

CONSUMER CHALLENGE PANEL

Submission to the Australian Energy Regulator (AER)

Consumer Challenge Panel Sub Panel 4 (CCP4)

Response to the AER Draft Decision and Revised Proposal to Tasmania's electricity distribution network service provider (TasNetworks - TND) for a revenue reset for the 2017-2019 regulatory period

Report by

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Sub Panel CCP4

CCP4 also includes:

-) Jo de Silva who has provided a separate report
-) Hugh Grant who has not contributed to this report

25 November 2016

1. Introduction

The purpose of this document is to deliver the views to the Australian Energy Regulator (AER) of the Consumer Challenge Panel (CCP) charged with providing input into the revenue reset for the 2017-2019 regulatory period for the Tasmanian electricity distribution network service provider TasNetworks distribution (TND).

CCP Sub Panel 4 (CCP4) has carried out this review, although this report is provided by CCP4 member David Headberry as the other members of CCP4:

-) Jo de Silva is providing a separate report and
-) Hugh Grant has had little direct input into this report.

Throughout this report, reference to CCP4(DH) refers to the views of David Headberry in his role as a member of CCP4. Also throughout this report is made reference to the report CCP4(DH) provided in the TND proposal – this is referred to as the “earlier report” throughout this submission.

CCP4(DH) has only provided input in passing regarding those aspects of the review where the AER has implemented a “mechanical” approach to setting the outputs. Such aspects include the approach to the roll forward of the regulatory asset base, escalation and growth factors, and other areas where the AER has what could almost be termed automatic processes.

CCP4(DH) has instead focused on aspects of the draft decision where it considers that there are significant issues to be addressed that will have considerable impact on the outturn assessments made by the AER in its role of establishing a “bucket of money” sufficient for the efficient distribution network services provider to deliver the services required by consumers.

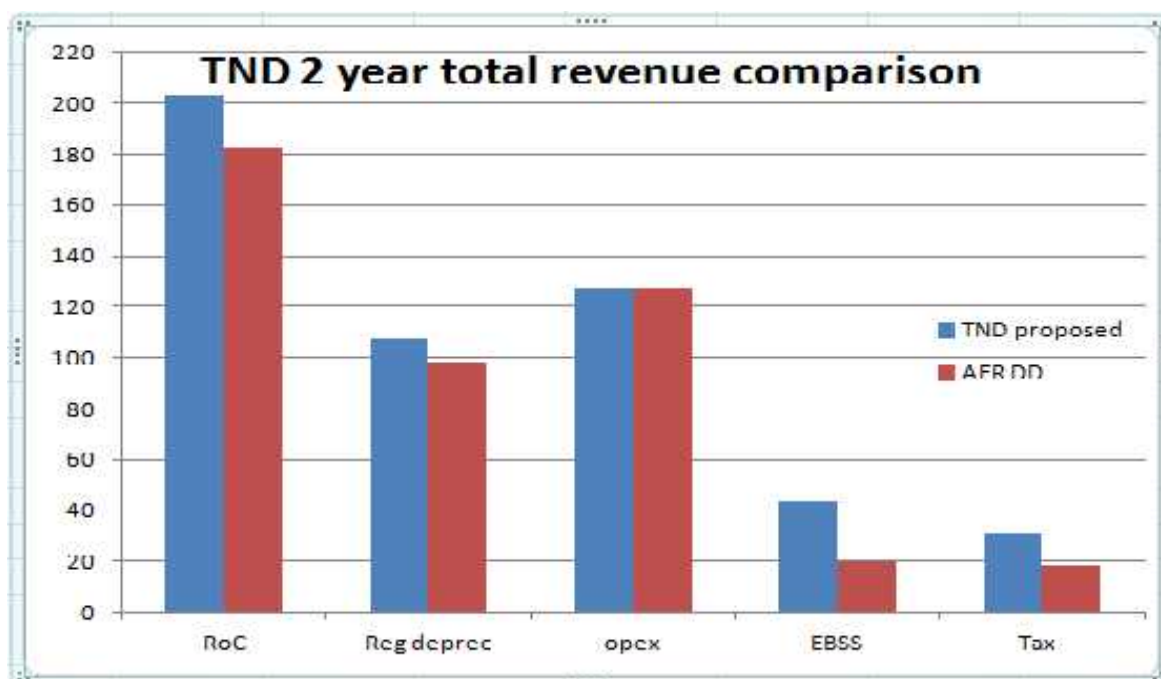
The AER draft decision utilises the suite of guidelines established by the AER as part of the Better Regulation program that arose from changes to the National Electricity Rules. In many cases, the proposal from TND followed these guidelines so there are a number of aspects where the AER has effectively accepted the TND proposals relating to these aspects. This report does not address aspects where there is congruence of the TND proposal and the AER draft decision other than to highlight where the AER guideline might be considered to be excessively conservative. This report also notes the outcomes of the Competition Tribunal decisions on the NSW distribution businesses and of the SA distribution business.

This report notes that the driving issue is that the final decision from the AER must be in the long term interests of consumers while, of course, acting within the requirements of the Rules. In its response to the TND proposal, CCP4(DH) noted that the long term interests of consumers must embrace the fact that the actions of current consumers responding to the impacts of the current review will have a significant impact on future

consumers. In this regard, the costs and tariff structures that are put in place as a result of this revenue reset must provide an outcome that is efficient now as well as into the future.

1.1 Impact of the TND proposal on consumers

In its proposal, TND advised there would be a reduction in the revenue it sought. To a significant extent the AER Draft Decision accepts much of the TND proposal. The following graphic identifies where there are major differences between the TND proposal and the draft decision.



Source: CCP4 using data from AER DD (attachment 1)

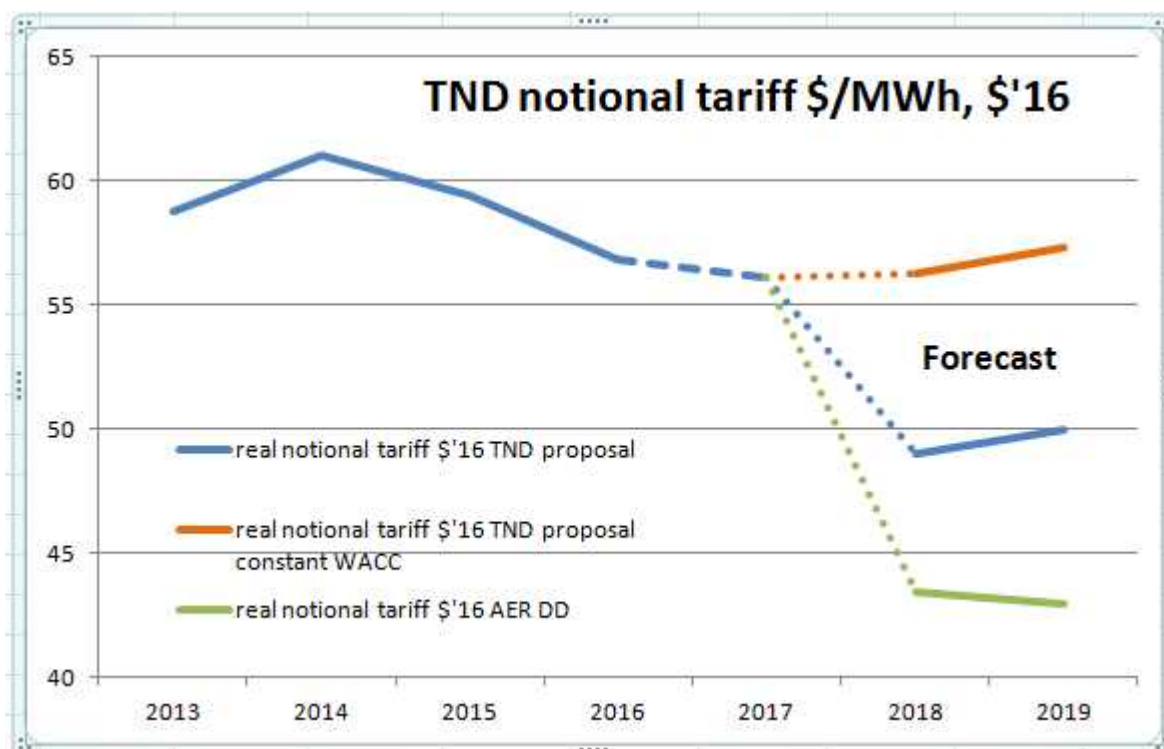
The major differences between the TND proposal and the AER DD lie with

-) the rate of return on capital (where the AER uses a lower risk free rate)
-) regulatory depreciation where the AER uses a slightly lower starting point for the regulatory asset base (RAB) and a slightly lower inflation rate
-) a significant adjustment to the efficiency benefit sharing scheme calculation
-) a higher value for “gamma” resulting in a lower tax allowance

At a high level, TND sought a lower revenue than it forecast it would receive in 2016/17, the last year of the current period. This reduction is primarily driven by a lower cost of capital, although opex is also forecast to reduce. These reductions are offset by higher amounts for depreciation and by including the opex efficiency carryover.

From this is derived an assessment of the notional TND tariff (revenue related to sales MWh¹).

While the outcome of this assessment showed that TND planned on delivering lower cost services to its customers, under a constant WACC scenario, there were no reductions in the notional tariff highlighting that all the benefit to consumers was effectively coming from the lower cost of capital.



Source: CCP4(DH) analysis

The AER DD delivers an even lower notional tariff than the TND proposal, although it must be stressed that the AER DD uses an even lower cost of capital than that proposed by TND². On a similar basis, if the AER DD was assessed using a constant cost of capital, it would probably still deliver a lower notional tariff than that sought by TND.

TND had indicated a desire to increase its cost of capital through applying the outcomes of the Australian Competition Tribunal limited merits review of the NSW DNSP appeal but the Competition Tribunal outcome for the South Australian Power Networks appeal would seem to indicate that the AER cost of capital guideline might be applied in its entirety to the TND final decision.

¹ The sales used for this comparison are derived from the NIEIR report (Electricity sales and maximum demand forecasts for Tasmania to 2045, base case¹) and the revenue (adjusted for inflation differences) from TND TN059 Post Tax Revenue Model (PTRM) Summary page

² Since the AER published its draft decision, the risk free rate has nearly returned to the value used by TND, removing much of the difference between the TND and AER allowed revenue streams

2. Consumer Engagement

In the response to the TND proposal, CCP4(DH) reported that the TND consumer engagement program was and continues to be well conceived and implemented.

This report recognises that CCP4 member Jo de Silva is providing a more detailed review of the TND consumer engagement program subsequent to the earlier report provided by this CCP member and the comments by the AER in its draft decision, so this report does not specifically address this aspect of the AER draft decision.

However, it is important to note that the consumer engagement carried out by TND to date is considered to be of a high standard (as reported in the earlier report) and has clearly identified that consumers have focused their views to three key aspects, viz:

-) That prices need to reduce
-) Current levels of reliability are generally acceptable
-) Consumers do not want to pay for increased reliability.

These three overarching considerations have been used to base the observations made in this report.

3. Benchmarking

3.1 Benchmarking cost of debt

In its earlier report on the TND proposal, CCP4(DH) commented that the AER had not implemented any benchmarking regarding the cost of debt and that such benchmarking would provide valuable input into assessing whether the wider CCP view that the AER guideline delivers a higher allowance for the cost of debt than is efficient.

The rate of return objective requires that rate of return for a network service provider

“... is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as applies to the [network service provider] ...”

CCP4(DH) questions how the AER can assess whether its return on debt allowance is efficient without assessing what actual costs of debt are incurred by network service providers and comparing these to the assessed costs of debt used by the AER in setting an allowance.

In its draft decision (attachment 3) the AER comments (page 3-77)

“We are satisfied that using a third party data series (or multiple series), appropriately chosen, is commensurate with the efficient debt financing costs of a benchmark efficient entity.”

It is clear that there is significant disagreement (by CCP members and consumer groups) with the AER contention that it can set an efficient cost of debt by merely assessing independent third party data. The AER avers that its approach (page 3-77) conforms with the Rules because:

-) The use of third party data can be practically applied
-) It is independent from the regulatory process
-) It reduces the scope for debate,
-) There is no consensus amongst regulators about the best method to estimate the return on debt.

This report does not dispute each of these reasons, but highlights that they only cover part of the story. The fact that the actual costs of debt incurred by networks is significantly lower than the costs of debt estimated by the AER implies that the AER approach does not ensure the allowances are efficient – a requirement of the rate of return objective.

The National Electricity Objective (NEO) requires the revenue allowances for networks be set at levels which are in the long term interests of consumers. If it can be demonstrated that consistently the return on debt allowances exceed the actual costs of debt incurred by networks, then the AER has failed to comply with the requirements of the NEO

because it will be not be basing its assessment of a reasonable revenue stream based on providing an efficient allowance.

In the development of the cost of capital guideline, the AER used the actual performance of the networks in the assessment of the gearing and equity beta. It is therefore inconsistent that the AER does not use the actual costs of debt incurred by the network businesses to inform the efficient cost of debt for the benchmark entity when there is no assessment of the cost of debt by actual entities with a similar risk profile and similar credit rating.

A concern consistently raised by consumers is that the AER has identified that the benchmark credit rating data is for BBB+ rated acquirers of debt. However the actual costs of debt for entities with the same credit rating shows a significant variation, with energy networks with a credit rating of BBB+ actually acquiring debt at lower rates than other entities with the same credit rating. This implies that credit rating might not be the prime driver behind the cost of debt³.

If there is variation between the actual costs of debt for entities with the same credit rating, then the AER needs to benchmark the actual costs of debt incurred by the networks so that it can demonstrate that they are allowing returns on debt which are consistent with those applying to an benchmark efficient entity with a similar degree of risk.

As there are few examples of monopoly entities with a similar degree of risk to energy networks, the AER must commence benchmarking the actual costs of debt incurred by the networks to ensure that their independent third party sources of costs of debt actually do deliver outcomes that are efficient.

This report considers that undertaking detailed benchmarking of actual costs of debt is in the long term interests of consumers. This benchmarking should be used in the future to assist in identifying the most cost efficient approach to debt provision.

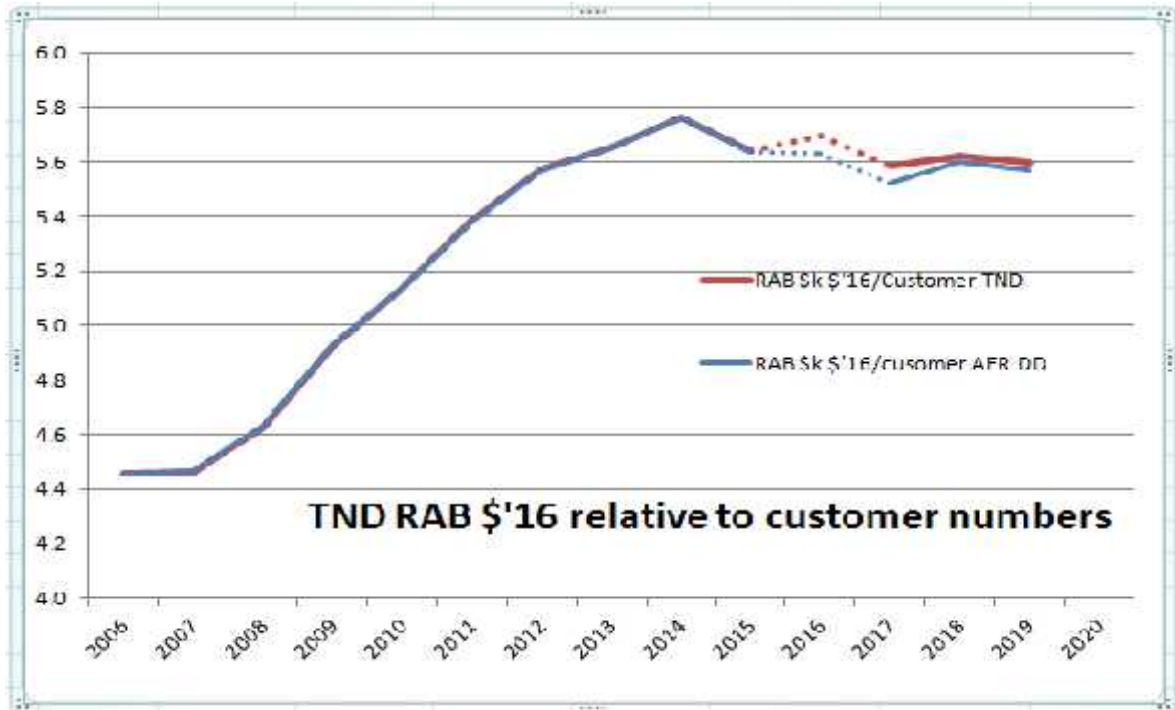
3.2 Asset benchmarking

In the report to the AER regarding the TND proposal, it was highlighted that TND is one of the less efficient networks in the NEM with regard to asset productivity. That report also highlighted that the RAB in real and relative terms was increasing. Despite this the AER has permitted the regulatory asset base of TND to further increase in nominal terms (although not in “real” terms). This increase in asset value is despite the fact that TND asset utilisation is falling, demand is static and consumption flat or falling.

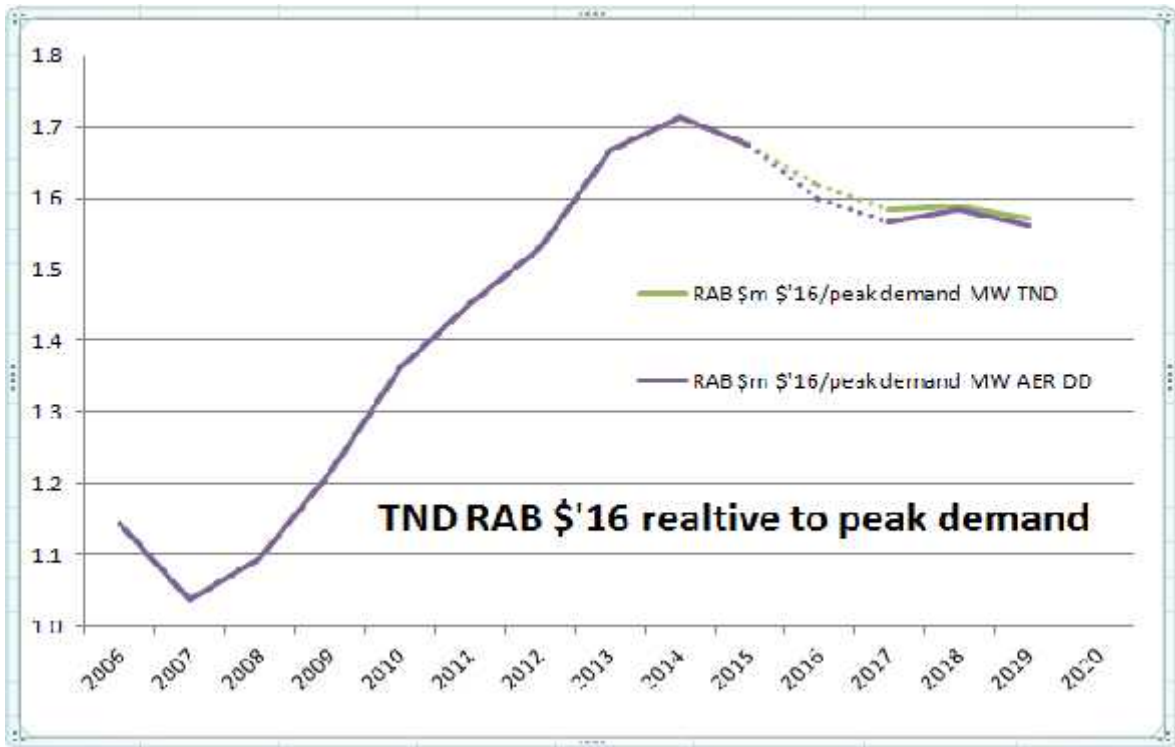
As can be seen from the following two charts, the value of the TND RAB remains essentially constant relative to customers served, with little change from the high growth

³ It is also noted that both the USA and Australia both have a credit rating of AAA yet the USA has a much lower cost for its debt than does Australia

seen since 2007. The second chart shows that relative to peak demand, there has been a slight reduction. The changes made in the AER draft decision have little impact on the relative value of the TND RAB.



Source: RIN data, TND proposal, AER DD, CCP4(DH) analysis



Source: RIN data, TND proposal, AER DD, CCP4(DH) analysis

It is recommended that the AER should benchmark the RAB for networks over time in relative terms (eg against peak demand and numbers of customers served) to assess the liability that future consumers will incur in terms of capital tied up in the assets used to provide the network services.

In the earlier report, it was noted that reliability of supply was relatively flat (even increasing) and utilisation was falling. These further indicated that there was little need for capex. This led to the conclusion that with such a low productivity of its asset base, great care was needed in assessment of the capex program initiated by TND. Despite this it is noted that the AER has accepted the TND capex program with no change.

While it is accepted that asset benchmarking is in its infancy with regard to the NEM, this should not detract from the need to ensure that the liability for future users is minimised without imposing higher costs on current consumers

3.2 Opex benchmarking

In the earlier report, it was noted that TND opex productivity was improving, although it was not at the efficient frontier.

What the AER draft decision fails to assess is whether the accepted level of opex for the next regulatory period continues moving TND to the efficient frontier. The AER assessed opex indicated that the opex forecast by TND was lower than the AER would have allowed and, on this basis, it could be assumed that the TND forecast opex would reflect greater productivity (in fact this was the assessment made in the earlier report). However, it is still important that such assessments are demonstrated.

With this in mind, it is considered that an assessment of opex should include extrapolating the benchmarking of the allowed levels of opex into the future to identify if the allowed levels really do result in opex becoming more efficient.

3.3 Conclusions

This report considers that the AER, in its assessments of various inputs to the revenue allowance, has not sufficiently taken into account the outcomes of the benchmarking carried out by it or CCP4 in its responses to the TND proposal, and nor has the draft decision demonstrated that the allowances assessed are efficient when extrapolating the allowances and benchmarking these allowances to the end of the next regulatory period.

4. Operating Expenditure (opex)

In the earlier report, it was concluded that:

“On balance, [it was considered] that the proposed opex is acceptable, closer to the efficient frontier but still on the high side of that target although CCP4(DH) [could not] identify by how much.”

This observation is supported by the AER draft decision which (based on its base-step-trend analysis) considered that as the TND proposed opex was less than the AER might otherwise have allowed, it would accept the TND proposed opex.

However, the earlier report did make observations that there were aspects of the TND proposed opex which might lead to a conclusion that the TND proposed opex was not as efficient as it could be.

There is a specific assumption by AER and TND that the opex for year 2014/15 is efficient as it is the result of a program to incentivise increasing efficiency in opex (via the Efficiency Benefit Sharing Scheme - EBSS). Two key observations arise from this assumption – to what extent does the EBSS incentivise a network to maximise efficiency and whether the base year opex is efficient.

Firstly, TND has decided that its existing opex is not efficient. TND has proposed a significant opex reduction from current levels and even less than the opex the AER would probably have accepted based on its base-step-trend approach; both of these make it clear that TND considers that its opex is not efficient. The benchmarking carried out by the AER implies that TND current opex productivity is about (maybe even above) average in the cohort of all NEM distribution businesses. That TND is in this position in the “opex productivity benchmark stakes”, it is assumed that TND opex has responded to the EBSS incentive yet, despite this, TND considers that they can be more productive and have proposed an opex lower than that which assumes they are already near the efficient frontier. This report considers that the AER assumption that the EBSS drives a network to efficient opex, is not supported by the actions of TND.

On this basis, this report considers that the AER needs to assess more closely the degree to which the EBSS is actually achieving significant productivity improvements. As a point of comparison, the earlier report commented that capital intensive firms operating in a competitive environment are reducing their opex in nominal terms to stay competitive.

The AER approach to identifying whether a deeper investigation is warranted into the proposed opex through comparisons with its base-step-trend approach is not supported

by TND actions as it is patently obvious that TND does not consider that it did deliver an efficient opex allowance through this process. The AER approach does not require any forecast productivity gain yet TND consider that their opex can be further reduced by improved productivity and notionally have built in 2.2% improvement. This report considers that the AER base-step-trend approach needs to incorporate a productivity improvement for all networks to incentivise networks to redress the consistent decline in productivity observed by the AER benchmarking of opex over the past decade.

Secondly, TND forecasts that the opex for 2015/16 (a year that is now complete) will be lower than the opex for 2014/15. As the subsequent year has an opex forecast to be lower than the opex for the base year, this implies that the base year opex used by the AER is not the efficient base year. The AER should reassess its opex forecast based on the actual 2015/16 data (which should now be available) to identify if its forecast for opex is still higher than that forecast by TND.

This report notes the AER observation made in the draft decision (page 7-21) – that:

“Because some capital intensive industries have achieved good productivity growth does not necessarily mean TasNetworks can achieve the same productivity growth. In particular, declining demand reduces TasNetworks' ability to achieve productivity growth.”

This report disagrees with that AER observation. It notes that other capital intensive industries have achieved improved productivity as a result of the imperative that, if they hadn't, they would have gone out of business. As noted above, the AER assessment of TND opex implies that the AER approach has not resulted in the highest productivity achievable. Further, this report considers that declining demand is not a cause leading to reduced productivity as opex is almost entirely related to the assets actually used (eg the length of powerlines, the numbers of hardware, etc). If anything reduced demand should result in increased productivity as this imposes less stress on equipment and thereby increases life (ie increases asset productivity) and reduces the amount of maintenance (reduces opex).

In the earlier report, it was observed that TND was seeking a higher level of repex than it had used in the past, although overall, capex forecast was much the same average spend as for the current five year period. What has not been recognised by the AER (although it might be from the TND decision to build in increased productivity) is the impact of this increased repex and the expectation that as a result of increased repex, there should be increased opex productivity. Repex impacts opex by reducing maintenance costs through replacement of old with new.

The earlier report reached the following conclusions:

“The TND approach to setting opex (by holding opex in nominal terms based on the 2014/15 actual) is supported to a significant extent as this reflects what occurs in competitive industry.

...

On balance, CCP4(DH) considers that the proposed opex is acceptable, closer to the efficient frontier but still on the high side of that target although CCP4(DH) cannot identify by how much.”

This report considers that the earlier conclusions are still appropriate but based on the draft decision, the concerns that the opex is still on the high side of efficient are reinforced. Equally, the extent of how much overstated the opex is could be used to enable a better decision to be made for the next review.

This report also considers that it is appropriate to congratulate TND on its approach to setting opex – its approach is a welcome change from the actions of other networks where they use the AER approach to maximise the opex allowance included in the allowed revenue.

5. Forecasting – demand, customer numbers

This section covers forecasts of customer numbers and peak energy demands; these provide a basis for the forecasts of capital expenditure, a key component in the building block analysis used by the AER to set the DNSPs' efficient future revenue requirements. All other things being equal, over-forecasts of these numbers would result in a higher revenue requirement being determined by the AER than is appropriate.

5.1 Customer numbers

The earlier report identified an inconsistency between the TND forecast of new connections and the forecast of its consultant (NIEIR) which provided a lower estimate of new connections; this raised some concerns.

This report notes that the AER tested the NIEIR methodology and has carried out a trend assessment of new connections made. It then compared this with independent data (from HIA); this independent assessment supported the forecast used for developing the new customer connections.

5.2 Energy peak demands

Another key driver of the cost of providing distribution network services is the maximum rate of flow of electricity, which must be accommodated at each point on the network. The larger the peak flow on a given part of that network, the larger the capacity of network assets must be at that location.

In its earlier report, it was noted there was some significant difference between three different estimates of expected peak demands. The AER draft decision examines this issue in some detail and concludes that the AEMO forecasts of peak demand is the more realistic. This report concurs.

The AER concludes that despite the differences between the forecasts, peak demand is unlikely to exceed historical levels in the next regulatory period and this observation impacts the assessment for capex.

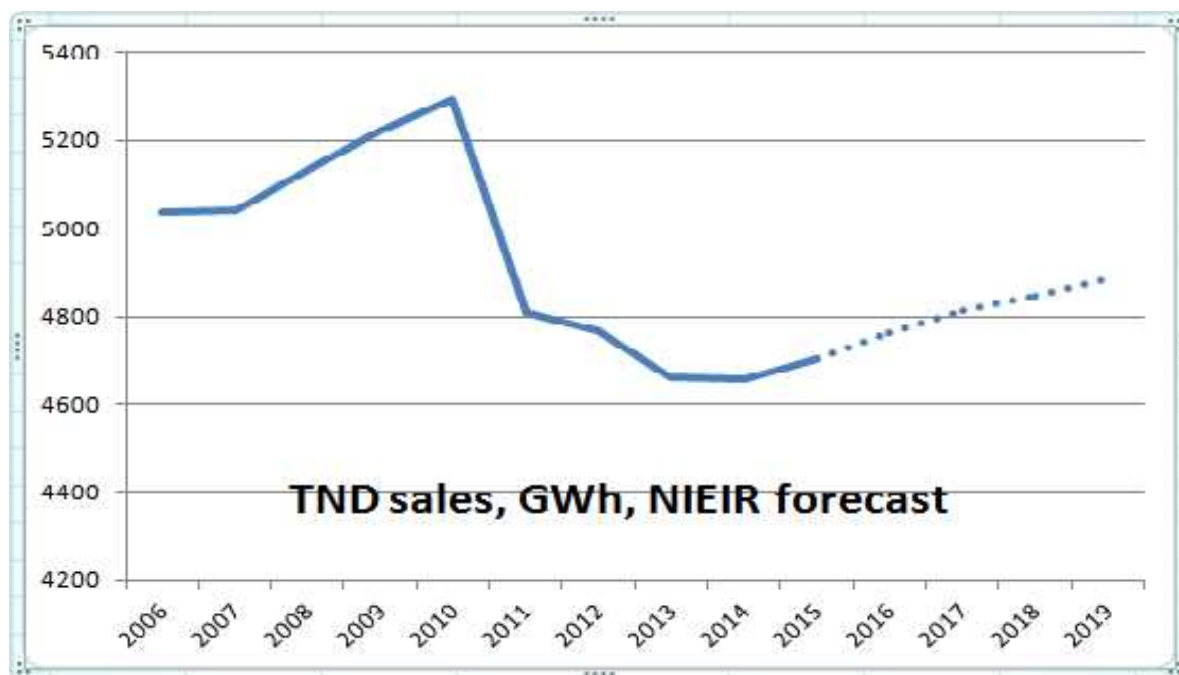
5.3 Total energy

The AER draft decision has not commented on the TND forecasts for energy consumption as this has little impact on the assessment of the allowed revenue, as the allowed revenue is subject to a revenue cap⁴.

⁴ A price cap regulatory decision requires a detailed assessment of expected volumes of sales.

However, it is important to have such information to develop a view of what the notional tariff will be. A notional tariff provides guidance to consumers about what the likely price for the services will be and how they compare with prices in the past.

For the purposes of developing a notional tariff, this report uses the actual volumes of sales included in the RIN data and the TND forecast developed by TND consultant NIEIR which is shown in the following chart.



Source: TND proposal

This modest increase in forecast consumption impacts on the notional tariff referred to in section 1.1 above which compares the AER draft decision with the TND proposal.

The outturn of this analysis is that with the forecast fall in revenue and increased sales, the tariffs facing consumers will fall as noted in section 1. However, if the forecasts are too high, tariffs will be higher than implied by the reduced revenue.

6. Capital expenditure (capex)

As noted in section 3 above, CCP4(DH) is very concerned at the continuing growth in the RAB in relative terms and therefore great care is needed to ensure that the capex allowed is efficient and does not result in the RAB further increasing.

Despite the growth in the RAB (in nominal terms but not in “real” terms) proposed by TND, the AER has accepted the TND proposed capex as being efficient, This report does not agree with the AER in all respects and the comments in the following sections expand on this observation

6.1 General comments on capex

6.1.1 Category based costing

In its earlier report, it was noted that there were concerns raised by networks regarding the shortcomings of the category based benchmarking, especially that unit costs vary considerably between networks, but this issue has not been addressed other to imply that the AER has used “standardised category data” which allows identification and scrutiny of (page 6-28)

“...different operating and environmental factors that affect the amount and cost of works performed by distributors, and how these factors may change over time.”

It is not clear whether the AER uses standardised cost data or has only used the data provided by TND for its assessment of capex. Further, the category analysis identifies the frequency with assets are replaced. Again, it is not clear whether the AER has used standardised replacement periods in its analysis or used data provided by TND alone.

What needs to be clearly identified is whether the draft decision is based on TND data or whether the evaluation is based on benchmarking data

6.1.2 Environmental impact on category costs

As with the category benchmarking, it is important to explain to what extent the environmental factors are being accommodated in the predictive modelling using the category analysis data, especially as the Ofgem assessment (referred to in the earlier report) implies that these are minor. This report notes that the only environmental aspect that might have to be taken into account is that for coastal areas (salt degradation). As all distribution networks have assets impacted by ocean environments, again, the net effect of this environmental issue might be marginal between networks.

What is important is to identify the extent to which TND category analysis data reveals differences to the averages seen across all networks. On page 6-42, the draft decision implies that the AER has used TND data as it states

“In our modelling, we found that TasNetworks' forecast for the modelled categories was significantly lower than the repex model estimate derived from its past replacement practices, and is closer to (though slightly higher than) a benchmark derived from other service providers.”

This report considers that benchmark data should be used to assess the reasonableness of repex forecasts as each network could implement a replacement process that consistently increases the rates of replacement which, following a trend analysis, reinforces poor asset management practices.

6.1.3 Capitalisation policies

In its earlier report it was noted that there are apparently different approaches taken by each DNSP with regard to capitalisation policies and if this is the case, this will impact the trend analyses used for assessing forecast capex.

The draft decision notes that the capitalisation policy used for TND assets is the same that has been used in the past by TND. What is not clear is the extent to which this policy varies from other networks and whether this impacts the benchmarking that has been undertaken.

For example, benchmarking of the TND asset management approach reveals that it is the least productive network in this partial productivity factor. This raises the question is this low productivity driven in part by a different capitalisation policy and whether this has impacted the partial productivity factor related to opex.

If the policy is significantly different it could explain why TND opex is seen to be in the more productive area of the comparisons and why its asset management is so low in productivity.

This issue needs to be resolved and a common approach used across all networks.

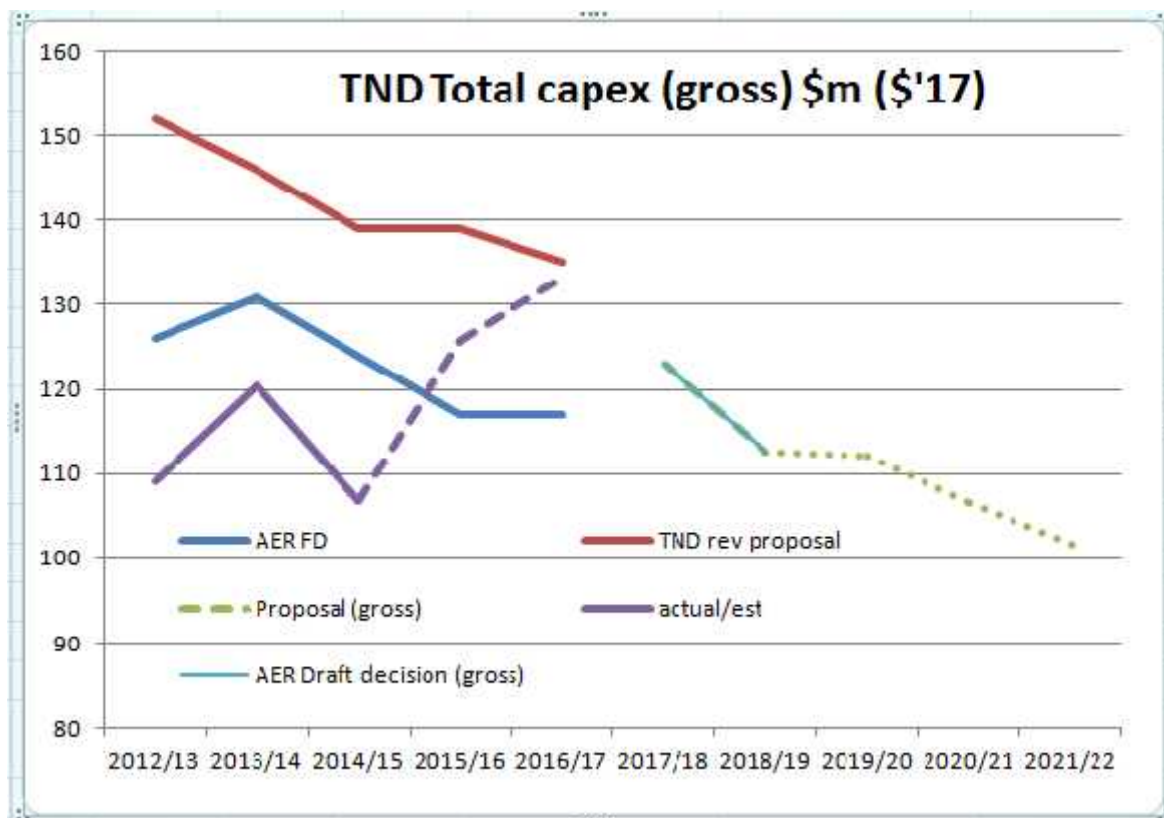
6.2 TND capex overview

In the earlier report, it was stated that TND proposed increasing its total capex needs for the next regulatory period (and the three years after that) from the current \$106.7m actually used in 2014/15.

In its draft decision, the AER has accepted the TND capex program as proposed yet the earlier report suggested that the forecast capex for the next 2 year regulatory period appeared to be too high, especially when considering the significant step up on capex estimated for the last two years of the current period when the actual capex for the first three years was so low.

The concerns are pictorially shown in the following chart where the forecast expenditure in the early years of the current program capex was significantly lower than that now forecast⁵; that TND has forecast much higher capex in the last two years of the current program still results in an overall underspend compared to the capex allowance provided for the current period.

The chart shows the overall trend of total capex⁶ for the current period, the next 2 year period and the subsequent three years, including the AER draft decision capex allowed.



Source: AER FD 2012, Aurora revised applic, TND proposal, AER DD, CCP4(DH) analysis

The earlier report made a number of observations regarding the historic capex, but specifically, the forecast capex is mainly due to increased repex, asset management systems and IT expenditure.

What is concerning is that the AER has assessed the TND proposed capex as efficient but deeper investigation does not support this contention.

6.3 Augex

Augex comprises two main elements – customer initiated and reinforcement capex.

⁵ Such “back loading” by TND provides a considerable financial benefit to TND

⁶ Note that the amounts are gross ie exclude customer contributions

6.3.1 TND Reinforcement augex proposal and accepted in the draft decision is forecast to remain virtually constant for the next 2 year period. In the earlier report this was considered to be inconsistent as there was no forecast increase in demand.

The reality is that this augex is to increase the capacity on some highly loaded feeders, to increase the reliability of some poorly performing feeders and to relieve some congestion.

TND, and supported by the draft decision, considers that there are some highly loaded feeders (with capacity utilisation of over 70%) that need to be increased in capacity. At the same time, overall utilisation of the network is falling and peak demand is static. Increasing capacity of the network adds to the RAB yet there is no certainty that the existing more highly utilised feeders cannot accommodate the expected levels of demand, despite being more highly loaded than other feeders.

This report also notes that the expected peak demand over the next period is still considerably less than the actual peak demand incurred in previous times. For example, the coincident raw peak demand in 2007 was significantly higher than that forecast for the next regulatory period and the forecasts are significantly higher than the latest actual coincident raw peak demands recorded, implying that the forecasts may be overstated.

For the draft decision to observe that the amount of capacity augex is (page 6-30)

“...a continuation of the historical volumes and expenditures in this area, based on addressing existing capacity constraints and risks identified in high-voltage network.”

is the very approach that has led to the burgeoning RABs seen throughout the NEM – just because this repex is the same as in the past is not a reason to continue the practice into the future. In the case of TND, this is even more pertinent as TND has the lowest asset productivity in the NEM

This report does not consider that the proposed capacity augex has been sufficiently substantiated as required by the NEO and the capex accepted in the draft decision is unnecessary.

With regard to the allowances for reliability and constraints, the observation in the draft decision (page 6-18)

“We consider that our approved capex forecast is consistent with the setting of targets under the STPIS. In particular, we consider that the capex allowance should not be set such that it would lead to TasNetworks systemically under or over performing against its STPIS targets.”

This report does not agree that the augex allowed delivers this outcome. The augex for reliability and constraints is specifically designed to increase the reliability of supply on the poorly performing feeders and to reduce congestion so that the reliability of supply to consumers is increased. A direct result of these investments will be an improvement in

reliability of supply. A natural outcome of this will be a performance improvement as measured by the STPIS. This observation is also made in section 7.1 below.

This report does not advocate for these investments should not occur⁷, but points out that the intent of the STPIS is to provide an incentive for the networks to invest their own funds to generate a revenue stream from the STPIS. Alternatively, if the capex is seen to be appropriate then the STPIS targets need to be adjusted to reflect that it is consumers that are underwriting the investment. If the capex is underwritten by consumers **and** the STPIS targets are not adjusted for the investment, then consumers will be providing capital so that the network can earn a bonus under the STPIS. Such an outcome is inefficient and is a form of “double dipping”.

6.3.2 Customer initiated capex. This report notes the assessment made in the draft decision regarding the forecasts of new residential connections and the capital contributions that would result from these.

However, this report notes the observation made that (pages 6-38 and 6-39)

“...TasNetworks informed us that the proposed customer contributions costs have taken into account the Government's request for TasNetworks to continue the current concession for irrigation connection projects.”

This raises a concern that the amount of customer contribution made for irrigation projects has been discounted from what might be considered to be equitable – that other Tasmanian electricity consumers should provide funds to enable implementation irrigation projects is not an appropriate outcome under the rules.

This report does not object to the Tasmanian government providing concessions to particular sectors of the Tasmanian economy but does consider that such concessions should be funded by the government and not by other electricity consumers. That the AER has accepted this should occur is contrary to the NEO which requires the allowances to be efficient and to require some consumers to subsidise others is not efficient.

The AER should investigate this issue more deeply with the aim of ensuring there is no inefficient allowance being provided.

6.4 Repex

In the earlier report, it was observed that

“...the repex claimed is too high and probably only needs to be \$30-\$40m pa as allowed by the AER in its 2012 assessment for the current period.”

⁷ In fact, this report considers that all consumers of the same class paying the same tariff for the service provided, should get the same reliability.

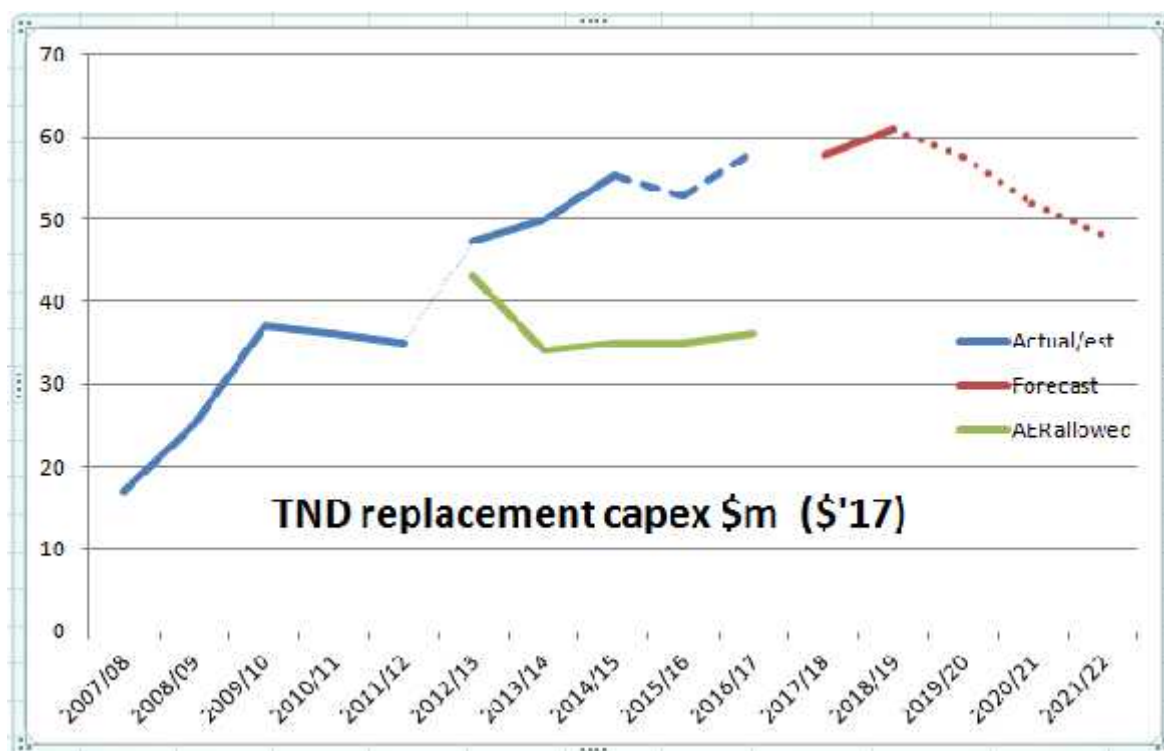
After reviewing the AER draft decision, this view is still considered to be valid.

One of the major issues facing network regulation at this time is the change from capital expenditure being predominantly for growth assets to being one of replacement of assets. What has been seen across all networks (particularly in the latest round of regulatory reviews) is the amount of capex claimed is still at very high levels although there has been little or no growth in demand – the primary driver of augmentation. Coincident with the growth in repex has been a reduction in utilisation of assets.

The outcome of the maintenance of these high levels of capex has been that the regulatory asset base when normalised against demand and numbers of consumers has grown considerably, leading to a cost that future consumers will have to carry.

The surge in replacement capex has been in part assisted by the tools used by the AER in assessing the reasonableness of the replacement capex.

Analysis of the trend in repex, over the longer term, shows the amounts of repex by TND have grown yet the AER tends to use the most recent actuals against which to measure forecast repex. The following chart was provided in the earlier report and tracks repex over 10 years.



Source: TND proposal, Aurora revised applic 2012, AER FD 2012

This shows the long term trend in repex growth, and specifically the growth in repex in the current period compared to the allowance for repex made in 2010/11 for the current period. While the 2010/11 allowance basically replicated the repex for the last two years of the 2007-2012 period (which also showed a significant increase in repex) TND actual repex in 2012-2017 was considerably higher than had been allowed.

In both the repex model and the trend analysis approach, the major drivers are the actual usage in the most recent period. In particular, the rates of replacement of specific assets used in the repex model are heavily influenced by the more recent activity. Similarly, the trend analysis is more dependent on more recent activity.

What neither approach reflects is that all networks ramped up their repex in the period applying during the current round of regulatory reviews (with most exceeding their forecast repex) and this has set new and higher rates of replacement than applied in previous periods – even back to the late 1990s. This means that the most recent repex activity is being predominantly used as the bases for the replacement trend analysis and the repex model, resulting in biased inputs. This assessment is supported by the draft decision observation that (page 6-41)

“The repex model estimates future repex by allowing TasNetworks the opportunity to continue **its current replacement practices** in the next regulatory control period.” (emphasis added)

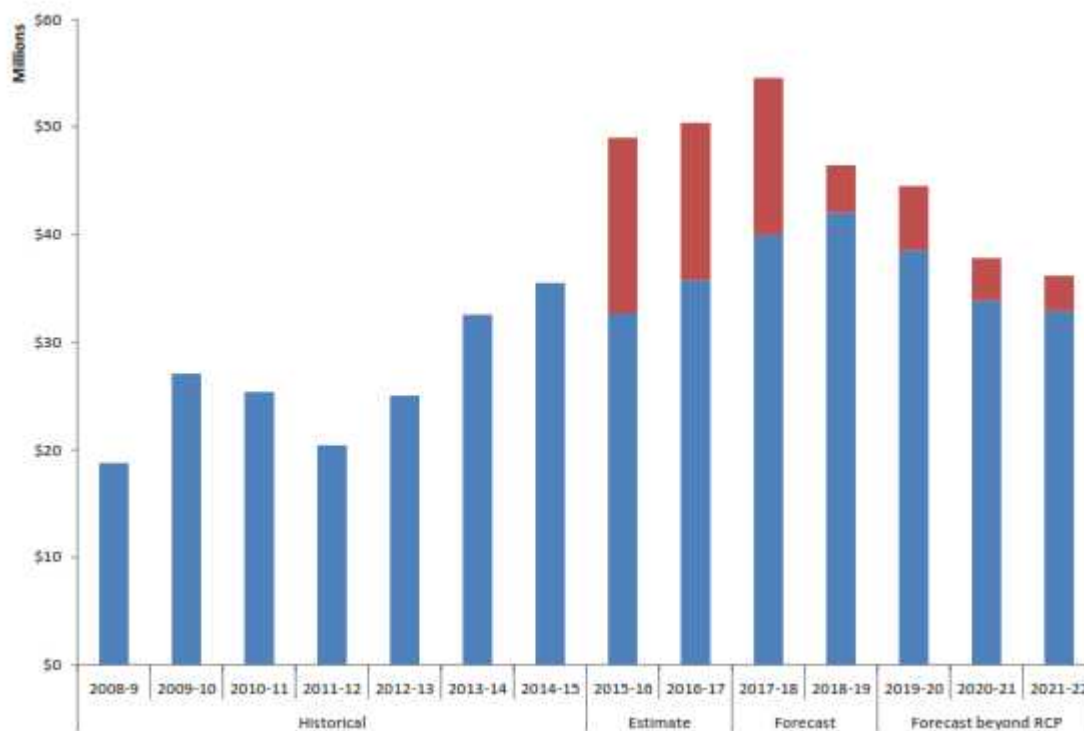
As the current rates of replacement reflect a regulatory period where repex has exceeded the allowances (which were based on previous replacement practices) this reinforces the view that the current rates of replacement are higher than used in the past, even when reliability and safety were maintained at the current levels

As a result, the earlier report raised the issue that there needed to be a more standardised approach (across the NEM) to setting rates of replacement for all network assets and that these should be benchmarked. Specifically, this report considers that the benchmarks for rates of replacement should be carried out over the longer term, preferably over multiple regulatory periods and perhaps even into the periods when the assets were held by the vertically integrated electricity providers⁸. Additionally, rates of replacement could be benchmarked using data from overseas as replacement rates are less influenced by geographical differences than prices.

The draft decision highlights that a proportion of the repex in the last two years of the current period and the first year of the next period are related to the investment in the AMS (Ajilis) program – this is highlighted in the following chart (DD page 6-43)

⁸ It is noted that the repex model does include some data earlier than the 1990s

Figure B-9 TasNetworks repex trend (including asset management repex)



Source: AER Category analysis and Reset RINs

Accepting that the AMS program could be excised from more generalised repex, the resulting usage of repex in the period 2007-12 has an average repex of ~\$22m pa yet the current period (excluding AMS) has an average repex of ~\$33m pa, a 50% increase between periods. The repex (less AMS) for the forecast period exceeds \$40m pa, a further 25% increase. Compared to the repex in the 2007-12 period, the forecast repex is a massive 90% increase, yet based on the repex model implies that this increase is considered to reflect efficient repex.

The draft decision makes the observation that (page 6-44)

“TasNetworks' has submitted that its repex over the 2017–19 regulatory control period is driven by:

- safety and environmental performance and compliance requirements;
- asset condition and risk;
- asset performance;
- spares availability and product support;
- technical obsolescence; and
- physical security.

We have been mindful of the above trends and the reasons TasNetworks has provided in assessing the repex allowance required for the 2016–20 regulatory control period.”

This report notes that these self same issues applied in the period 2007-2012 and despite a much lower repex, TND was still able to accommodate all of these requirements.

This report also notes that the repex modelling resulted in (page 6-42):

“TasNetworks' forecast for the modelled categories [being] significantly lower than the repex model estimate derived from its past replacement practices, and is closer to (though slightly higher than) a benchmark derived from other service providers.”

As all networks in the NEM have increased their repex in the current round of regulatory reviews and overspent on repex compared to the allowances provided, it could be assumed that rates of replacement of assets has increased across all networks so the benchmark replacement rates used to compare the repex modelling for TND would also be expected to be inflated from previous replacement rates exhibited by networks prior to the periods exhibiting the inflated repex usage.

This report considers that there is considerable doubt about the **inputs** used in the repex modelling (although it agrees that the repex model approach provides a significant benefit) and this concern has been highlighted in other CCP reports (eg CCP3 reports on the Victorian networks reviews)⁹.

It is also clear that all networks are using the AER repex model and that modelling provides outputs that are considered by the networks to be acceptable to them. The concern remains that it is the **inputs** used that must be more closely examined otherwise future consumers will have a legacy of high RABs reflecting low utilisation and therefore imposing a considerable financial impost for future generations.

In conclusion, this report remains of the view that the repex claimed by TND and allowed in the draft decision is too high and probably only needs to be \$30-\$40m pa as allowed by the AER in its 2012 assessment for the current period.

6.5 IT, AMS and communications

In the earlier report, it was accepted (with reluctance) that the Ajilis AMS program should continue but that the AER must seek from TND the business case **in terms of consumer benefit** why the AER should allow the Ajilis project to be implemented and added to the RAB over the period of 10 years that TND wanted to depreciate the AMS over.

The draft decision states (page 6-51) that the AER is satisfied

⁹ For example, the input data price and expected lives of assets used in the repex model show some distinct anomalies between different classifications (eg why is a staked pole just as expensive as a new concrete pole, why is the life of a concrete pole vary so much with the voltage of the conductors it carries?)

“...that TasNetworks’ proposed AMS capex is prudent and efficient. TasNetworks provided a positive business case in support of its forecast capex. We have reviewed this business case, and consider that:

- the need for the investment has been previously identified in the current regulatory control period
- the options analysis was sufficiently granular in identifying the range of feasible options
- project costs were subject to an open tender process, such that we are reasonably satisfied that TasNetworks’ proposed costs are prudent and efficient
- the lowest cost feasible option was selected.”

While this report accepts the assertions of the AER, it would be better if such a business case was made public so that consumers can see what is expected of the investment and where and how the benefits arise; consumer can then assess whether the forecast benefits have in fact been delivered and so inform future business cases for expenditure.

The AER comments (page 6-52) that the outturn of the AMS program is a forecast reduction in repex over the coming years to 2022. It will be interesting to see if the repex post 2022 shows a continuing decline.

6.7 Conclusions on capex

Overall, this report considers that

-) the allowed augmentation capex will impact the STPIS resulting in an unearned bonus and there needs to be an adjustment to reflect this
-) the repex is too high when examining the information over a longer period than just the repex incurred in the current period
-) the inputs to the repex model need to be examined and benchmarked more widely
-) the business case for the AMS (Ajilis) project needs to be made public

The adjustments proposed in this report should result in there being no increase (and perhaps a slight reduction) in the RAB in nominal terms which reverses the trend seen over recent years.

7. Incentive schemes

This report considers that the incentive schemes applying to the TND regulatory program reliability (service target performance incentive scheme – STPIS), opex (efficiency benefit sharing scheme – EBSS) and capex (capital expenditure sharing scheme – CESS) provide an inter-related suite of incentives.

In its earlier report, CCP4(DH) provided a view that no element of the three schemes should be varied from what is detailed in the guidelines detailing the incentives; the AER draft decision follows this principle.

7.1 STPIS

In its application, TND proposed that the STPIS should be limited to +/- 2.5% of revenue rather than +/- 5% used in the AER guideline. CCP4(DH) provided a view that the revenue at risk under the STPIS must be kept consistent with the penalty/bonus arrangements applying across the suite of incentive schemes and that to reduce the STPIS amount at risk would change the balance of the incentives. Implicit in this observation is that the capex provided should also not distort the incentive.

This report supports the AER draft decision that the STPIS for TND should continue on the same basis that it currently does – that +/- 5% of allowed revenue should be at risk in relation to the STPIS.

However, it is noted that the AER draft decision provides capex specifically to address the reliability of under-performing feeders and to relieve congestion that is occurring in the network.

Both of these activities will result in an improvement of network reliability yet the targets set for the STPIS are based on historical reliability performance measures and outcomes. Essentially, the AER draft decision (and the TND proposal) requires consumers to fund capital investment which has the primary goal of improving reliability. This is “double dipping” as it is inappropriate for consumers to fund investment that is targeted to provide TND with a bonus out of the STPIS.

This report however supports the improvement in reliability of poorly performing feeders as those consumers supplied by those feeders pay the same as other consumers yet get a lower performance. The same observation applies to those consumers that lose supply due to congestion.

To overcome this “double dip”, it is recommended that the targets for reliability under the STPIS are reset (improved) to reflect the expected average improvement in reliability that will occur as a result of the investment to improve the reliability to those consumers that will benefit from the “reliability and congestion capex”.

7.2 EBSS

In the earlier report, it was noted that the size of the EBSS was significant compared to the actual opex that was proposed. Although the AER draft decision significantly reduces the incentive payment, it is still large in comparison. The major reason for this is that the incentive payment from a five year program is being recovered in this unique two year regulatory period.

Normally, the EBSS benefit from the current 5 year period is allocated across the next 5-year regulatory period implying that only 20% of the EBSS carry forward benefit is paid in any one year of the next regulatory period – this occurs because the allowed revenue is smoothed (using an NPV approach) to eliminate year on year variations and to trend to a smoother transition to the next regulatory period. As this next regulatory period is only 2 years, the EBSS benefit from the 2012-17 period will be recovered over only 2 years, effectively imposing on current consumers a cost that would normally be shared with future consumers.

With this in mind, this report proposes that the EBSS benefit that is to be allocated to this two year regulatory period, should be reduced by 60% (ie three years worth of benefit) and this be allocated equally between the two years. So that TND retains the full value of the bonus that it has earned, the 60% of the bonus from the current period should be added to the EBSS payment that will accrue from this 2 year regulatory period, effectively reflecting the benefit from a standard 5 year regulatory period in the 2019-2014 period. Not to follow such an approach effectively imposes on consumers for the 2 year 2017-19 period an EBSS bonus from a five year period, but deliver a potential cost to consumers of the 5 year 2019-24 period, an EBSS cost from just two years of operation.

This report recommends that, using the AER draft decision value for the EBSS bonus NPV of \$17.3m, this should be split into 5 equal amounts (ie \$3.46m). \$6.92m (ie 2 years of the carry forward) would be allocated to the 2017-19 period and the other \$10.38m (ie 3 years of the carry forward) allocated to the 2019-24 period along with the carry forward of the EBSS from the 2017-19 period. This approach is more equitable and replicates what would have occurred in the absence of the unique 2 year regulatory period.

If this approach is not carried out it will impose a considerable burden on the consumers in the 2017-19 period and provide a considerable benefit to consumers in the 2019-24 period which will only have a carry forward cost of just 2 years of EBSS carry forward. The carry forward from the 2 year period is likely to be small as TND has applied a significant productivity factor for the 2017-19 period opex and therefore it is more likely than not, that the EBSS carry over from the 2017-2019 period to the 5 year 2019-24 period will reflect this aggressive opex target.

7.3 DMIA

In its response to the TND proposal, it was noted that there were concerns about the extent of the DMIA payments across the NEM and the value that consumers received from these payments. That report noted:

“...there is a concern among consumers that the amounts allowed for the DMIA are significant when assessed in aggregate across all of the DNSPs in the NEM.”

The report questioned

“... to what this allowance is to achieve overall, to what extent the programs are managed between DNSPs to prevent duplication and whether there have been cost benefit analyses undertaken to ensure that the maximum value is achieved for the investments made using consumer contributions.”

In its draft decision, the AER has advised that it intends to carry out a review of the Demand Management Incentive Scheme (DMIS) and its associated DMIA during 2017. With this in mind, this report accepts that to make a change to the TND DMIA is perhaps premature, and an appropriate allowance included for the next two years to allow TND to complete its current programs

As TND has suggested that its current allowance be effectively maintained (allowing for some inflation from the amount allowed 5 years ago) the AER draft decision has accepted the TND proposal. This report, although still concerned about the amounts allowed across the NEM for the DMIA and the potential for duplication of projects, agrees with the AER that maintaining the current level of DMIA is not unreasonable.

8. Weighted average cost of capital

This report notes that the AER draft decision accepts the application by TND of the AER guideline on rate of return (except on gamma), although TND had commented that it might apply the outcomes of the current appeals other networks have initiated against the AER rate of return guideline.

This report notes that the Competition Tribunal decision relating to the NSW networks upheld the AER guideline regarding the cost of equity but rejected the AER guideline relating to the transition approach to debt and to gamma. The AER has appealed the Competition Tribunal decision on the NSW networks.

Pleasingly for consumers, the most recent Competition Tribunal decision (regarding the SA Power Networks appeal) effectively applies the AER guideline, specifically in relation to the transition on debt and on gamma, appearing to overturn the previous Competition Tribunal decision relating to the NSW networks appeal.

On balance, it would appear that the AER draft decision to apply its guideline in its entirety to the TND proposal would appear to reflect what has been decided by the Competition Tribunal's most recent decisions. It is hoped that TND will, in its revised proposal, accept unquestioned, the AER guideline.

However, this report also notes that the risk free rate for cash (the 10 year Australian Commonwealth bond rate) has risen considerably since the AER draft decision and the current rate of about 2.72% is near the risk free rate used by TND in its initial proposal; this effectively removes a significant portion of the difference in the revenue allowances (and hence the notional tariff) between the TND proposal and the draft decision.

There is every expectation that the 10 year bond rate will continue to increase over the coming months further eroding the lower tariffs implied by the TND proposal and the draft decision.

While this report accepts that the AER is unlikely to change its guideline (and therefore TND has no reason not vary from it), the observed increases in the risk free rate have reinforced CCP4(DH) concerns that the parameters used by the AER in its rate of return are too conservative. In the earlier report, gearing, market risk premium, equity beta and gamma were all identified as being more conservative than is considered appropriate by consumers and these are to be addressed in the next AER review of the rate of return on equity parameters. Accepting that this review is to take place within the next 2 years, it is accepted that the current parameters should be applied to the TND decision.

However, while the current guideline requirements for assessing the cost of debt are also “locked in” in the guideline, this report reinforces the comment made in section 3.1 that the AER should be carrying out a benchmarking study on the cost of debt for energy network firms to assess whether the guideline is in fact delivering outcomes that reflect an efficient acquisition of debt. The Rules require that the AER should allow for networks to recover the efficient costs for providing the service. An efficient cost should not consistently exceed those actual costs that networks incur. In fact, if networks are permitted to consistently recover more than their costs, then the allowance is not efficient.

However, deep investigation of TasNetworks financial statement 2016 provides an outcome that raises considerable concern. The annual report balance sheet states that TasNetworks has an asset base of \$3,198m¹⁰ of which \$920 is net assets. Of this \$920m \$675 is the asset revaluation reserve (note 14) and notes 12 and 13 state there is \$251m of retained reserves and contributed equity.

The implication of these numbers is that total borrowings¹¹ (total assets less net assets) for TasNetworks is \$2,278m implying a debt share of 71% of total assets, an equity share (equity injection plus retained earnings) of 8% and a revaluation reserve which is 21% of total assets.

There is no doubt that the equity share should attract the return on equity calculated via the guideline and probably the debt share might attract the cost of debt at the rate calculated under the guideline¹². However, the asset revaluation reserve does not impose a cost that TasNetworks incurs and therefore require a return on. The revaluation reserve is the outcome of the automatic inflation adjustment applied to the assets each year. It is noted under note 14 that the reserve cannot be used to pay dividends except in limited circumstances reinforcing the view that this amount is not a benefit that TasNetworks can actually realise and is effectively a “paper” entry to the accounts.

This means that the assumption that the RAB is geared to 60% debt and 40% equity is quite wrong on three counts:

Firstly, the debt share is more appropriately assessed at a maximum of 71% of total assets and perhaps as low as 55% when assessing just the debt that TasNetworks has to pay interest on. While the AER guideline assesses the benchmark entity has 60% debt on which the entity pays interest, in fact the interest bearing debt for TasNetworks is less

¹⁰ This includes both distribution and transmission assets

¹¹ It should be noted that not all of the net debt is interest bearing (eg employee benefits and deferred tax benefits)

¹² This is arguable because TasNetworks does not pay any cost in relation to a number of debt elements (eg the employee benefits or trade and other payables)

than that assumed for the benchmark entity. While the borrowings that TasNetworks pays interest on (ie 55%) is near the assumed amount of debt under the guideline gearing (ie 60%). This means the balance of the debt (much of which TasNetworks does not incur a cost on) is being reimbursed to TasNetworks at the same rate of return as applies to the higher risk element of equity.

Secondly, the equity share of the total assets that should receive a return on equity is no more than 8%. This compares with the AER guideline assumption that the equity used by the benchmark entity is 40%.

Thirdly, there is 21% of the total assets that is merely a paper entry which does not incur any cost or impose a liability to TasNetworks – the asset revaluation reserve. This report considers that TasNetworks should receive no return at all on this element of the total assets as to require consumers to pay a return on an amount that TasNetworks incurs no cost on is contrary to the Rules which allow TasNetworks to recover its reasonable costs; certainly the NEO does not contemplate consumers paying for something that TasNetworks does not incur a cost for.

As TasNetworks earned a profit of \$98.4m, this implies that the return on equity for the financial year ending 2016, was about 40% based on the equity injection plus retained earnings. While not as extreme as the return on equity achieved by other networks¹³, it is still very high compared to the returns on equity achieved by firms in the competitive sector, and well above the notional return on equity allowed in the draft decision of 6.5% or even that claimed by TND of 7.30%.

The AER has stated that its assessment of the rate of return it calculates is based on the notion of a benchmark entity operating as a pure-play regulated energy network business. It has derived its assessment of the inputs used for the rate of return guideline from the actual performance of the Australian energy networks and identified the gearing based on what it has observed from these businesses (see appendix F of the AER Better Regulation Explanatory Statement Rate of Return Guideline December 2013).

In its assessment the AER has identified the levels of debt a regulated energy firm has and then assumed that the balance of the capital is all equity. For firms in the ASX, there is no automatic indexation of assets each year by CPI as there is for regulated energy firms as plant and equipment (the bulk of the assets held by energy networks) is considered to

¹³ See for example the CCP4 (Grant and Headberry) work carried out on the Powerlink proposal available at <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/powerlink-determination-2017-2022/challenge-panel>

reduce in value each year as a used asset most commonly seen to be worth less than a new asset.

This report notes that the increase in asset values required by the regulatory requirement to increase asset values by CPI each year is transferred by TasNetworks to a “revaluation reserve” in order to balance its books. Under the accounting rules, an asset should only be re-valued if there is every chance that the sale of the asset will actually result in a sale reflecting the new valuation¹⁴. However, the assets held by TasNetworks are unlikely to increase in value if sold. For example, a transformer once bought will normally sell for less than the purchase price as it will have been used and therefore have less residual life. On this basis, TasNetworks has not followed accounting rules in assessment of the “fair value” of the asset as TasNetworks has assumed the assets will sell for more than the purchase price – this is demonstrated in the tables in note 7 of the accounts where TasNetworks has increased the value of the assets but effectively ring fenced the amount of the increase.

TasNetworks has assumed that because the regulatory environment is such that it is permitted by the regulation to index its value of the assets it holds, then it is following accounting guidelines. Furthermore, TasNetworks has to index the assets otherwise its accounting would be at odds with the regulatory process.

It is noted that TasNetworks has not declared the revaluation increase in the profit and loss statement (which is what accounting rules require) as if it did so it would have to pay tax on the revaluation; this supports the view that the increase in asset value is merely a paper entry and not a real cost incurred by TasNetworks.

There are two core issues that need to be further noted

1. This assessment means that the AER guideline imposes on consumer an obligation to pay TasNetworks for costs that TasNetworks does not incur. As the NEO only requires consumers to pay the efficient costs, to require consumers to reimburse TasNetworks for costs that are not incurred is contrary to the NEO. This report considers that the rate of return on equity should only be applied to the equity that has actually been injected into the business (ie 8% of the RAB) and not a notional 40% as in the guideline.
2. Firms listed on the ASX carry out their accounting with revaluations above (or below) the depreciated purchase price being considered to be profits. The derivation of the market risk premium is from the growth in the accumulation

¹⁴ For example, if a block of land is rezoned, it is likely that the asset will have appreciated in value and the increase in the land value is then taken as an increase in profit and declared in the profit/loss statement. Similarly, if a building has significant vacancy, it will be revalued downwards to reflect the lower cashflow from the significant vacancy

index which reflects the dividends paid and the growth in the value of the stocks listed. This means that the market risk premium reflects the impact of revaluations being taken to the profit and loss. In the case of setting the market risk premium applied to regulated entities, this is calculated from data which **includes** revaluations of assets being declared as a profit. This discontinuity effectively results in “double dipping”.

This report notes that the rate of return guideline is considered by the AER to be focused the financial practices of the benchmark efficient entity and not about specific networks. What is not identified in this bland assertion is that the inputs to the benchmark efficient entity are all drawn from the practices of the Australian energy networks, with some minor “shading” of the inputs from some international firms. So essentially, the benchmark efficient entity reflects an amalgam of the operations of the Australian regulated energy networks.

As many of the Australian energy networks reflect similar outcomes to that seen of TasNetworks (ie about 55-65% interest bearing debt and 5-15% of actual injected equity and retained earnings), it is quite clear that the AER guideline fails to reflect the actuality of how the networks are structured financially. A direct result of this is that the networks are extremely profitable (much more so than firms operating in the competitive sector) because of the AER decision to allow the networks to gain a rate of return on equity for the indexation element of the regulated asset base.

This report considers that this aspect is one element as to why energy networks are being sold for significant premiums to the regulated asset base.

8.1 Depreciation

As noted in the earlier submission, the depreciation allowance sought by TND is a significant portion of the total revenue and larger than in previous years, probably due to the lower inflation incurred in recent years and forecast for the next period. It was this concern of increasing regulatory depreciation that initiated many of the observations in the earlier report.

In the earlier report, it was raised that the depreciation for the Business Management Systems (BMS – the Ajillis system) at 10 years could be considered to be too short, particularly with the ever increasing amounts of capex across the NEM being committed to upgrade or institute new IT systems when consumers see little benefit from the investment as the existing systems meet the requirements of consumers. This issue was also raised in the section in the earlier report on capex. By allowing networks to depreciate IT assets over short periods, provides an incentive to replace or upgrade IT systems. While it is recognised that there are always being offered better IT systems than

those already in operation it is not always necessary to replace them, especially if they offer little benefit to the consumers that fund them.

With this in mind, this report considers that the AER draft decision to allow the TND AMS to be depreciated over 10 years is not in consumers' best interests as there is no demonstrable benefit to consumers to effectively replace the AMS in 10 years time. The draft decision points out that 10 years is longer than the average depreciation period used by other networks, but this report highlights that it was the AER previous decisions led to this outcome by allowing these shorter times, so the comparison is not reasonable.

The earlier report also raised a concern about the inconsistency seen between the various life expectancies identified for the various assets provided by networks – specifically between the depreciation schedule, the RIN data and the asset lives used in the replex calculation. The draft decision provides a view that comparisons between the three are difficult to compare as the data used is developed and aggregated in different ways for each report. This is accepted but the analysis by CCP4(DH) does not result in outcomes that support the assertion in the draft decision that they do deliver similar outcomes¹⁵.

Further, the draft decision provides evidence that the TND weighted average standard asset lives compared to other distribution networks are not materially different – this is shown in figure 5.2 page 5-14. Analysis of this figure shows that the arithmetic average weighted asset lives across the 13 distribution businesses is over 46 years but a weighted average (based on RABs) is higher. Even using the arithmetic average, TND weighted asset life is ~10% lower than the arithmetic average which is a not an immaterial amount as asserted in the draft decision (page 5-13) as it results in a higher depreciation requirement for Tasmanian consumers.

As noted in the earlier report:

“...the development of the regulatory asset base (RAB) is a tool to assist in the assessment of an appropriate revenue stream. Because of this the RAB should reflect the actual asset lives rather than a notional expected life of the assets used in providing the service. In this regard it is important to recognise that faster depreciation of assets than actually occurs, results in a transference of wealth between generations and this is not consistent with the regulatory concept of equity between current and future consumers.”

The observations in the draft decision do not address this very real concern, especially as full depreciation of assets means that networks are incentivised to replace assets as soon as they are fully depreciated. This incentive recognised that a fully depreciated asset does not deliver a return on or of the asset whereas a new replacement immediately delivers considerable value.

This report considers that reporting of expected lives of assets should be consistent between the depreciation schedule, the economic benchmarking RIN and the category

¹⁵ See page 5-13

analysis as this is more transparent and allows stakeholders to make informed observations on revenue decisions.

Further, there needs to be better benchmarking of assets between the 13 distribution networks (15 if WA and NT networks are added), again to ensure there is consistency across all networks and to ensure that consumers of some networks are not being disadvantaged.

9. Pass through events

Despite expressing some reservations on the extent of pass through provisions, the earlier report noted that the pass through provisions proposed by TND reflected those that the AER had previously accepted and therefore there would be regulatory inconsistency if the pass through provisions were rejected

This report notes that the AER has accepted the pass through provisions as proposed.

10. Classification of services and ACS

10.1 Connections

The acceptance by the AER of the TND proposal (supported by the Tasmanian government) to reclassify basic connection services to alternative control services (ACS) is noted.

In principle, this change is supported especially as there is an intent to make such connections subject to competition at some time in the future.

However, there is concern that this reclassification moves costs out of standard control services (SCS) to ACS. It is not clear that the costs included in the opex for the base year has been adjusted for the move to include these costs as ACS.

It is important that there is no “double dipping” and consumers need to be assured that TND and the AER have not included in the allowances for capex and opex to generate the allowance for standard control services, when those costs are now to be recovered directly from consumers through reclassifying these costs as ACS.

10.2 Public lighting

In the earlier report, it was noted that Councils had commented that they did not know how the public lighting prices were developed, nor were they convinced that the prices reflected the costs for the services. With this in mind, the earlier report suggested that public lighting prices could be disaggregated a little, at least to reflect urban, regional, city and rural divisions. It is noted that the AER responded to this stating (page 16-22):

“If the costs were further disaggregated by Tasmanian region, or urban compared to rural, it is not expected that this it would result in any significant change in prices. To attempt to break prices down further would increase TasNetworks administrative costs without providing any improvement in cost reflectivity to customers.”

CCP4(DH) does not agree. In this case, consumers (councils) need to be assured that the prices they have to pay as an ACS should be reflective of the costs they are charged. For the AER to assert that the prices do reflect the costs for the service is not borne out by council officers’ observations. For example, the councils commented that they do understand that prices probably vary with location and light types and they are entitled to be assured that the prices they do pay are reflective of costs (including replacements); the administrative costs to provide some breakdown would be minimal if there is already a detailed cost build up. If there is no detailed build up of the costs, it becomes difficult to accept the AER assertion that the prices are reflective of the costs.

The actual prices provided in the ACS schedule highlight this concern. The difference in prices between a 100w sodium vapour light (\$43.64 pa) and a 400w sodium vapour light

(\$47.67 pa) clearly shows that the price is not based so much on the energy provided or the capital cost, but heavily biased towards the physical cost of a replacement when needed (it would be expected that the cost for a team to replace a light would be much the same regardless of size). If this is the case, then location of the light becomes a key driver of the annual cost.

This aspect needs further work.

11. Tariff Structure Statement

The new rules and setting tariffs requires a distribution network to prepare a tariff structure statement (TSS).

The purpose of the TSS and the review which initiated this requirement was to provide more cost reflective tariffs and to provide an incentive for consumers to use electricity more responsively to pricing signals. From a network point of view, if consumers moderate their electricity usage (particularly shifting usage away from times of peak demand) this will result in less need for investment in assets that are used only infrequently; the price signals from the tariff structure should provide an incentive for consumers to load shift from assets that are operating at near capacity. The benefit for consumers is that by better utilisation of networks, ultimately lower prices for all will result. This report supports these aims.

However, involvement by governments in this process has resulted in a distortion. For example, governments require consumers of the same usage class to pay the same tariffs for the use of the networks regardless of location and also governments consider that an opt in approach will mitigate price shock that might result from imposition on all consumers of a demand based tariff¹⁶. Yet it is predominantly demand that sets the size of the networks and the cost of it to consumers.

While this report generally supports the AER draft decision and considers that the AER draft decision is in accordance with the NER. CCP4(DH) provides the following observations regarding the proposed TSS and the AER draft decision.

As a general observation, this report considers that a well designed TSS should provide a signal that reflects that demand is the primary element that needs to be reduced whether by net reduction or by time shifting. Opt-in tariffs should not be used as these distort cost reflectivity as consumers will only opt-in if they get a lower price. Cross subsidies whether explicit or implicit (such as PV roof top solar) need to be wound out of the tariffs.

The fixed elements of tariffs should be minimal to maximise the incentive to change usage patterns. The higher the proportion of fixed charges, the less the incentive to change usage patterns. Therefore this report agrees with the AER that although network costs are fixed, having a high fixed element in a tariff reduces incentives to respond to price. Further, under revenue cap regulation, having any element as a fixed charge is unnecessary as any revenue under-run in one year can be recovered in the next.

We agree with the AER that a demand tariff at the residential and small business level is cost reflective, although making them opt-in defeats their purpose as an opt-in approach

¹⁶ Demand based tariffs have been used for large consumers for many years

distorts cost reflectivity as a user will only opt-in when there is a benefit, which results in others having to pay more.

Cross subsidies need to be eliminated as these distort cost reflectivity. Such cross subsidies include implicit cross subsidies (such as occur from residential PV rooftop solar where with this feature users do not pay for the cost of ensuring the network is sized sufficiently to provide back up) as well as explicit cross subsidies (such as proposed for irrigators see section 6.3.2).

There is particular concern about the timeframes for assessing the peak demand to be applied for the peak demand tariffs because once the peak demand is reached in any particular set period, the peak demand cost is then fixed and becomes a disincentive for subsequent action. CCP4(DH) considers that there should be a continuous incentive¹⁷ to limit peak demand.

There is a need to harmonise distribution tariffs with retailer tariffs and it is not clear that this has been done or was a key element of the development of the TSS

It is noted that too fast a transition to a more cost reflective tariff arrangement will result in price shocks to some consumers. With this in mind, this report considers that there must be a transition to unwind non-cost reflective tariffs. While a 15 year transition period is proposed, this period of time is excessive and reduced, perhaps to be fully operational before the completion of the regulatory period after the next period.

¹⁷ An example of such a continuous incentive is that used by AEMO in Victorian transmission where the peak tariff is applied to the historic average of the peak demands that occur on the 10 peak system weekdays in a year during the periods of 11 am to 7 pm. This provides an incentive to still seek to reduce peak demands as it is the average that will apply over the set period