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Dear Sir,

Please find following a submission on the regulatory proposal and associated attachments lodged by TasNetworks for the next regulatory control period, which is due to start on 1 July 2019 and end on 30 June 2024, and the corresponding Issues Paper published by the Australian Energy Regulator (AER).

# 1. Risk Assessment and Mitigation

Much of TasNetworks' forecast expenditure is intended to reduce risk. The assessment of risk is according to TasNetworks' risk assessment framework, having regard for the TasNetworks Boards' risk appetite.

There is no assessment of whether the risk framework and the Board's risk appetite is conservative or otherwise. A conservative risk framework and risk appetite will naturally lead to increased costs due to increased mitigation activities.

It is not possible to ascertain whether the assessments of risk presented by TasNetworks in the Regulatory Proposal and supporting documents are realistic because rarely are clear reasons given as to why the "likelihood" and "consequence" were rated as they were.

There is no justification as to why the target risk level (if there is one) is chosen, and why it is appropriate.

There is no quantification of risk to demonstrate that the cost of addressing the risk is less than the cost of not addressing the risk.

There is no investigation of alternate (non-network) approaches to risk mitigation or diversification, such as insurance.

## 2. Compliance

Much of TasNetworks' forecast expenditure is intended to ensure compliance with various legislative and regulatory obligations. The underlying implication appears to be that complete compliance with every obligation is required. This implication is extreme, and leads to elevated expenditure forecasts.

From a pure economic point of view, consideration should be given to the relative costs of compliance and non-compliance (for example, the STPIS and GSL schemes provide signals as to the cost of complete compliance). This does not seem to have been done by TasNetworks.

# 3. Capital Expenditure on Short Life Assets

Expenditure on short life assets (such as IT systems with a life of 5 years) has a much higher relative impact on end-use customer prices than expenditure on longer life assets (such as transformers, with a life of 40 years). Over the life of a transformer, the IT would be replaced eight times. The cost of this is borne by the customer.

Given the magnified effect on customer prices, forecast capex for short life assets should be subject to a higher degree of regulatory scrutiny so that the NEO is achieved and prices controlled.

## 4. Opex Forecasts

TasNetworks' forecast distribution opex appears rather high given that the reason for merging Transend and Aurora's distribution business was to realise efficiencies.

Two opex categories in the base year, 2017-18, show increased expenditure:

- Maintenance and vegetation management, which is put down to increased vegetation management expenditure; and
- Business services, which is not explained.

It is difficult, therefore, to test the validity of one of the key assumptions for distribution operating expenditure:<sup>2</sup>

our 2017–18 base year operating expenditure is efficient, and therefore provides a reasonable basis for projecting future operating expenditure requirements.

## 5. Capex Forecast Justifications

As a general comment, there is insufficient justification provided to adequately assess the necessity of TasNetworks' capex programs. The forecast costs of some of these programs are both substantial and substantially higher than the previous regulatory control period, yet there is limited information about how they were derived: the links between the strategies and the forecast costs are not available.

### 6. IT Expenditure

At its most simplistic, a network service provider seeking to implement a new system and/or software should be able to show that the cost of implementing the system will be less than the cost of not implementing the system. This analysis is lacking.

The reasons for using Tier 1 IT systems, especially for small network service providers, should be assessed very carefully. Tier 1 systems may provide the necessary functions, but there may be a cost premium involved in their acquisition. It is not appropriate that the customers bear the cost premium.

IT systems and software are short life assets (see section 3).

<sup>&</sup>lt;sup>1</sup> 2019-24 Regulatory Proposal, table 9.7

<sup>&</sup>lt;sup>2</sup> 2019-24 Regulatory Proposal, section 9.4.2

Given the large expenditure on IT and its magnified impact on customer prices, forecasts should be subject to a similar degree of scrutiny as major network infrastructure investment. The scrutiny should extend to opex costs associated with the new infrastructure: IT usually has significant associated licensing and maintenance costs.

It seems that TasNetworks is intending to acquire a Customer Relationship Management (CRM) tool.<sup>3</sup> The forecast cost for this is unclear due to TasNetworks confidentiality requirements.<sup>4</sup> Since the CRM does not assist TasNetworks achieve the NEO, it should not be included in forecast expenditure for the regulated business.

# 7. Contingent Projects

### **Contingent Project Triggers**

In each of the contingent projects specified in the regulatory proposal, TasNetworks has proposed the following trigger events:

- 1(a) Successful completion of a RIT-T; or
- 1(b) A decision by a government or regulatory body that results in a requirement for the [construction of the assets].
- 2. TasNetworks Board approval to proceed with the project subject to the AER amending the revenue determination pursuant to the Rules.

None of these are properly "trigger events":

- successful completion of a RIT-T does not warrant immediate commencement of construction, and appears to be a reversal of the usual process, which is RIT-T → assessment during a determination by the AER → construction.
- a decision by a government or regulatory body to oblige construction is more properly a regulatory change event trigger for a pass-through.
- Board approval after the AER has accepted that a contingent project is required and has amended the determination accordingly: this is too late to be a trigger event for a contingent project. Moreover, it would be expected that Board approval would be required *prior* to making submission to the AER that a trigger event has occurred.

It would be expected that one of the triggers would involve the receipt of a genuine connection application progressing to the connection offer and acceptance stage.

<sup>2019-24</sup> Regulatory Proposal, page 15

<sup>&</sup>lt;sup>4</sup> 2019-24 Software Asset Management Plan

#### Second Bass Strait Interconnector

TasNetworks has proposed as a contingent project the construction of a second Bass Strait interconnector.<sup>5</sup> The total cost of the project is expected to be \$1,100 million dollars, with costs to be shared between TasNetworks and the Australian Energy Market Operator in its capacity as transmission network planner in Victoria.

The Regulator's attention is drawn to the transmission licence issued to Basslink Pty Ltd (the operator of the existing Bass Strait interconnector) by the Tasmanian Economic Regulator under the Electricity Supply Industries Act. The licence states that the jurisdiction of Tasmania extends "three nautical miles from the Tasmanian coast".6

Following this precedent, every part of the proposed second Bass Strait Interconnector that is more than three nautical miles from the Tasmanian coast:

- falls outside of the jurisdiction of Tasmanian regulation;
- cannot form part of the regulated network operated by TasNetworks;
- should not be subject to a transmission (or distribution) determination made by the AER under the NEL for the Tasmanian jurisdiction.

Consequently, forecast costs for those parts of the second Bass Strait interconnector that are more than three nautical miles from the coast of Tasmania should not be considered as part of this transmission determination.

# Sheffield to Palmerston 220kV Augmentation North West 110 kV Network Development North West 220 kV Network Redevelopment

TasNetworks has proposed three contingent projects primarily to remove constraints for potential new generation in the north west of the state.<sup>7</sup>

It is not clear why the costs for the removal of constraints on generation should be borne by a party other than the generators.

As noted above, the trigger events are not well specified.

### Rationalisation of Upper Derwent 110kV Network

TasNetworks has proposed a contingent project to rationalise the upper Derwent Valley 110kV network.<sup>8</sup> The reason for the project being "contingent" is uncertainty about potential variation to "Hydro's connection requirements". This is probably a candidate to be a contingent project, although some of the costs will relate to generator connection works.

As noted above, the trigger events are not specified well.

<sup>&</sup>lt;sup>5</sup> 2019-24 Regulatory Proposal, section 8.2.8

<sup>&</sup>lt;sup>6</sup> Electricity Supply Industry Transmission Licence issued to Basslink Pty Ltd, 1 August 2012 (as amended), Schedule 1.

<sup>&</sup>lt;sup>7</sup> 2019-24 Regulatory Proposal, section 8.2.8

<sup>8 2019-24</sup> Regulatory Proposal, section 8.2.8

# 8. Vegetation Management

#### Historical and Forecast Costs

The approach to vegetation management at Aurora/TasNetworks has been evolving since at least 2009. A summary of the changing strategies and approximate costs is presented in Table 1.

In their draft determination for the 2012-2017 regulatory control period, the AER noted its reservations about the efficiency of Aurora's vegetation management costs:<sup>9</sup>

The AER notes the 2009-10 level of vegetation management opex was the highest level of historical costs and 40 per cent higher then the level incurred in 2007-08. ...

In determining the 2009-10 recurrent base level, the AER has reviewed Aurora's:

- · vegetation management practices and criteria
- contracting arrangements
- recent cost increases.

Based on the AER's analysis, it considers Aurora's historical management of vegetation has resulted in 2009-10 costs above those which an efficient DNSP would have incurred given similar circumstances. The AER considers Aurora had previously been advised that a change in its vegetation management practices would result in medium to long term cost reductions. However, the AER considers a multiple of factors contributed to these change in practices not occurring. Aurora has claimed confidentiality over these factors...

The AER considers a prudent and efficient DNSP given the same historical circumstances could have incurred a much lower level of vegetation management opex in 2009-10, which would have resulted in a reduction in the order of \$5.7 million in 2009-10. However, in light of Aurora's current circumstances, the AER considers this reduction may be too large for Aurora to meet its ongoing obligations in the forthcoming regulatory control period.

The AER therefore considers it is more appropriate to allow Aurora the opportunity to transition to a best practice approach over the forthcoming regulatory control period rather than penalising it for its historical management decisions. Based on this approach, the AER considers a reduction of \$0.4 million is reflective of the recurrent opex Aurora requires in accordance with the opex criteria in the forthcoming regulatory control period. This reduction not only provides Aurora the ability to comply with its ongoing obligations but also provides Aurora the ability to achieve future cost reductions.

It can be seen from Table 1 that, in the 2012-17 regulatory control period, Aurora/TasNetworks spent significantly more than the amount considered efficient by the Regulator.

The AER was silent on TasNetworks' vegetation management cost forecasts for the 2017-2019 regulatory control period, presumably because TasNetworks' aggregate opex forecast was less than the AER's modelled efficient forecast. Nonetheless, the outturn expenditure for this period was significantly larger than that of the previous period (see Table 1).

TasNetworks is proposing to continue to spend a similarly large amount in the next regulatory control period. It seems apposite for the AER to follow up its comments from the 2012 draft determination.

<sup>&</sup>lt;sup>9</sup> 2012-17 Draft Determination, page 171

Table 1. Summary of Vegetation Management Strategies and Costs

Period	Strategy	Approximate Annual Cost
2004-2009	Unknown, assumed annual trimming cycle. Note 1	\$6 million <sup>10</sup>
2009-2012	Annual trimming cycle. <sup>11</sup>	\$8 million <sup>12</sup>
2012-2017	Efficient maintenance cycle. 13, Note 1	\$10.5 million <sup>14</sup>
2017-2019	Trimming cycle. <sup>15</sup>	\$23 million <sup>16</sup>
2019-2024	Vegetation treated as an asset, managed using a risk-based approach. <sup>17</sup>	\$23 million <sup>18</sup> (forecast)

Note 1. These terms were defined by Aurora: 19 "Trimming cycle refers to the practice of removing the minimum vegetation to comply with TEC 8A, whilst maintenance cycle removes additional vegetation reducing the cycle (and cost) over time despite its initial higher cost."

### **Risk Assessment**

The Vegetation Asset Management Plan submitted as an attachment to the regulatory proposal for the current regulatory control period contains a risk assessment that identifies inherent, current and target risk levels for the risk "major bushfire start is attributed to TasNetworks assets and/or work practices".<sup>20</sup>

There is no indication of why the risks were rated at those levels; no indication of how the planned works will move the business towards the target level of risk and no indication of whether the target risk level is achievable. It is therefore difficult to assess the reasonableness of the planned works.

### **Vegetation Management Approach**

The proposed strategy appears to be to treat each span and tree as a separate "asset" for managing. Whilst complete, this is an exceedingly complex task requiring significant resources for management, data collection and data maintenance.

It is not clear that this is the most efficient approach, nor is it clear that TasNetworks has forecast expenditure for these tasks.

<sup>&</sup>lt;sup>10</sup> 2012-17 Regulatory Proposal, section 12.2.5

<sup>&</sup>lt;sup>11</sup> 2012-17 Vegetation Management Strategy, page 7

<sup>&</sup>lt;sup>12</sup> Aurora Energy Economic Benchmarking RIN 2008-2013, worksheet 3

<sup>&</sup>lt;sup>13</sup> 2012-17 Vegetation Management Strategy, page 7

<sup>&</sup>lt;sup>14</sup> 2017-19 Vegetation Asset Management Plan, section 13.1.

<sup>&</sup>lt;sup>15</sup> 2017-19 Vegetation Asset Management Plan, section 11.1.1

<sup>&</sup>lt;sup>16</sup> TasNetworks (D) Reset RIN 2019-20 to 2023-24, table 3.2.1

<sup>&</sup>lt;sup>17</sup> 2019-2024 Vegetation Asset Management Plan, sections 13.2, 14.1

<sup>&</sup>lt;sup>18</sup> TasNetworks (D) Reset RIN 2019-20 to 2023-24, table 3.2.1

<sup>&</sup>lt;sup>19</sup> 2012-17 Vegetation Management Strategy, page 7

<sup>20 2019-24</sup> Vegetation Asset Management Plan, section 9.1

## **Vegetation Management System**

To aid the implementation of the proposed strategy, TasNetworks is seeking to implement an IT system, a "Vegetation Management System", at an unspecified cost.<sup>21</sup> The creation of this IT system is properly capital expenditure: it is not clear that there is expenditure forecast for this system.

TasNetworks states that, prior July 2014, there was:22

no operational vegetation management database in place, therefore inadequate evidence base for vegetation exposure and work volumes across the network, lack of understanding of find rates, and inability to forecast future vegetation management work volumes or budgets;

Yet the Vegetation Asset Management Plan for the 2012-2017 regulatory control states:<sup>23</sup>

The primary action that came from the Risk Treatment Plan was the further development of the vegetation management information technology system (known as VEGEMITe) to include capabilities for forecasting works, modelling, and reporting requirements. These changes were required prior to the development of the 2012-2017 Pricing Determination.

Timelines for implementation were:

- December 2008: Operating prototype in place
- December 2009: System operational
- July 2010: Reporting available

All timelines have been met, and the improved quality and level of detailed information gained from VEGEMITe has provided key inputs into the cost/resource modelling used to quantify Aurora's financial and resource requirements for the 2012-2017 Pricing Determination.

It is not clear why another vegetation management system is required.

### 9. Distribution Network Tariffs

### Time of Use Demand Tariffs

TasNetworks is proposing to continue the introduction of a range of time of use tariffs for small residential customers. These are considered to be more "cost-reflective" than the traditional suite of flat rate consumption tariffs.

There are three of these tariffs:<sup>24</sup>

- time of use energy (TAS93), a peak / off-peak charging structure based on energy consumption;
- time of use demand (TAS87), a peak / off-peak charging structure based on kW demand;

<sup>&</sup>lt;sup>21</sup> 2019-24 Vegetation Asset Management Plan, section 14.4

<sup>&</sup>lt;sup>22</sup> 2019-24 Vegetation Asset Management Plan, section 13.3.1

<sup>&</sup>lt;sup>23</sup> 2012-17 Vegetation Management Plan, section 7.4

<sup>&</sup>lt;sup>24</sup> 2019-24 TSS, figure 10

• time of use demand with DER, a peak / off-peak charging structure based on kW demand for customers with Distributed Energy Resources (embedded generation).

The difference between the latter two tariffs is that the time of use demand with DER tariff has a discounted off-peak demand charge.<sup>25</sup>

The intention behind cost-reflective pricing is that the customer pays for the full cost of supply. In a peaky system, such as a power supply system, a cost-reflective pricing structure for access to services results in customers paying more for services accessed in peak times. An incentive is thus created for customers to reduce their economic demand for services in peak times.

Recent changes to Distribution Ring-fencing clarifies that regulated distribution business now have no role to play beyond the connection point. So, how a customer actually reduces its demand for services (electrical demand) in peak times should now be of no concern to the distributor (from a pricing point of view).

To labour the point, whether the residential customer chooses to reduce demand by installing embedded generation; insulating their premises; installing a wood heater; or refraining from turning on every appliance in the house during peak periods should be immaterial to the regulated distributor. What is important is that the consumer has reduced its demand during peak periods.

The approach chosen by TasNetworks whereby customers that install embedded generation receive a "better deal" violates the principle of distributor indifference to actions beyond the connection point. Customers are rewarded for choosing a particular, more expensive, form of demand management.

This approach creates two classes of demand-side management: one for those who can afford embedded generation and one for those who cannot. This seems out of scope for a regulated distribution business.

The approach also creates a perverse situation by creating incentive to install embedded generation, which will subsequently contribute to network instability and increased mitigation costs.

## Residential Customers Moving to Time of Use Tariffs

TasNetworks states that the long-term aim is for all residential customers to move to cost-reflective tariffs, which are represented by the time of use offerings.<sup>26</sup>

TasNetworks operates under a revenue cap, which means that the revenue that TasNetworks will collect from its customers will be unchanged. The portion of revenue collected from each customer group will also be unchanged. Changing the pricing method, therefore, has no effect on TasNetworks' overall revenue, or the total amount collected from residential customers, but it will affect what individual customers pay.

<sup>&</sup>lt;sup>25</sup> 2019-24 TSS, page 15

<sup>&</sup>lt;sup>26</sup> 2019-24 TSS, section 1

There will be two groups of customers: those who pay more and those who pay less under the new regime. Because of the operation of the revenue cap, the amount of savings seen by one group of customers must be balanced by the amount extra paid by the other group of customers.

TasNetworks presents information implying that customers that move to these time of use tariffs will be better off than on the flat tariffs.<sup>27</sup> But this is only a temporary situation. Eventually all residential customers will be on time of use network tariffs.

For this reason, it would be instructive to see the "end game". That is, for TasNetworks to forecast the tariff rates supposing that all residential customers moved to time of use tariffs. This will allow consumers to make a more informed decision about the proposed tariffs.

### 10. Issues Paper

## Retailers and Network Tariffs

In the Issues Paper, the AER notes:28

It is important to understand that network tariffs are charged to retailers. Network tariffs are not charged directly to end customers (apart from some large industrial customers). An opt-out approach means retailers are, by default, charged a cost reflective network tariff, with the option for the retailer to opt-out of this arrangement. End customers continue to have a choice in their retail offering. The retail offerings available to end customers are determined by the retail price regulation arrangements in Tasmania, and by the market offers available by Aurora and the currently limited number of other retailers.

One objective of network tariff reform is that retailers are exposed to the costs of network congestion or the costs of using the network when it is under the greatest demand pressure. ...

Retailers are not charged a cost reflective network tariff. Except in respect of their own premises, they are not a customer of the distributor.

In Tasmania, under chapter 6B of the National Electricity Rules, the retailer acts as an agent for shared customers. Each month, the retailer is billed by the distributor for an amount equal to the network charges for the shared customers.

So, each retailer will receive 12 bills per year and must manage its cash-flows to ensure that it is able to pay the bill each month. It is not clear how cost reflective pricing will have any effect on retailers:

- TasNetworks is under a revenue cap, so the total amount of revenue to be collected from all retailers will not change.
- Tasmania has a stable customer population with limited retail competition in the small customer category and limited churn, so the proportion of revenue collected from each retailer is unlikely to be volatile.

<sup>&</sup>lt;sup>27</sup> For example, 2019-24 TSS, page 133 and after

<sup>28</sup> Issues Paper, page 40

• The weather is the major driver of demand in Tasmania; moving to costreflective pricing will not affect this, so the seasonal variation in billing will continue unchanged.

A retailer is more likely to be concerned with managing its exposure to spot energy prices.

# 11. Glossary

These documents are referenced in the body of this document.

Reference	Document	
2012-17 Draft Determination	Draft Distribution Determination, Aurora Energy Pty Ltd 2012-13 to 2016-17, published by the AER in November 2011	
2012-17 Regulatory Proposal	Aurora Energy Regulatory Proposal for the regulatory control period 1 July 2012 to 30 June 2017	
2012-17 Vegetation Management Plan	Aurora Energy, Management Plan 2011 Vegetation Management, 19 February 2011 Attachment AE038 to the 2012-17 Regulatory Proposal	
2012-17 Vegetation Management Strategy	Aurora Energy, Management Strategy Vegetation Management, 12 May 2011 Attachment AE019 to the 2012-17 Regulatory Proposal	
2017-19 Regulatory Proposal	TasNetworks Regulatory Proposal for the regulatory control period 1 July 2017 to 30 June 2019	
2017-19 Vegetation Asset Management Plan	TasNetworks, Asset Management Plan Vegetation v1.0, October 2015 Attachment TN030 to the 2017-19 Regulatory Proposal	
2019-24 Issues Paper	Issues Paper TasNetworks Distribution and Transmission Determination 2019 to 2024, published by the AER in March 2018	
2019-24 Regulatory Proposal	TasNetworks Regulatory Proposal for the regulatory control period 1 July 2019 to 30 June 2024	
2019-24 Software Asset Management Plan	TasNetworks Asset Management Plan Corporate IT – Software Asset Management Plan v1.0, October 2017 Attachment to 2019-24 Regulatory Proposal	
2019-24 TSS	TasNetworks Tariff Structure Statement for the regulatory control period 1 July 2019 to 30 June 2024	
2019-24 Vegetation Asset Management Plan	TasNetworks, Vegetation Asset Management Plan v3.0 October 2017 Attachment to the 2019-24 Regulatory Proposal	