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On behalf of Victoria's five electricity distribution businesses
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14 September 2012

Committee Secretary
Senate Select Committee on Electricity Prices
PO Box 6100
Parliament House
Canberra ACT 2600
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Victoria's Electricity Distribution Businesses' Submission to the Senate Select Committee Inquiry on Electricity Prices

On behalf of the Victorian electricity distribution businesses (DBs), CitiPower, Jemena, Powercor Australia, SP AusNet and United Energy, I am pleased to attach our submission to the Senate Select Committee Inquiry on Electricity Prices. We would welcome the opportunity to discuss this submission further at the Inquiry's public hearing.

The purpose of this submission is to provide the Committee with information to help members deliberate on some of the issues outlined in the Inquiry's terms of reference.

The Victorian DBs distribute electricity and provides metering services to 2.6 million customers in Victoria.

Our submission is supported by a report prepared by Ernst and Young: *Victorian domestic electricity prices 1996-2010: The contribution of network costs*, dated 9 September 2011.

Our submission supplements a detailed submission from the Energy Networks Association (ENA).

Key points we want to make to the Senate Select Committee are:

- Victoria's electricity distribution businesses have a unique perspective to provide to this Inquiry. We believe the sector has performed well since major reforms were implemented in the mid-1990s with network charges reducing over time and reliability outcomes improving.
- The network component of the average electricity bill in Victoria is about 32% (including metering costs) which is much less than the commonly cited national figure of 51%.
- The regulatory regime first introduced in the mid-1990s continues to work well in Victoria for industry and customers, delivering the right balance of incentives and penalties to ensure our businesses deliver a safe, efficient and reliable electricity supply.

- The smart meter program is progressing well and will provide a technology platform which will deliver benefits and enable opportunities for Victorians now and into the future.
- Our assets must be built, maintained and operated in response to peak demand to ensure we deliver safe and reliable electricity supply to meet consumer expectations and a range of policy and regulatory requirements. The growth in peak demand is driving additional cost to consumers that can be avoided. We will therefore continue to work with governments, regulators, retailers and consumers on innovative ways to reduce them.

This submission has been approved by me, as CEO of United Energy and by the regulatory and government affairs representatives of each of the Victorian distribution businesses.

Yours sincerely

Hugh Gleeson
Chief Executive Officer United Energy

Submission to the Senate Select Committee Inquiry on Electricity Prices

Victorian Electricity Distribution Businesses

14 September 2012



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About the Victorian Electricity Distribution Businesses

The Victorian electricity distribution businesses (DBs) - CitiPower, Jemena Electricity Networks (JEN), Powercor Australia, SP AusNet and United Energy - distribute electricity and provide metering services to 2.6 million consumers in Victoria.

Purpose

This submission from Victoria's five distribution businesses (DBs) is in response to the Select Committee on Electricity Prices' inquiry into a range of matters outlined in its terms of reference.

As privately owned distribution businesses, we are in a unique position to comment on key issues being considered by this Inquiry.

Since privatisation in the mid-1990s, our businesses have delivered real price reductions and improved reliability to Victorian consumers under the regulatory framework. This has been achieved while still delivering shareholder returns and, more recently, Victoria's smart meter rollout.

Our recent experience in applying the benefits of smart meter infrastructure enables us to provide a different perspective on how the industry at a distribution level can deliver increasing benefits to consumers. These benefits include technologies which are already today providing Victoria's electricity consumers more insight into their electricity consumption habits, so they can make more informed choices and save money. In the future, the platform established in Victoria via advanced smart metering technology and introduction of flexible tariffs will enable genuine peak demand management.

Our assets must be built, maintained and operated in response to peak demand to ensure we deliver safe and reliable electricity supply to meet consumer expectations and a range of policy and regulatory requirements. The growth in peak demand is driving additional cost to consumers that can be avoided. We will therefore continue to work with governments, regulators, retailers and consumers on innovative ways to reduce them.

Our CEOs would welcome the opportunity to discuss these matters further at a public hearing.

Summary

- This Inquiry comes at an important time for the Australian regulated electricity businesses with a number of reviews underway covering consumer facing issues such as electricity pricing and industry regulation. Victoria's DBs understand customer concerns about rising energy prices and support the intent of these reviews, which we see as ensuring that over the long-term, consumers continue to receive a safe, efficient and reliable electricity supply which supports our community's continually evolving lifestyle and economic needs. We are actively participating in the various reviews and look forward to providing a unique perspective to this Inquiry.
- The Victorian electricity distribution sector has performed well since major reforms were implemented in the mid-1990s, with network charges reducing over time and reliability outcomes improving.
- The network component of the average electricity bill in Victoria is about 32% (including metering costs). This is much less than the commonly cited national figure of 51%.
- The regulatory regime first introduced in the mid-1990s continues to work well in Victoria for industry and consumers through delivering the right balance of incentives and penalties to ensure our businesses deliver a safe, efficient and reliable electricity supply.
- Consumers expect an electricity supply which delivers to their needs across various seasonal extremes and supports an ever-evolving range of electrical appliances and technology. While it is early days, demand management will play an increasing role, enabling a reduction in network augmentation costs by reducing the length and extremity of peak demand periods.
- The smart meter program will provide a technology platform for the future and will progressively enable Victoria's electricity industry to deliver benefits to consumers such as better information via internet portals and in-home displays, automatic fault detection and faster outage response, remote meter reads, elimination of estimated meter reads, remote connection and disconnection, remote meter condition monitoring, network condition monitoring and flexible pricing. Some of these benefits are available now and others will progressively be rolled out during and beyond the completion of the smart meter rollout. The installation of smart meters has resulted in the detection of around 13,000 wiring defects which have been rectified to improve customer safety.

Trends in electricity prices, costs and reliability

- Victoria's electricity distribution sector has performed well since major reforms were undertaken in the mid-1990s:
 - network charges (including additional costs of the smart meter rollout from 2010) decreased in real terms between 1995 and 2010. Network charges decreased by 20% on a \$ per MWh basis, or by 12% on a per customer basis. This equates to around a 4% real reduction in retail customer bills.
 - network charges comprise a relatively low share of electricity prices to consumers
 - our businesses have continued to deliver safe, reliable and efficient performance to our customers.
- Following recent increases for regulated network revenues approved by the Australian Energy Regulator (AER) (effective January 2011), our network charges are at the very low end of the range in Australia.

- Key drivers of increases in network costs approved by the AER for the 2011-15 period are mostly external to our businesses. These are:
 - network augmentation, which has significantly driven capital expenditure following significant peak demand growth
 - an increase in the allowance for the cost of capital, largely reflecting the impact of the global financial crisis
 - a range of enhanced environmental, safety and other statutory obligations
 - increasing materials and construction costs and land and labour rates, reflecting cost pressures across the Australian economy
 - operating cost increases caused primarily by enhanced bushfire mitigation regulations and electrical safety regulation compliance.

Private ownership of electricity distribution

- It is for state governments to decide whether or not privatisation of state owned DBs would promote the interests of the people of their state.
- In Victoria, network privatisation has clearly driven efficient outcomes for consumers, taxpayers and the broader economy. The regulatory framework including a service performance penalty and reward incentive scheme has, over time, reduced network charges and increased network reliability to benefit customers. We have responded to the regulatory framework in a way that has delivered safe and reliable electricity supply to consumers and appropriate returns to our shareholders.

The regulatory regime

- We strongly support a robust regulatory regime and an independent, capable and accountable regulator to ensure consumers and industry both get a “fair go”. Through our industry association, the Energy Networks Association (ENA), we have supported the various inquiries and reviews into aspects of the current regulatory regime which we see as important and timely.
- We see scope for incremental improvement in the existing regulatory arrangements but do not believe, particularly in such a new, national framework, major change is helpful in ensuring appropriate protection of consumers’ long-term interests. We believe the current framework delivers to the consumer and industry interests in Victoria. In conjunction with our industry associations we are constructively participating in review processes currently being undertaken by the Australian Energy Markets Commission (AEMC), the Productivity Commission and the Standing Council on Energy and Resources.

Delivering benefits from Victoria’s investment in smart meters

- The mandatory smart meter rollout project approved by the previous Victorian Government in 2006 is well advanced and due to be completed by the end of 2013.
- The program involves rolling out 2.6 million new meters across the State, of which almost 1.5 million have now been safely installed.
- Several customer benefits resulting from the smart meter program are available now and others will progressively be rolled out during and beyond the completion of the smart meter rollout. The installation of smart meters has resulted in the detection of around 13,000

wiring defects that have been rectified to improve customer safety. Other examples of benefits include:

- internet portals and in-home displays which, when linked to the meters, help consumers better understand and control their electricity use and cost
 - automatic fault detection and faster outage response so consumers will have their power restored more quickly
 - remote meter reads
 - no more estimated meter reads, meaning reads are more accurate
 - remote connection and disconnection when consumers move house, reducing the cost and time to perform the service
 - remote meter condition monitoring allowing for early detection of local supply issues
 - network condition monitoring and control activities
 - flexible pricing which will see consumers who want to participate being able to choose an electricity pricing plan which suits their consumption habits and lifestyle.
- Achieving the full benefits of the rollout for customers will still take some time. Critically, all the meters need to be rolled out for benefits to be fully introduced and the target for industry completion is not until end 2013.
 - *Incentives for change through flexible pricing* - the Victorian DBs support the Victorian Government's view that introduction of flexible pricing must be undertaken in an orderly way. It will be important to ensure that introduction of flexible pricing is supported by a consumer information campaign and that the pricing structures and their impacts are very clearly explained, particularly to vulnerable consumer groups. We have been working on development of flexible network tariffs which will be introduced consistent with Government policy and appropriate regulation.
 - *Consumer education* - at this stage, consumer understanding of smart meters and the opportunities they create is limited. Following the Victorian Government's decision in December 2011 to continue with the smart meter rollout, the Government's consumer communication program has developed significantly, including the launch of the recent "Switch On" initiative. We support the Government's increased communication on smart meters, which we believe is critical to benefits delivery and take-up.
 - *Implications for other states* - we believe that in time Victoria's smart meter rollout will be seen as an important, future focussed step to:
 - improve peak demand management and encourage demand side participation
 - support the introduction of flexible tariffs
 - provide the platform for a suite of benefits to consumers including more transparency around their bills.
 - We think this type of technology platform will, ultimately, be a necessary progressive step change across the country.

Introduction

This Inquiry comes at an important time for the Australian regulated electricity businesses with a number of reviews covering consumer facing issues such as electricity pricing and industry regulation underway. Victoria's DBs support the intent of these reviews, which we see as ensuring consumers continue to receive a safe, efficient and reliable electricity supply which facilitates their continually evolving lifestyle needs.

This submission supplements the Energy Networks Association (ENA) submission to this Inquiry. We support the ENA's positions on:

- The Australian Energy Market Commission's (AEMC) proposed rule changes for Economic Regulation of Network Service Providers. (Published 23 August 2012)
- A Productivity Commission Review of Electricity Network Regulation
- The review of the Limited Merits Review (LMR) regime.

In large part, these reviews have been triggered by concerns over increases in retail electricity prices, including significant increases in distribution costs in some states.

Victoria's electricity distribution sector has performed well since major reforms were undertaken in the mid-1990s, delivering lower costs and improved reliability to consumers, and distribution now comprises a relatively low share of electricity prices in Victoria.

Submission structure

This submission focuses on:

- trends in electricity prices, costs and reliability including:
 - long term trends in costs and prices (1996-2010)
 - the causes of increased network charges for the current five year regulatory determination period (2011-1014).
- our experience of the benefits of private ownership
- our views on the regulatory framework
- creating benefits for consumers from Victoria's investment in smart meters
- arrangements and initiatives for network businesses to assist their customers to save energy and reduce peak demand that drives avoidable costs in our networks.

Victoria's Electricity Distribution Businesses

The Victorian Electricity distribution businesses (DBs) own and manage the power poles and wires, and provide metering services, for the distribution of electricity safely and reliably to homes and businesses across the State.

The Victorian DBs were formed as a result of restructuring of the State Electricity Commission of Victoria (SECV) and the Municipal Electricity Undertaking (MEUs) in the mid-1990s and the subsequent divestment of the associated retail businesses. The DBs were privatised during 1995.

All Victoria's DBs are privately owned, by a mix of ASX-listed and single investor-owned companies.

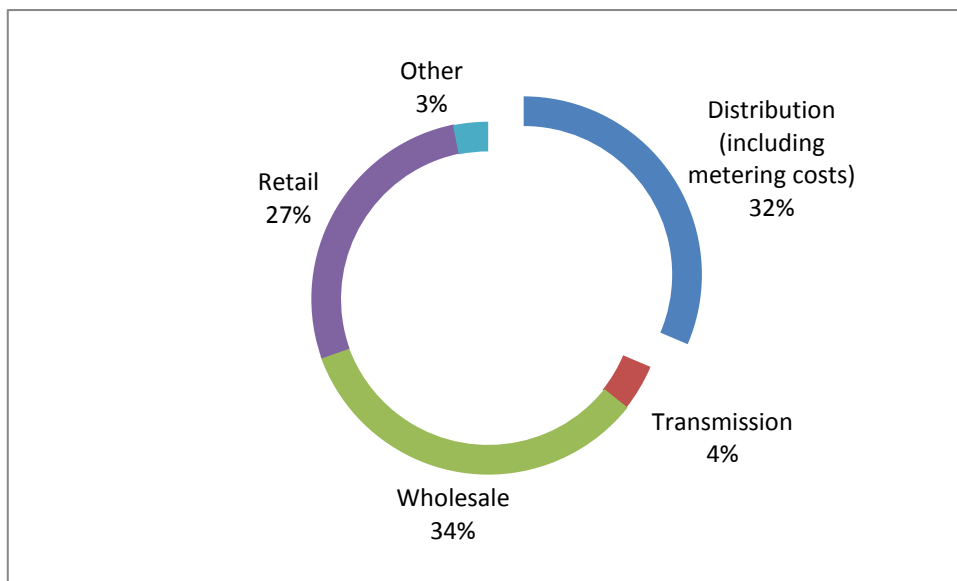
Each DB supplies a geographic region of Victoria. CitiPower, JEN and United Energy supply customers in inner and outer Melbourne. Powercor Australia and SP AusNet supply customers in western and eastern Victoria respectively.

Electricity prices, costs and reliability

Network charges contribution to residential electricity prices

AEMC analysis (Figure 1) shows that distribution costs in Victoria make up around 32% (including metering costs) of residential retail electricity prices, which is much lower than the commonly cited national figure of 51%.

Figure 1 Components of residential electricity prices - Victoria (2012/13)



Source: Australian Energy Markets Commission: *Possible Future Retail Electricity Price Movements: 1 July 2011 to 30 June 2014*.

Metering included in distribution costs and accounts for 9%. "Other" includes: RET/LRET, SRES, and feed-in-tariffs. Wholesale prices include carbon tax. Retail costs based on standing offer tariffs.

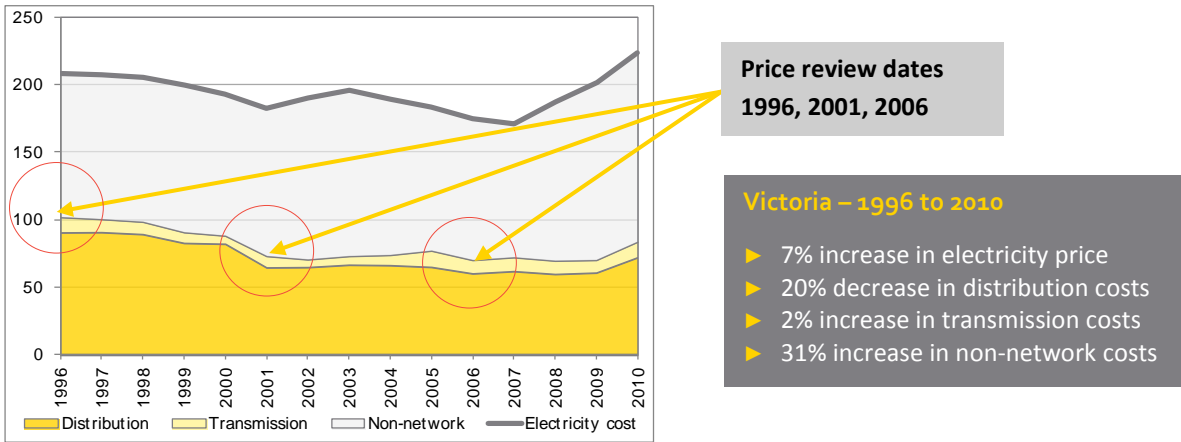
Long-term trends in network costs and electricity prices

Following industry restructuring, 1996 was the first year when prices charged by Victorian DBs were separately identified and regulated. Analysis by Ernst & Young (Figure 2) shows that distribution costs have decreased by 20% in real terms (including smart meter rollout costs) between 1996 and 2010.

Domestic retail electricity prices fell by 18% in real terms between 1996 and 2007 and then increased by 30% between 2007 and 2010. Over the entire period (1996 to 2010) electricity prices and typical bills for the typical domestic customer in Victoria have increased by 7% in real terms.

Figure 2 Victoria electricity price by component 1996 to 2010

(\$ per MWh, real 2010)



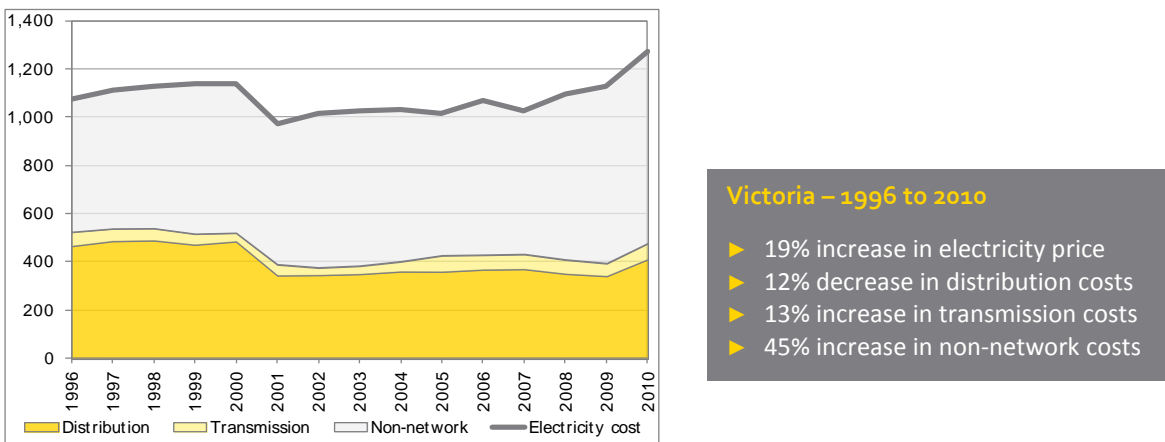
Source: Ernst and Young, *Victorian domestic electricity prices 1996-2010: The contribution of network costs* A report for the Victorian electricity network businesses, 9 September 2011.

Non-network costs are wholesale, retail, government mandated green schemes and taxes.

Figure 3 shows the same information presented on a cost per customer basis.

Figure 3 Victorian electricity prices by component 1996 to 2010

(\$ per customer, real 2010)



Source: Ernst and Young, *Victorian domestic electricity prices 1996-2010: The contribution of network costs*, Report for the Victorian electricity network businesses, 9 September 2011.

Non-network costs are wholesale, retail, government mandated green schemes and taxes.

Factors affecting Victorian electricity prices since 2007

Smart meter rollout costs

In 2006, the previous Victorian Government decided to roll out smart meters and associated technology to all Victorian electricity consumers with an annual electricity consumption of less than 160Mwh per year. The AER has regulatory oversight of the smart meter rollout costs. In 2012 the smart meter rollout has added a net increase of between \$80-\$120 to consumers' electricity bills.

Retail and wholesale prices explains most of the increase in retail prices

As shown in Figures 2 and 3 above, there has been a sharp increase in combined wholesale and retail electricity costs starting in 2007 which explains most of the increase in retail electricity tariffs since that time.

It should be noted that this analysis overstates the actual retail prices being paid on average by consumers in Victoria. The analysis in Figures 2 and 3 is based on available information for regulated standing offer tariffs. However in practice, with retail competition, many customers pay discounted market tariffs which we understand are currently around 15%-18% less than the regulated standing offer tariffs. The Essential Services Commission estimates that one in three Victorian customers remain on regulated standing market offer tariffs¹. Accurate information on retail electricity prices actually being paid (including the numbers of customers paying market tariffs) is difficult to obtain.

However even taking this into account it appear that there has been a significant increase in the wholesale and retail costs since around 2007.

Declining network utilisation

In recent years average household electricity consumption has been declining due to improving energy efficiency, penetration of rooftop photovoltaic systems, changing consumption patterns in the industrial sector and the response to higher retail electricity prices. Current demand forecasts indicate this trend will continue². At the same time, distribution system peak consumption has continued to increase, due largely to increased penetration and use of air conditioning on hot days. Declining average consumption together with increasing peak demand is causing poorer network utilisation.

Distribution costs are driven by the capacity of the system to meet peak demand, not by average utilisation. Traditionally distribution network tariffs have been recovered on a usage basis. This means that there is upward pressure on our usage based network tariffs to recover rising capacity costs over a declining average units sold.

This is a key reason why network tariff reform is required, so as to better match network tariffs with the drivers of our costs. Network tariff reform should encourage a reduction in the growth in peak demand resulting in improved network utilisation, which can be passed on as a benefit to consumers. Network tariff reform is discussed further below.

¹ Essential Services Commission, *Energy retailers: comparative performance report – pricing 2009-10*, December 2010, p. IV.

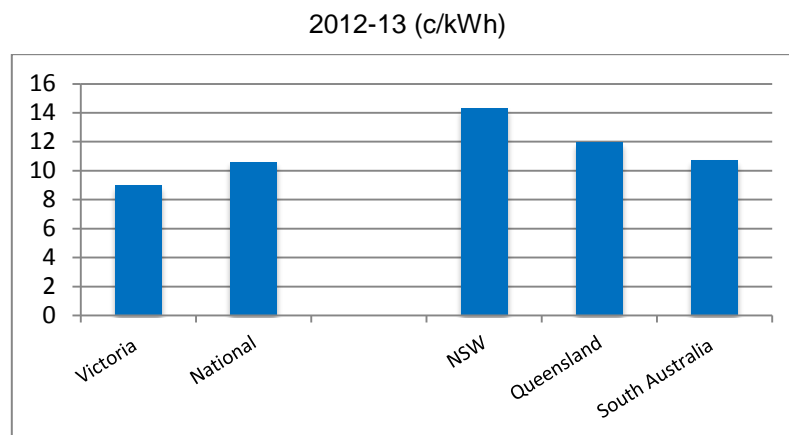
² Australian Energy Market Operator, *National Electricity Forecasting Report*, 2012

Regulated approval of allowed distribution revenues (2011-15)

In 2010, a real increase in allowed distribution revenues for the five Victorian DBs for the new five year regulatory period (2011-15) was approved, which averaged 9.7% compared to the allowed revenues the previous five year period.

A recent Australian Energy Markets Commission study (see Figure 4) shows that after this increase, the forecast distribution charge component in Victorian residential consumers' bills for 2012-13 are significantly less than the national average and amongst the lowest in Australia³ and this is despite the added costs of rolling out the Victorian Government's smart meter program.

Figure 4 Estimated distribution costs - contribution to residential retail electricity tariffs



Source: Australian Energy Markets Commission: Possible Future Retail Electricity Price Movements: 1 July 2011 to 30 June 2014.

It should be noted that “apples with apples” comparisons are difficult because of differences in metering costs. Metering costs are included in distribution charges for all jurisdictions. In Victoria, the Government's decision to roll out smart meters has resulted in an increase in metering costs. As shown in Figure 5, even after including the significant additional costs of the mandatory smart meter rollout, Victoria's distribution and metering charges are still significantly less than the national average and well below those of New South Wales and Queensland.

Composition of residential retail electricity tariffs

Figure 5 shows the estimated composition of residential retail electricity tariffs for 2012-13 for Victoria, nationally and for New South Wales, Queensland and South Australia.

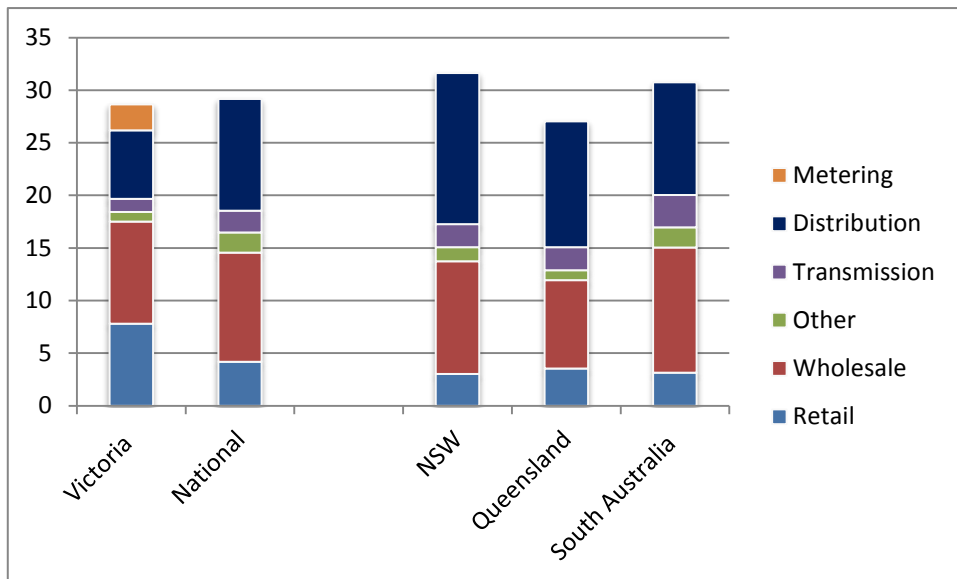
Victoria's residential retail electricity tariffs are slightly below the national average. As discussed above, while distribution costs are low on a national basis, retail costs in Victoria (based on the regulated standing offer tariffs) are significantly higher than in other states (about 86% higher than the national average).⁴

³ Distribution charges for Tasmania and ACT are lower than Victoria.

⁴ As noted above, because of discounted market offers, this overstates the true retail costs being paid on average by Victorians.

Figure 5 Estimated composition of residential retail electricity tariffs

(2012-13, c/kWh)



Source: Australian Energy Markets Commission: Possible Future Retail Electricity Price Movements: 1 July 2011 to 30 June 2014.

Retail costs are based on standing offer tariffs not adjusted to include Queensland recent retail tariff freeze decision. "Other" includes: RET/LRET, SRES, and feed-in-tariffs, state energy efficiency and demand management schemes, other stated based schemes. Wholesale prices include carbon tax.

Key drivers of recent increases in approved network revenues

Overview

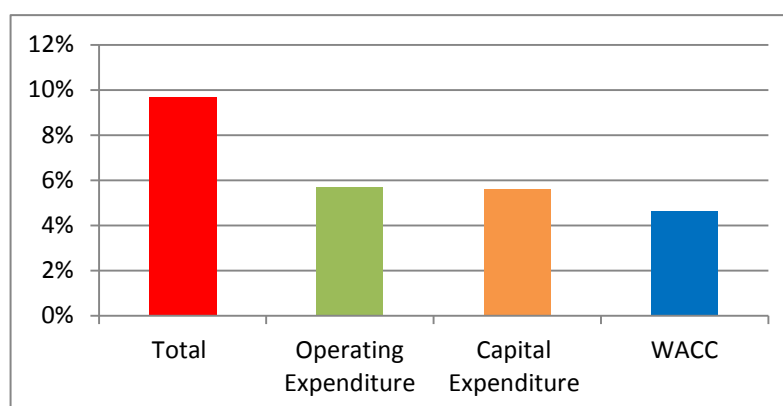
Most of the key factors contributing to the recent increases in AER approved distribution revenues for 2011-15 (compared to the previous five years) are external to the distribution businesses. These include:

- network augmentation which has significantly driven capital expenditure reflecting significant peak demand growth
- an increase in the allowance for the cost of capital, largely reflecting the impact of the global financial crisis.
- a range of enhanced federal and state environmental, safety and other statutory obligations
- increasing materials and construction costs, and land and labour rates, reflecting cost pressures across the Australian economy
- operating cost increases caused primarily by bushfire mitigation costs and electrical safety regulation compliance.

Key drivers of revenue increases for the 2011-15 determination

The key drivers for the 9.7% increase in approved regulated revenues for the 2011-15 period were capital expenditure, operating expenditure and the Weighted Average Cost of Capital (WACC)⁵ (See Figure 6).

Figure 6 Key drivers of increase in Victorian DB network prices for 2011-2015 revenue determination⁶



Source: Appendix A - *Analysis of Key Drivers of Network Price Changes Report* prepared for the Energy Networks Association by NERA Economic Consulting, 16 April 2012. Note: The analysis identifies the impact on the total revenue increase of each factor in isolation, keeping the other two factors constant. As a result the individual contributions are not additive.

Weighted Average Cost of Capital

The increase in the allowance of the Weighted Average Cost of Capital (WACC), when considered on its own, caused 4.6% of the 9.7% increase in approved revenue between regulatory periods and was largely driven by an increase in the debt risk premium, which reflected the impact of the global financial crisis.

Capital expenditure

Augmentations to meet peak demand growth are a significant factor driving increase in capital expenditure.

The other two factors were external drivers:

- new customer connections - which reflect increases in customer numbers
- a range of enhanced federal and state environmental, safety and other statutory obligations.

⁵ Analysis of *Key Drivers of Network Price Changes Report* prepared for the ENA by NERA Economic Consulting, 16 April 2012.

⁶ P_0 represents the change in real network prices between the current and previous five year regulatory period. NERA analysed the impact on P_0 of each factor in isolation, keeping the other two factors constant.

Analysis undertaken for the ENA⁷ shows that asset renewal and replacement was not as major a driver in Victoria as it was for New South Wales and Queensland.

Operating expenditure

Operating expenditure increases were primarily driven by escalation in operating costs affecting the base level of operating costs and to a lesser extent by “step changes” costs.

Reflecting cost pressures across the Australian economy, materials and construction costs, land and labour rates have generally been increasing in real terms. The increase in the base operating cost allowance of around 2-2.4% is due to escalation in these costs.

“Step change” costs include costs driven by enhanced bushfire mitigation and costs for compliance with electrical safety regulations.

Reliability performance

Analysis of electricity distribution charges must be considered together with reliability objectives and outcomes.

Customers expect reliable electricity supply. A short-term focus on reducing electricity costs risks reducing reliability below the level expected by consumers. Conversely, excessively high reliability standards can contribute to higher charges which may be more than consumers may be willing to pay.

In Victoria, distribution network investment to meet increasing demand for electricity is governed by an economic benefits approach. The reference point is the ‘value of customer reliability’ assessed by the Australian Energy Market Operator (AEMO) through a customer survey, which accordingly represents customers’ “willingness to pay” preferences.

Coupled with this, the Victorian DBs operate under strong reliability of service performance incentives (rewards and penalties), set by the AER, which are also referable to the ‘value of customer reliability’. Under these arrangements, augmentation investment and reliability improvements will only take place where it is transparently in customers’ interests.

The Victorian DBs have individually made contributions into the AEMC’s ‘Review of Distribution Reliability Outcomes and Standards – National Workstream’ in support of retention of the current Victorian approach as representing best practice.

Since privatisation of the DBs in the mid-1990s, the Victorian electricity distribution sector’s reliability performance has been generally good. Table 1 shows trends in two metrics that measure historical reliability compared to other regions in the National Electricity Market (NEM).

⁷ *Analysis of Key Drivers of Network Price Changes* Report prepared for the Energy Networks Association by NERA Economic Consulting, 16 April 2012.

**Table 1 System average interruption duration index (SAIDI) and frequency index (SAIFI)
Victoria and NEM⁸**

	2000-01	2001-02	2002-02	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Average
System Average Interruption Duration Index (SAIDI) (Minutes)											
Victoria	152	151	161	132	165	165	197	228	255	170	178
NEM (Weighted average)	198	245	199	258	211	221	211	213	254	200	221
System Average Interruption Frequency Index (SAIFI)											
Victoria	2.0	2.0	2.2	1.9	1.8	1.9	2.1	1.7	2.5	1.7	2.0
NEM (Weighted average)	2.4	2.4	2.0	2.2	1.0	2.1	2.0	1.9	2.2	2.0	2.0

Source: Australian Energy Regulator, State of the Energy Markets (2011)

Private ownership of electricity distribution businesses

We consider that it is for state governments to decide whether or not the sale of their distribution businesses would promote the interests of the people of their state. Nonetheless, we consider that private ownership is a relevant issue for this inquiry.

Victoria's electricity distribution industry has consistently performed well since privatisation, reducing cost, improving efficiencies and providing a safe and reliable electricity supply to consumers.

Our experience indicates that privately owned DBs can deliver appropriate levels of reliability provided there is effective regulation in place. The current national regulatory framework includes incentives (rewards and penalties) for business to deliver appropriate levels of reliability. Similar incentive arrangements to the current national arrangements have worked effectively in Victoria since 1996.

⁸ Most outages are caused by the distribution network. The data reflect total outages experienced by distribution customers, including outages resulting from issues in the generation and transmission sectors. In general, the data have not been normalised to exclude outages beyond the network operator's reasonable control. Some data have been adjusted to remove the impact of natural disasters (for example, Cyclone Larry in Queensland and extreme storm activity in New South Wales), which would otherwise have severely distorted the data. The NEM averages are weighted by customer numbers. Victorian data are for the calendar year beginning in that period. Queensland data for 2009-10 are for the year ended 31 March 2010. Sources: Performance reports by the AER (Victoria), the QCA (Queensland), ESCOSA (South Australia), OTTER (Tasmania), the ICRC (ACT), AusGrid, Endeavour Energy and Essential Energy. Some data are AER estimates derived from official jurisdictional sources.

The regulatory framework

Overview

We support a robust regulatory regime and an independent, capable and accountable regulator. We understand that our businesses provide monopoly services and that, in the absence of an effective regulatory regime, financially driven businesses may not act consistently in the long-term interests of consumers.

Our investors make investments in long-term assets, often with economic lives of 50 years or more. They are therefore vulnerable to changes in the regulatory regime after they have made investments. For this reason, infrastructure investors worldwide seek stable and predictable regulatory regimes.

Victoria established an incentive based regulation regime in the mid-1990s at the time the DBs were privatised. Incentive regulation involves the regulator determining allowed revenues or prices over a period, typically five years, by setting benchmark cost allowances, and providing an opportunity for the business to outperform. Importantly, this regime includes incentives to ensure that the business are rewarded or penalised relative to their reliability performance.

While not perfect - we have not always agreed with the decisions made by the regulator - this regulatory framework has been successful over time in creating incentives for the businesses to extract efficiency gains and share these with consumers while still delivering acceptable returns to investors.

In 2005, new national regulatory arrangements were enacted. This regime formalised the regulatory arrangements that had evolved over the previous 10 years in Victoria and other jurisdictions, while improving accountability and regulatory certainty.

National economic regulation can be incrementally improved but does not need major changes to protect the long-term interests of consumers

Currently there are three major reviews dealing with different aspects of the economic regulation framework:

- Proposed rule changes for economic regulation of network service providers. These rule changes cover both electricity and gas networks. The AEMC published a draft determination and draft rules on 23 August 2012.
- The Productivity Commission review of electricity network regulation, which is reviewing the use of benchmarking in electricity network regulation. The Commission is due to publish a draft report in October 2012.
- A review of the Limited Merits Review (LMR) regime established by the Standing Council on Energy and Resources which is to be completed by 30 September.

The Victorian DBs support the submission of the Energy Networks Association (ENA) to this Inquiry, which will comment on these reviews.

We see scope for incremental improvement in the existing regulatory arrangements but do not believe, particularly in such a new framework, major change is helpful in ensuring appropriate protection of consumers' long-term interests. We believe the current framework balances consumer and industry interests in Victoria.

Delivering benefits from Victoria's investment in smart meters

In 2006, the previous Victorian Government approved an Advanced Metering Infrastructure (smart meter) project. The project, which is now well advanced, mandated replacing all old accumulation meter technology in 2.6 million homes and small businesses in Victoria with smart meters. Victoria has been the only State to adopt a mandatory smart meter rollout.

The Victorian DBs are responsible for the installation, ownership, management and maintenance of smart meters in their service areas and the associated communication systems and for data management. We have a major stake in the success of this project.

As the rollout progresses with almost 1.5 million meters now installed across the state, benefits to consumers are starting to be realised, however, many are contingent on the rollout being complete and all meters "in market", which is not scheduled to be delivered until end 2013. Other benefits will take time, customer engagement and co-operation with government and regulators to progress.

Benefits of smart meters

Smart meters are two-way, digital communication systems that record electricity usage every 30 minutes and automatically send this data to electricity suppliers.

The main benefits of smart meters, some of which are already available in Victoria today include:

- internet portals and in-home displays which, when linked to the meters, help consumers better understand and control their electricity use and cost
- automatic fault detection and faster outage response so consumers will have their power restored more quickly
- remote meter reads
- no more estimated meter reads, meaning reads are more accurate
- remote connection and disconnection when consumers move house, reducing the cost and time to perform the service
- remote meter condition monitoring allowing for early detection of local supply issues
- network condition monitoring and control activities
- flexible pricing which will see consumers who want to participate being able to choose an electricity pricing plan which suits their consumption habits and lifestyle.

The installation of smart meters has resulted in the detection of around 13,000 wiring defects that have been rectified to improve customer safety.

In order to maximise the benefits of smart meters for customers we need to work with government, regulators and other stakeholder groups to better explain the technology and its potential, and encourage behavioural change and benefits take-up.

Information and tools

The first step in empowering customers to use electricity more efficiently is providing them with meter data that is easily accessible and tools to turn meter data into meaningful information.

A number of internet portals have begun operation in recent months. These enable easy access to meter data and provide tools to help consumers analyse their recent electricity use.

Jemena recently launched *Electricity Outlook*⁹, a free web portal which displays a customer's recent electricity use information online. It includes features such as a home energy assessment tool, which enables households and small businesses to monitor their electricity consumption.

United Energy has developed a similar, free web portal, *Energy Easy*¹⁰ which now has over one thousand users registered. To date, feedback on both United Energy's and Jemena's portals has been excellent.

Origin, an electricity retailer, has launched a free web portal available to their customers which provides various analysis tools.

Web portals could also help consumers to compare electricity pricing offers from competing providers to make sure they are getting the best deal.

In-home displays, connected to smart meters, enable consumers to access real-time information about their electricity use. This information can help consumers identify ways to save electricity, thereby reducing their energy costs. The Victorian Government's Energy Saver Incentive Scheme is subsidising the cost of in-home displays.

Once the smart meter rollout is completed, there will be no technical barriers to the use of web portals and in-home display tools by any consumer in Victoria. However consumer understanding of the opportunity for use of these tools, and business understanding of how consumers will use these tools, are still at a very early stage.

The challenge for government and industry is to promote consumer understanding of the opportunity and to gain experience (learning by doing) of how to help consumers gain real value from these tools, and potentially to develop better tools.

Incentives for change through flexible pricing

While timely and meaningful information is the foundation for better electricity utilisation, the benefits of smart meters for customers are limited if there are not incentives for large scale consumer change. Consumers need to positively act on information by changing electricity use in ways that reduce system costs but do not affect the benefits from using electricity.

Following its recent review of the smart meter program, the current Victorian Government announced that it supported (on a voluntary basis) introducing 'flexible pricing' (also known as 'time-of-use' pricing).

Flexible pricing encourages customers to use electricity at times when there is lower demand, thereby reducing peak demand and the need for investment in infrastructure. Retailers are expected to offer different rates for different time segments, and seasonal rates.

The Victorian DBs support the Victorian Government's view that introduction of flexible pricing must be undertaken in an orderly way.

The AEMC *Power of Choice*¹¹ draft report (released on 6 September 2012) recommends a gradual phasing in of time-of-use network tariffs, and has made specific recommendations for a

⁹ <http://jemena.com.au/customer/electricity/smart-meters/portal/>

¹⁰ <https://energyeasy.ue.com.au/>

¹¹ Australian Energy Markets Commission, *Power of choice - giving consumers options in the way they use electricity*, 6 September 2012

phased in approach. The Victorian DBs have been developing time-of-use network tariffs which will be introduced consistent with Government policy, and with the ENA we will be considering in detail the AEMC's recommendations.

Demand management

Along with the introduction of flexible pricing, demand management remains a key challenge for Victorian DBs, particularly demand-side participation and how it can be used to reduce peaks. Several initiatives are underway, including:

- consumer demand management trials
- introduction of a critical peak demand tariff for large business customers
- investigation of a district energy services scheme in partnership with local government.

United Energy is evaluating options for consumer demand management trials, including through use of its *Energy Easy* internet portal which over one thousand customers have now signed up to use.

SP AusNet has introduced a new 'critical peak demand tariff' for large business customers, to target the demand that is directly responsible for system capacity constraints. Under this tariff, a customer is no longer charged under a 'demand' tariff if that demand is not contributing to the overall system peak, and therefore to future augmentation costs. This tariff has enabled large business customers to reduce their demand by 130 MW overall in 2010-12, reducing the total annual peak demand across SP AusNet's electricity distribution network by three to four per cent, equivalent to the total annual demand of 22,800 houses.

United Energy has recently partnered with Manningham City Council to investigate the commercial feasibility of a district energy services scheme in Doncaster, Victoria. The scheme includes initiatives with the potential to defer network investment through providing embedded generation, demand management and alternative energy solutions.

The way forward

Finally, while information and incentives are necessary preconditions for change, customers need to be educated and well informed to capture the full benefits of smart meters.

At this stage, consumer understanding of smart meters and their opportunities is relatively low. This has been recognised by the Victorian Government, which established a *Switch On* program¹² managed by the Department of Primary Industries to more actively engage and better explain to customers their choices and options around energy solutions, including smart meters.

In April 2012, the Minister of Energy and Resources announced the establishment of a Ministerial Advisory Council for the Advanced Metering Infrastructure with a focus on realising the benefits to consumers from smart meters.

The Victorian DBs are working closely with the Department of Primary Industries and the Government on all their various communication initiatives including active participation in the Ministerial Advisory Council.

¹² www.switchon.vic.gov.au/home

As recommended by the AEMC in its recent *Power of Choice* report, a more holistic approach to policy is required, that focuses on providing consumers with information, education, incentives and tools. The current Victorian Government has recognised this and has taken steps towards a more holistic approach.

There needs to be close collaboration between networks, retailers and others including equipment providers. Government needs to take a leadership role in facilitating this collaboration and the Victorian Government seems committed to this task.