Tasmanian Transmission Revenue Proposal

An overview for Tasmanian electricity consumers Regulatory control period 1 July 2014 – 30 June 2019



About TasNetworks

We are Tasmania's electricity network service provider. We commence operations on 1 July 2014, with the merger of Aurora's distribution network (the poles and wires) and Transend's transmission network (the big towers and lines).

TasNetworks supplies the power from generation sources to homes and businesses in Tasmania through a network of transmission towers, substations and powerlines. We also:

- build, maintain and operate the network
- establish new connections where infrastructure does not currently exist
- respond to, and repair, outages and faults
- operate and maintain a 24-hour fault call centre
- read, replace and repair meters
- provide education, advice and information about electrical safety
- deliver nationally accredited training to lineworker apprentices, contractors and sub-contractors, local councils and civil construction organisations
- own and operate a telecommunications business that serves customers in the electricity industry and other industries.

The TasNetworks vision

Trusted by our customers to deliver today and create a better tomorrow

The purpose of our business:

We deliver electricity and telecommunications network services, creating value for our customers, our owners and our community.



Snapshot

TasNetworks' Revenue Proposal supports lower prices for consumers



How our Revenue Proposal will affect you

Our Revenue Proposal outlines our plans for improving, maintaining and operating the transmission network efficiently to meet the long-term interests of consumers.

We actively engaged with consumers, listened carefully to the feedback we received, and responded to that feedback in developing our Revenue Proposal.

For the five-year period from 1 July 2014 to 30 June 2019 our Revenue Proposal puts further downward pressure on prices for all consumers. We have proposed challenging targets and will work hard to achieve them:

- our capital expenditure will be halved
- we will work hard to achieve further efficiencies and our average operating expenditure will fall by 12 per cent
- we will maintain our service levels
- our revenue requirement will drop by \$34 million in the first year—on top of the \$37 million in revenue reductions we made over the last two years
- consumers benefit immediately—in the first year the transmission component of the average annual bill for residential and small business customers will reduce.

Reducing expenditure levels any further would allocate too much risk to our customers, in particular risk to service levels. Further reductions would also compromise our ability to provide appropriate returns to the people of Tasmania, the ultimate owners of our business.

We are confident that our Revenue Proposal strikes the right balance for Tasmania's future.

Turn to pages 10 and 11 of this paper to find out more about our commitment to ongoing engagement with Tasmanian consumers, and how you can become involved.

About this Paper

The revenue TasNetworks earns from providing monopoly transmission and distribution services is set by the Australian Energy Regulator (AER). This is done separately for transmission and distribution services. We prepare a proposal for the AER, outlining our expenditure plans to efficiently provide transmission services for a five-year period. We are required to submit our Revenue Proposal for transmission services by the end of May 2014. The Revenue Proposal covers the period from 1 July 2014 to 30 June 2019. This Paper:

- provides an overview of the electricity supply chain and the transmission network in Tasmania
- summarises the key messages contained in our Revenue Proposal
- explains how we actively engaged consumers in the development of our Revenue Proposal
- outlines the feedback we have received, confirming that customer value from network services is linked to the price and reliability of delivered electricity
- includes information on the steps in the Revenue Proposal review and approval process, and how you can have your say.

The planning and compilation of TasNetworks' Revenue Proposal, and the engagement activities undertaken as part of this process, were undertaken by Transend, Tasmania's transmission network service provider to 30 June 2014. The work was undertaken in partnership with TasNetworks, Tasmania's transmission network service provider from 1 July 2014. References in this document to 'we', 'our' and 'us' may either be references to Transend or TasNetworks, depending on the context.

The Tasmanian electricity supply chain

Transmission is one step in the supply chain that delivers electricity to your home or business. Our research shows that the general public can find it difficult to understand how this chain works. Here's a simple explanation:

Step 1 | Generation

Electricity is generated at power stations and wind farms. In Tasmania the majority of these are operated by Hydro Tasmania. Electricity also comes from generators on mainland Australia via the Basslink undersea cable.

Step 2 | Transmission

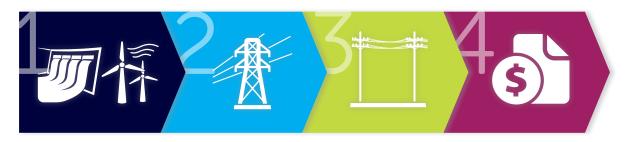
Electricity is transmitted from where it is generated around the State through a network of transmission lines and substations owned by TasNetworks. We transmit directly to some large industrial businesses who are our transmission customers. We also transmit electricity to Basslink, providing electricity to customers on mainland Australia.

Step 3 | Distribution

Once it is transformed into lower voltages at a substation, electricity can be safely distributed through a network of poles and wires to homes and businesses, again by TasNetworks. These homes and businesses are TasNetworks' distribution customers.

Step 4 | Retail

The retail company buys electricity for its customers and uses TasNetworks' transmission and distribution networks to transport the power. Retailers issue bills to customers that reflect the electricity they have used and the costs of providing it to them. Until 1 July 2014, all Tasmanian households and small businesses are customers of Aurora Energy. After this date, other retailers will be able to enter the market.



Our transmission network

The Tasmanian electricity transmission network has a backbone network operating at 220,000 volts (220 kV) that links the main generators to major 'load' centres, including major industrial customers. A lower voltage transmission network mainly operating at 110,000 volts (110 kV) connects other generators and regional load centres.

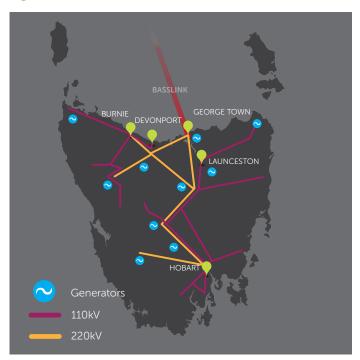


Figure 1 | Tasmania's transmission network overview

Use of the transmission network at a given point in time depends on how much electricity Tasmanian customers are using, whether we are transmitting electricity to or from Victoria across Basslink, and which Tasmanian generators are operating.

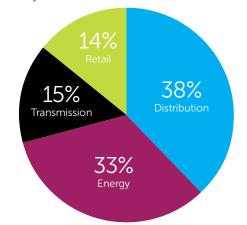
Tasmania has a dispersed customer base and a relatively large inter-connector (Basslink) that can move electricity from or to Tasmania. Compared to the rest of Australia, Tasmania has a large number of relatively small generators. Most of these are hydro-electric 'hydro' generators, dependent on rainfall and water in storage to be able to operate.

Because we have a lot of hydro generation, the use of the transmission network varies day to day, season to season and year to year, depending on which generators are running.

Tasmania's main population centres are a long way from where the generators are located. This means that our transmission network requires many kilometres of transmission lines and many substations to serve our customers.

Electricity prices: no one wants to pay more than they have to

In Tasmania, on average, about 15 per cent of the electricity bill is made up of transmission costs. The remaining 85 per cent of costs relate to other steps in the supply chain generation, distribution and retail—together with costs to run the electricity market and fund schemes such as the renewable energy certificates. Figure 2 | Cost breakdown of a typical residential electricity bill



Source: Office of the Tasmanian Economic Regulator, Comparison of 2014 Australian Standing Offer Energy Prices, March 2014. Retail component includes Renewable Energy Certificate costs and Australian Energy Market Operator charges.

Our Revenue Proposal

A comparison between the next five years and the previous five

During the past five years:

- our transmission network delivered record amounts of energy
- we worked hard to find more efficient ways to deliver our services
- peak demand forecasts did not eventuate and we responded to the changed circumstances
- we reduced capital expenditure and reduced our operating expenditure
- we charged our customers less than the allowed revenue and maintained service levels.

Looking forward

- Electricity consumers in Tasmania will continue to benefit from the savings made in the current regulatory period.
- Capital expenditure is forecast to be less than half the expenditure in the current period, in constant dollar (or 'real') terms.
- We will work hard to make further reductions to operating costs and deliver savings from the transmission and distribution merger.
- We have made an adjustment to our depreciation profile, which results in a reduction in transmission charges over the next five years.
- We have accepted a lower return on equity and proposed a significantly lower cost of capital.
- Consumers benefit immediately—in the first year, our revenue drops.

Our Revenue Proposal supports lower prices for consumers.

Forecasting the revenue required to provide transmission services

Our Revenue Proposal is prepared in accordance with a range of detailed obligations set out in the National Electricity Rules and supporting guidelines prepared by the AER. We outline how much money we will need to efficiently provide transmission services in Tasmania over the next five years.

The majority of the revenue we are proposing is to fund the \$1.4 billion in Tasmanian transmission assets constructed over the last 60-plus years. Our Revenue Proposal also outlines revenue required to support future capital investment. We recover the money invested in transmission assets over very long periods of time—typically 40 to 60 years.



Another large element of our future revenue requirement is our annual operating cost, which provides for operating and maintaining the transmission system and running the business. We outline the efficiency gains we have made over the last five years and how we factor in future efficiencies.

The Revenue Proposal includes allowances for forecast tax payments and the rate of return we receive for our investments. These are based on a 'benchmark' firm rather than our actual costs. This is so that customers pay the same for transmission services regardless of who owns the business and how much debt the business actually has. Our Revenue Proposal provides more information about all these components.

Below we provide summary information about our future capital and operating expenditure drivers and forecasts. We also summarise our proposed revenue requirements for the next five years.

Planning for the peak

Electricity networks transport electricity between generators and homes and businesses. Homes and businesses may use more electricity at particular times of the day and particular times of the year. We must plan ahead to make sure the transmission system can cope with this peak customer demand.

We plan up to 30 years ahead and predict future demand using weather forecasts, trends in the economy, technological changes and a host of other factors.

We are an industry leader in harnessing the capacity available in our transmission network. We continue to work with our customers to find smarter ways to deliver electricity as cheaply as possible.

Planning ahead means we can cater to the needs of the future, while providing the electricity our consumers need now.

In Tasmania, electricity consumption has been trending down in recent years. Various factors explain the trend: closures of industrial plants, increases in the use of solar panels and energy efficiencies from new building regulations. Another factor is consumers' response to higher electricity prices in recent years: people are buying more efficient appliances and turning off items that aren't being used.

The forecast growth in peak demand is also rising at lower rates than we've seen in the past.

We have updated our plans based on the changed outlook for peak demand growth. This has reduced our proposed capital expenditure.

Capital expenditure is halving

Under Transend, significant amounts of money were spent to rebuild the ageing transmission system. Many assets needed to be replaced or upgraded as they were in poor condition, unable to meet safety standards and/or provide acceptable levels of supply quality and reliability to our customers.

In areas with peak demand growth we rebuilt some assets at greater capacity. We also built some new transmission assets such as transmission lines and substations to improve the reliability and security of supply. We made this investment after analysis and consultation in accordance with regulatory tests for transmission investment.

Capital expenditure during the current regulatory period was contained to \$557 million, which is \$115 million less than the AER's allowance. Our peak demand forecasts did not eventuate in some areas, so we deferred a number of capital projects in response to the changed circumstances. We also found more efficient ways to deliver required services. We only charged customers for the capital investment we actually made.

We are forecasting significant reductions in our capital expenditure requirements.

Figure 3 shows that our average annual capital expenditure for the next regulatory period is expected to be 52 per cent lower in real terms than our actual expenditure in the current regulatory period. There are two main reasons for this reduction:

- Investments made over the last 10 years, together with lower growth in peak demand, mean that our network generally has sufficient capacity to meet forecast demand growth for the next five years.
- We have cleared a significant backlog of renewal projects.

The ongoing program reflects a continuing need to manage risks, renew assets and deliver a secure and reliable electricity supply.

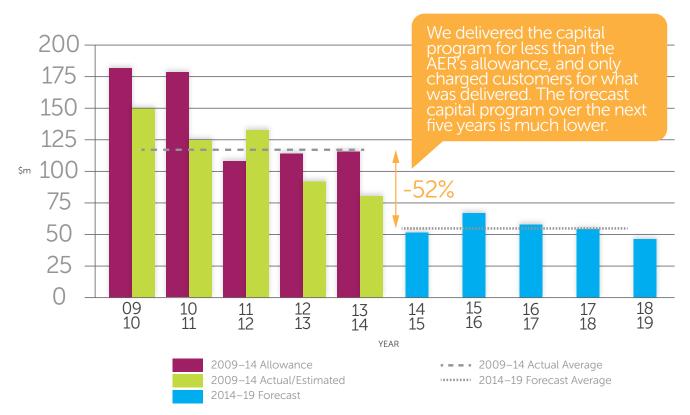


Figure 3 | Overview of forecast and actual capital expenditure (\$m 2013-14)

Operating expenditure will reduce further

We have factored future efficiency savings into our operating expenditure forecasts, including efficiencies from the merger of the transmission and distribution networks.

In forecasting our operating expenditure requirements, we have been careful to ensure that there is an appropriate balance between the pressure to reduce expenditure and the importance of maintaining service performance and managing network risks.

We are setting ourselves challenging targets and will work hard to achieve them.

Our operating expenditure forecasts for the next regulatory period reflect:

- an immediate reduction in the first year of operation
- further efficiency gains achieved each year as we rationalise our systems and find better ways of delivering services to our customers. We will need to find these future efficiencies to offset a range of upward pressures on our operating costs.

Figure 4 illustrates that we have forecast operating expenditure that falls in real terms over the regulatory period, despite a range of new obligations and forecast increases to input costs.

65 to achieve continuing operating expenditure reductions. 50 \$m -12% 45 30 15 16 09 10 10 11 11 12 12 13 13 14 14 15 17 18 18 19 16 17 YEAR 2009–14 Allowance ---- 2009–14 Actual Average 2009–14 Actual/Estimated 2014–19 Forecast Average 2014–19 Forecast

Figure 4 | Overview of forecast and actual operating expenditure (\$m 2013-14)

Revenue comparison between the last five years and upcoming five years

Figure 5 plots a revenue comparison of total annual transmission revenue between the current regulatory period from 1 July 2009 to 30 June 2014 and the proposed revenue for the upcoming regulatory period from 1 July 2014 to 30 June 2019.

Over the last two years of the current regulatory period, we decided not to recover our full revenue allowance. This means that our load customers are collectively receiving a discount of more than \$37 million. We are reducing our revenue by a further \$34 million in the first year of the regulatory period commencing 1 July 2014.

Our Revenue Proposal for the next five years reflects the feedback we have received and supports lower prices for consumers. Our business sustainability is linked to the sustainability of our customer base. To protect our customers, we have taken the initiative to propose the lowest sustainable revenue requirement; we have not left this responsibility to the AER.

Figure 5 | Revenue comparison between current and upcoming regulatory periods (\$m - nominal)

Ne have already foregone

million in 2013–14



Snapshot of total revenue

Allowed revenue 2009–2014\$1,057 millionActual recovered revenue 2009–2014\$1,020 millionForecast revenue 2014–2019\$ 973 million

Incentives to reduce costs while maintaining service levels

Under the national regulatory framework, new incentive schemes have been introduced to promote more efficient outcomes in terms of cost savings and service performance improvements. Our Revenue Proposal explains these incentive schemes. The schemes are designed by the AER and aim to achieve outcomes that are aligned with feedback we received from customers to:

- deliver efficient outcomes
- maintain reliability
- be accountable for the targets we set.

TasNetworks will continue to pursue initiatives to deliver the cost and service outcomes that these schemes support.

In summary

Our Revenue Proposal puts further downward pressure on prices for all electricity consumers. We have proposed challenging targets and will work hard to achieve them.

Reducing expenditure levels any further would allocate too much risk to our customers, in particular risk to service levels. Further reductions would also compromise our ability to provide appropriate returns to the people of Tasmania, the ultimate owners of our business.

Table 1 illustrates that our Revenue Proposal will result in a drop in prices initially, followed by annual increases that are below inflation. It is a snapshot of how we see the 'bottom line' impact of our Revenue Proposal on residential and small business customers:

		Impact On Annual Charge					
		2013–14 ¹	2014–15	2015–16	2016–17	2017–18	2018–19
Weighted average residential annual charge	Total	S2,256	-\$54	+\$4	+\$1	+\$5	+\$5
	Transmission component	\$338	-\$54 (-16.0%)	+\$4 (+1.4%)	+\$1 (+0.5%)	+\$5 (+1.7%)	+\$5 (+1.6%)
Weighted average small business annual charge	Total	\$3,782	-\$91	+\$7	+\$2	+\$8	+\$8
	Transmission component	\$567	-\$91 (-16.0%)	+\$7 (+1.4%)	+\$2 (+0.5%)	+\$8 (+1.7%)	+\$8 (+1.6%)

Table 1 | Average annual price impact on residential and small business customers (\$ nominal)

These pricing outcomes are indicative and could vary year to year for a range of reasons, including where we receive more revenue for achieving improved customer service outcomes. Our Revenue Proposal provides more information about the factors that affect our revenue allowance and customer prices each year.

We are confident the Revenue Proposal strikes the right balance for Tasmania's future.

¹Total charges are from AER fact sheet, Transitional decisions: TransGrid and Transend 2014–15, March 2014. Transmission component is 15 per cent as per the Office of the Tasmanian Economic Regulator, Comparison of 2014 Australian Standing Offer Energy Prices, March 2014.

Consumer engagement – strengthening relationships

In this section we outline what we have learnt from our engagement and how that feedback has shaped our Revenue Proposal and our plans for the future.

For the purpose of undertaking consumer engagement for transmission services, we divide consumers into two groups:

- transmission customers, those who are directly connected to the transmission network
- all other electricity consumers, those who are connected to the distribution network.

Our engagement approach is tailored to reflect the different requirements and preferences of these two groups.

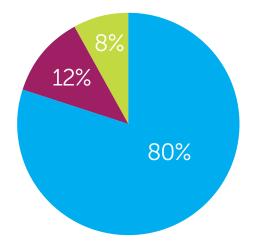
Consumer feedback—price and reliability are major concerns

Our **transmission customers** have a sophisticated level of understanding of our business plans and are able to give us informed feedback. In considering their electricity supply, transmission customers tell us that they are concerned about the price of delivered electricity. They also tell us that reliability of supply is important and they do not want to risk a reduction in transmission service levels unless *they* choose to take that risk.

Consumers are generally less informed about the electricity industry and transmission services. Our engagement highlights that consumers value reliable electricity services and are also concerned about the affordability of delivered electricity.

Figure 6 captures some consumer views of the trade-off between price and reliability. It illustrates that a less reliable service was not accepted as a trade-off for lower prices. By the same token, an increase in reliability was not supported if it came at a higher price.

Figure 6 | Price and reliability trade-off



Q: If you had a choice, which of the following would you most likely do?

- 80% A: Pay about the same amount for the same standard of service
- 12% | A: Pay more for a more reliable electricity service
 - 8% | A: Pay less and accept a less reliable service with more blackouts

Further information on the activities we conducted and the outcomes from our engagement are provided in our Revenue Proposal, chapter 3.



Our consumer engagement activities distilled the following risks and benefits for **transmission customers** and **consumers** when considering the Revenue Proposal:

Table 2 | Consumer views on the possible risks and benefits of the Revenue Proposal



Consumer engagement is an important input to the development of our business plans and influences our strategic direction.

We have responded to feedback by putting further downward pressure on prices for all consumers while maintaining service levels.

Have your say: our promise on engagement

TasNetworks is committed to educating, informing and engaging with consumers about our activities and plans for the future.

A campaign to educate Tasmanians about who we are and what we do commenced in late April. This was a first step in TasNetworks' consumer engagement, which will continue to build on the learnings from Transend's engagement described in this Paper and Aurora's engagement with its distribution customers.

We want an ongoing conversation about issues that interest you and affect your lifestyles, such as the price, reliability and safety of electricity, the costs and benefits of possible projects, and the environmental impacts of our business.

We know that most people prefer face-to-face interaction so we will try and offer this opportunity to you. One suggestion from consumers was the establishment of a panel that reflects a broad cross-section of consumer views, and we are giving this serious consideration.

Keep an eye on our website for information on how you can become involved. Your feedback will help us to improve the way we engage and influence our strategic direction.

Next steps

Submission of the Revenue Proposal

May – November 2014	AER reviews Tasmanian Transmission Revenue Proposal, prepares issues paper, conducts public forum, and invites public submissions before releasing its draft decision.
January 2015 (indicative)	TasNetworks submits its revised Revenue Proposal, if required. The due date is 30 business days after the AER releases its draft decision.
January – April 2015	AER undertakes further review, including of public submissions, and releases its final decision.
July 2015	New transmission prices take effect.

Like to know more?

You can read a full copy of the Revenue Proposal on the Transend Networks' website at www.transend.com.au

After 1 July 2014, it will be posted on TasNetworks' website at www.tasnetworks.com.au

If you would like further information on any detail in this Overview Paper or our Revenue Proposal, please contact our Transmission Revenue Reset Project Manager.

We also welcome any general queries and feedback you may have.

Talk to us today

You can contact us in the following ways:

Prior to 1 July 2014

- @ revenuereset@transend.com.au
- 🔄 www.transend.com.au
- Customer feedback line: 1300 361 811

After 1 July 2014, you can contact TasNetworks

- @ revenuereset@tasnetworks.com.au
- 일 www.tasnetworks.com.au
- 🤇 Customer feedback line: 1800 060 399 (free call)



