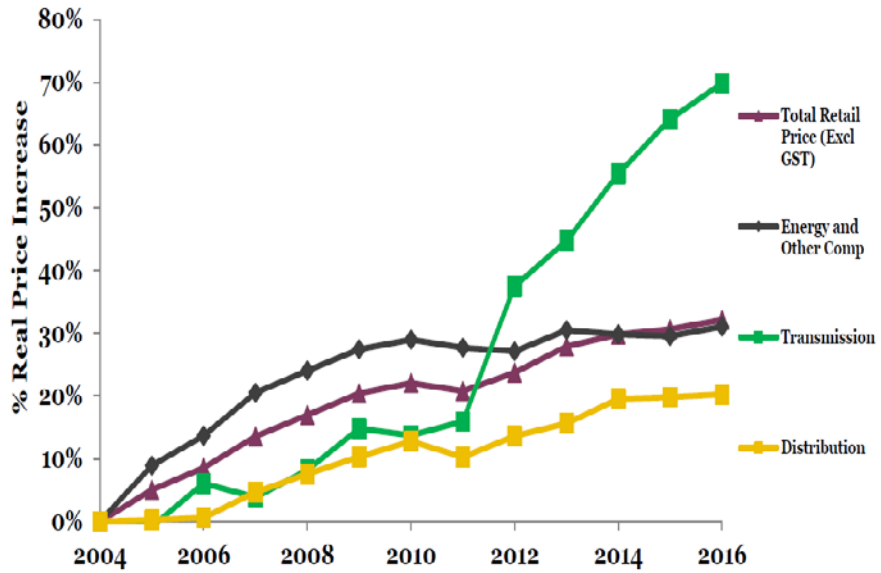
FOCUS AREAS OF THE COMMISSION – REVENUE AND PRICING IMPACTS

- The top of the Commission's mind for RCP3 should be how recent sustained transmission price increases have impacted customers

- Transmission prices have grown considerably over the last 10 years and have had a dramatic impact on electricity affordability.
- **Graph 1** shows in real dollars the price changes for each major electricity supply chain element.
- This graph highlights that **transmission prices** have increased year-on-year since 2010 at a rate of 10% or greater.
- By contrast to all the other supply chain elements the increase in transmission charges has been the most significant.
- In this submission we note a considerable component driving transmission charges can be attributed to how Transpower's building block revenues are determined, which is different to the approach adopted for EDBs.

Graph 1: PwC decomposition of price changes for each major electricity supply chain element

Figure 3: Real price increase by component of total delivered electricity charges (excl. GST) for a domestic consumer using 8,000kWh (%) 2004 - 2016

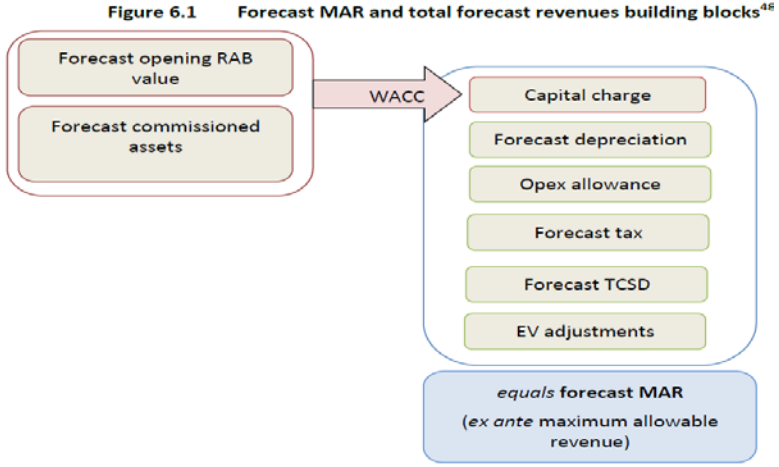


PRICING AND REVENUE IMPACT – REVALUATION INCOME

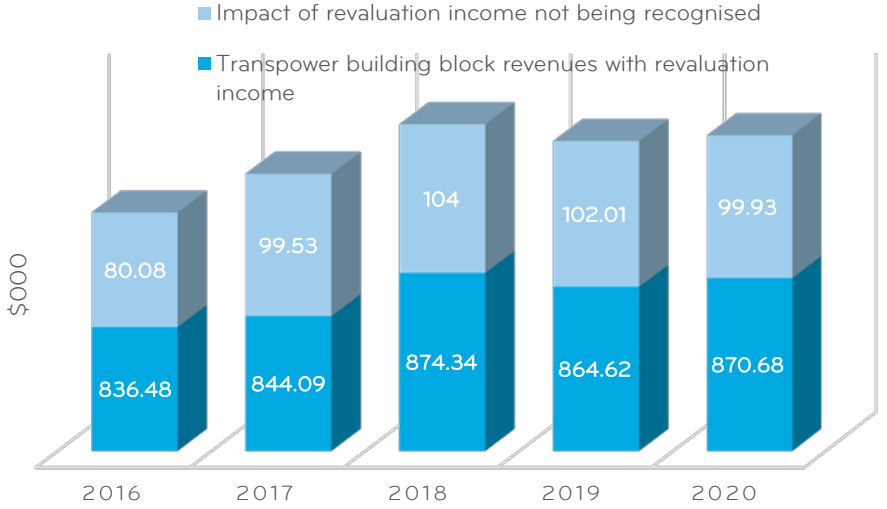
- The difference between the EDB and Transpower cashflow profile is circa $480M collected by Transpower over RCP2

- A key difference between the way Transpower's revenues are determined for its RCP and how EDB revenues for the DPP/CPP are determined is the treatment of "revaluations".
- Transpower does not recognise "revaluation income" (from the change in value of its RAB) in its building block allowable revenues. The Commission's paper highlights the building blocks used to determine Transpower's RCP revenues which we have shown in **Infographic 1.**
- In contrast the Commission **deducts** "revaluation income" off the revenues for EDBs for a DPP or CPP.
- The approaches for Transpower and EDBs are equivalent in NPV=0 terms. Accordingly, there is no justifiable reason for Transpower's RCP revenue profile not to be determined on the same basis as EDBs.
- We estimate the magnitude of the cashflow for Transpower from the different approach was circa **$480M** over its RCP2 period. This is shown in **Graph 2**. Transpower's cashflow profile is a major contributor to the price increases shown in **Graph 1 (on the previous slide)** as it allows the forward recovery of commissioned assets which is not entitled in a DPP.
- This is an extraordinary difference in cashflows between transmission and distribution networks and needs to be aligned. The cost imposed from transmission charges on customers could be significantly lower especially given the government's concerns on fairness and affordability.

Infographic 1: Transpower building blocks



Graph 2: Transpower RCP 2 Revenue with revaluation impact quantified



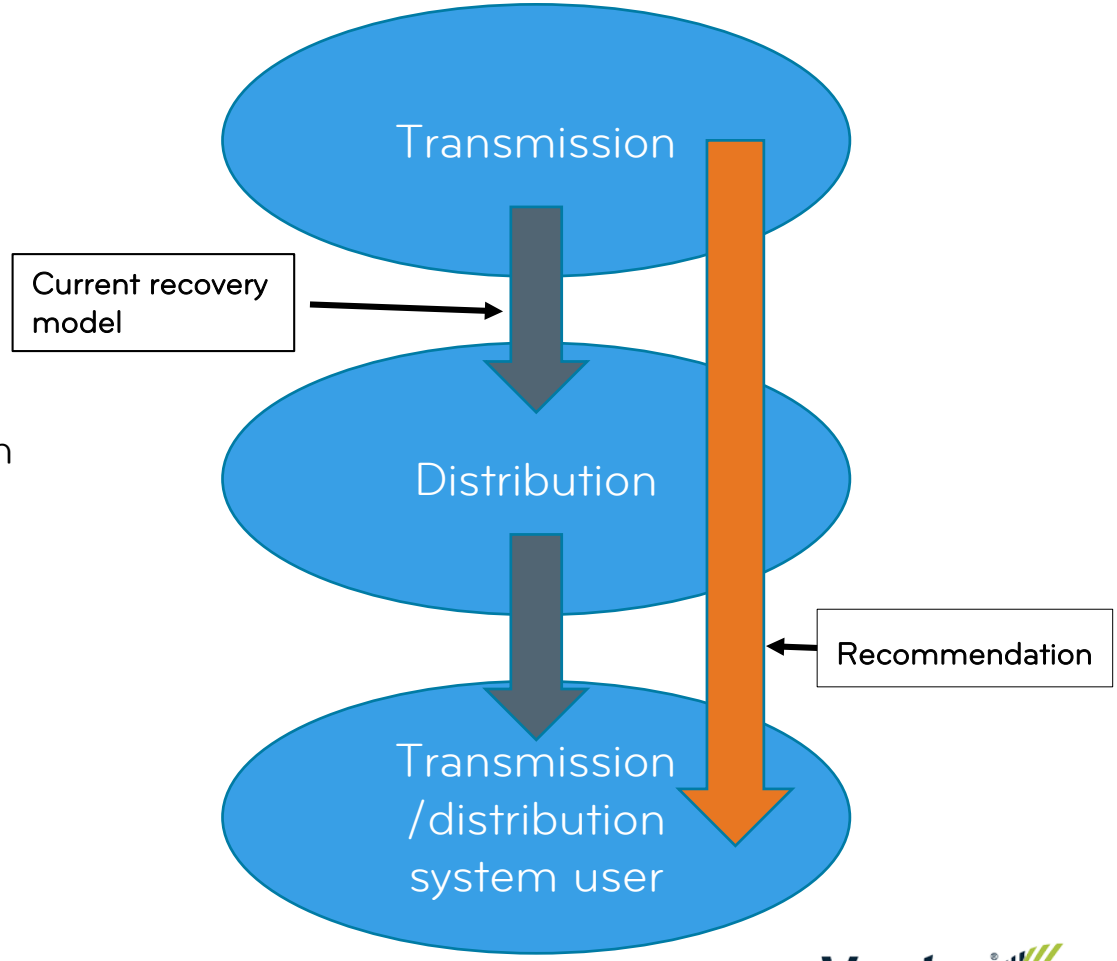
Source: ComCom Nov 2014 Transpower RCP2 Decision and applying revaluation rates used for setting revaluation income in DPP2 for EDBs

FOCUS AREA OF THE COMMISSION – REVENUE AND PRICING IMPACTS

- Transmission prices need to be transparent and Transpower needs equivalent exposure as other supply chain participants for credit risk

- The Commission note the importance of creating transparency around Transpower's forecast expenditures. Yet the rigor for achieving this is lacking.
- It is unsettling that pricing effects on decisions for Transpower's RCP3 will be discharged as part of the EDB DPP reset in 2019. This appears to be due to the obligation on EDBs to pass-through transmission charges.
- We believe it is unacceptable that Transpower faces no revenue recovery risk whilst EDBs do. This should be changed. We show the current model which limits Transpower's credit exposure and our recommendation in **infographic 2**.
- This will reduce the credit risk imposed on EDBs to collect transmission charges on behalf of Transpower and promote greater fairness.
- The current transmission pricing methodology (TPM) passes most of Transpower's revenue (through its HVAC charge) to EDBs to collect. The most recent proposal for TPM reform would cause more concentration of transmission charges to be collected by EDBs. In contrast, grid-connected generators which are dependent on the transmission grid to bring their product to market do not appear to be paying their fair share for transmission services.

Infographic 2: Current and Vector's proposed recovery of transmission charges from transmission users

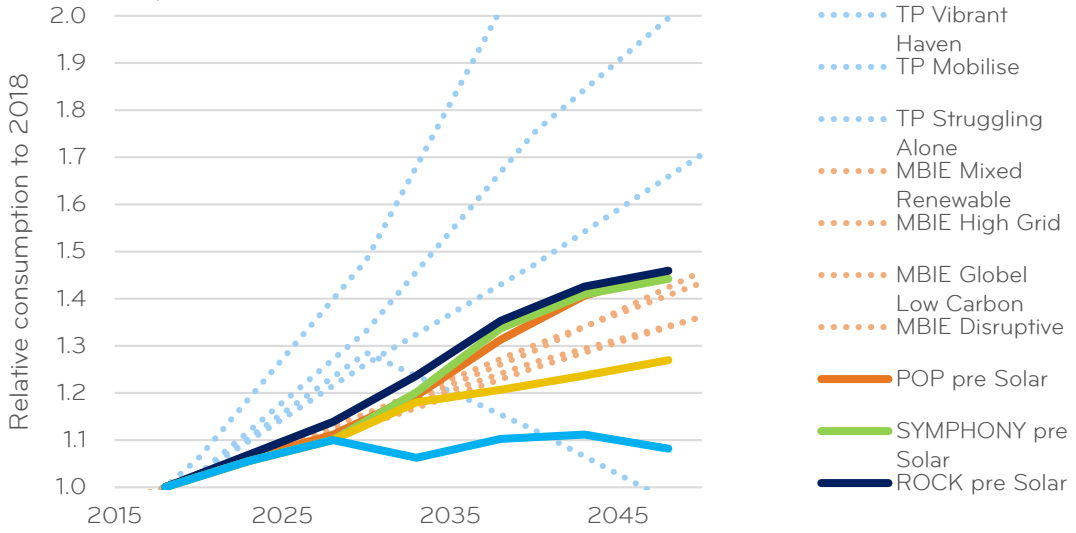


FOCUS AREA FOR THE COMMISSION - SETTING APPROPRIATE EXPENDITURE ALLOWANCES

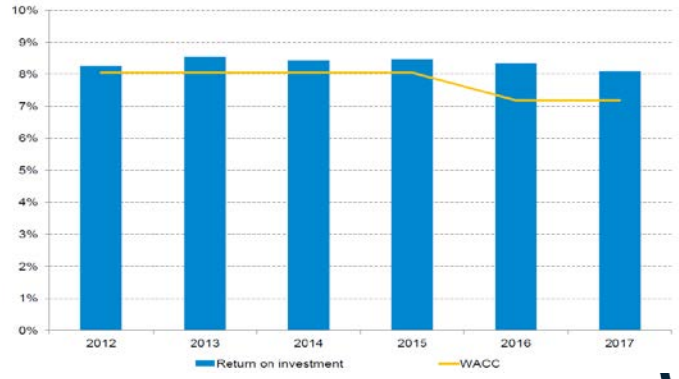
- Transpower's cashflow profile could be encouraging it to over-estimate demand over the next 30 years

- Both Vector and Transpower have developed scenario models of future expected electricity demand and consumption.
- We note Transpower's forecast consumption is much higher than Vector's own forecasts **(Vector AMP 2018)** for changing consumption and out of step with MBIE's view of future consumption. This is shown in **Graph 3** which shows forecast customer consumption up to 2050 using Transpower's forecasts, MBIE and Vector's AMP modelling.
- This difference in forecasting may reflect Transpower's ability in cashflows to recover its assets much earlier than EDBs. This gives it more reason to over-forecast demand with less concern around asset stranding.
- We also note from the Electricity Price Review (EPR First Report in Figure 21) that Transpower has consistently been earning above its allowable returns whilst EDBs are generally earning below their regulated return. Figure 21 of the EPR First Report is reproduced in **Graph 4**. There is no evidence that Transpower's consistent outperformance of the regulated return can be attributed to efficiency improvements.
- Aligning the cashflow profile between EDBs and Transpower will ensure better alignment on investment planning including appropriate timing and deferment philosophies and a consistent approach to alternative solutions.

Graph 3: Customer Consumption Growth Comparison (Pre Distributed Generation)



Graph 4: Transpower's ROI versus Regulated WACC



Vector recommendations

Vector makes the following recommendations for Commission:

- Consider the impact recent transmission price increases have had on prices over the last decade.
- The Commission must migrate Transpower's cashflow model to be consistent with EDBs given the impact transmission charges are having on prices to customers given the government's concerns over affordability and vulnerable customers. As a 100% owned government business affordability opportunities should be a key consideration for Transpower in its statutory responsibilities.
- The Commission should test the validity of Transpower's forecasts as these are out-of-step with other forecasts of future consumption including Vector's own forecasting work.
- Consider the benefit of moving away from a co-mingled network charge passed on by EDBs given this approach over-exposes EDBs to credit risk from having to recover the most significant bulk of Transpower's annual revenues.