



**Aurora Energy's  
Regulatory  
Proposal to the AER  
2012-17**

**AER Public Forum,  
19 July 2011**



# Presenters and outline

Presenters: Dr Peter Davis, CEO and André Botha, General Manager Network,

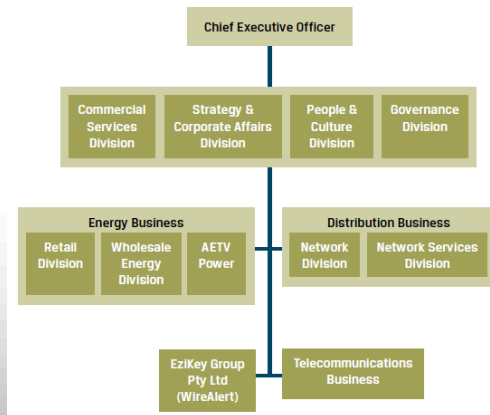
## Outline:

- Background
- Electricity Pricing
- Aurora's Regulatory Proposal
- Impact on Customers
- Conclusion

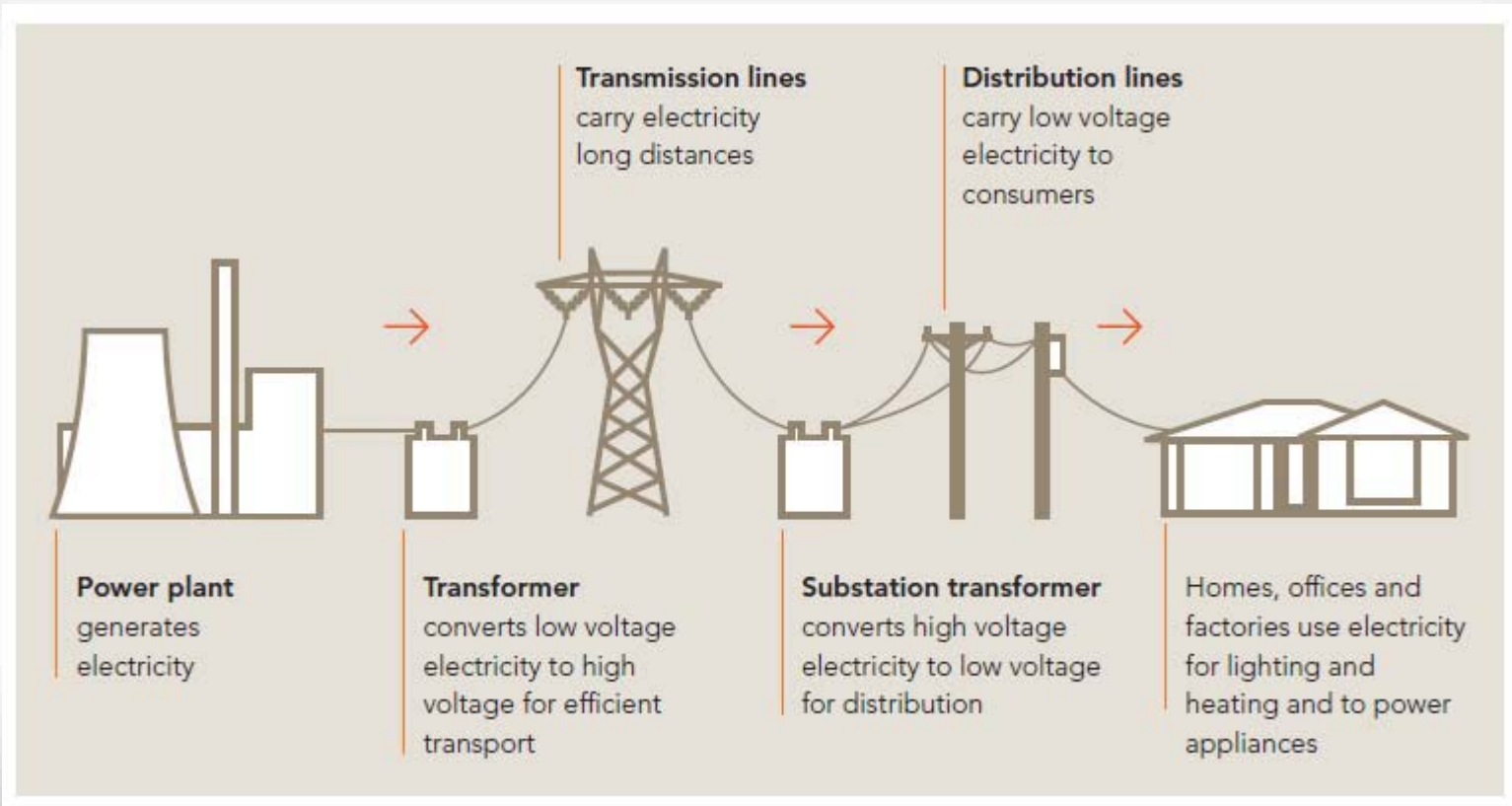


# Introduction to Aurora Energy

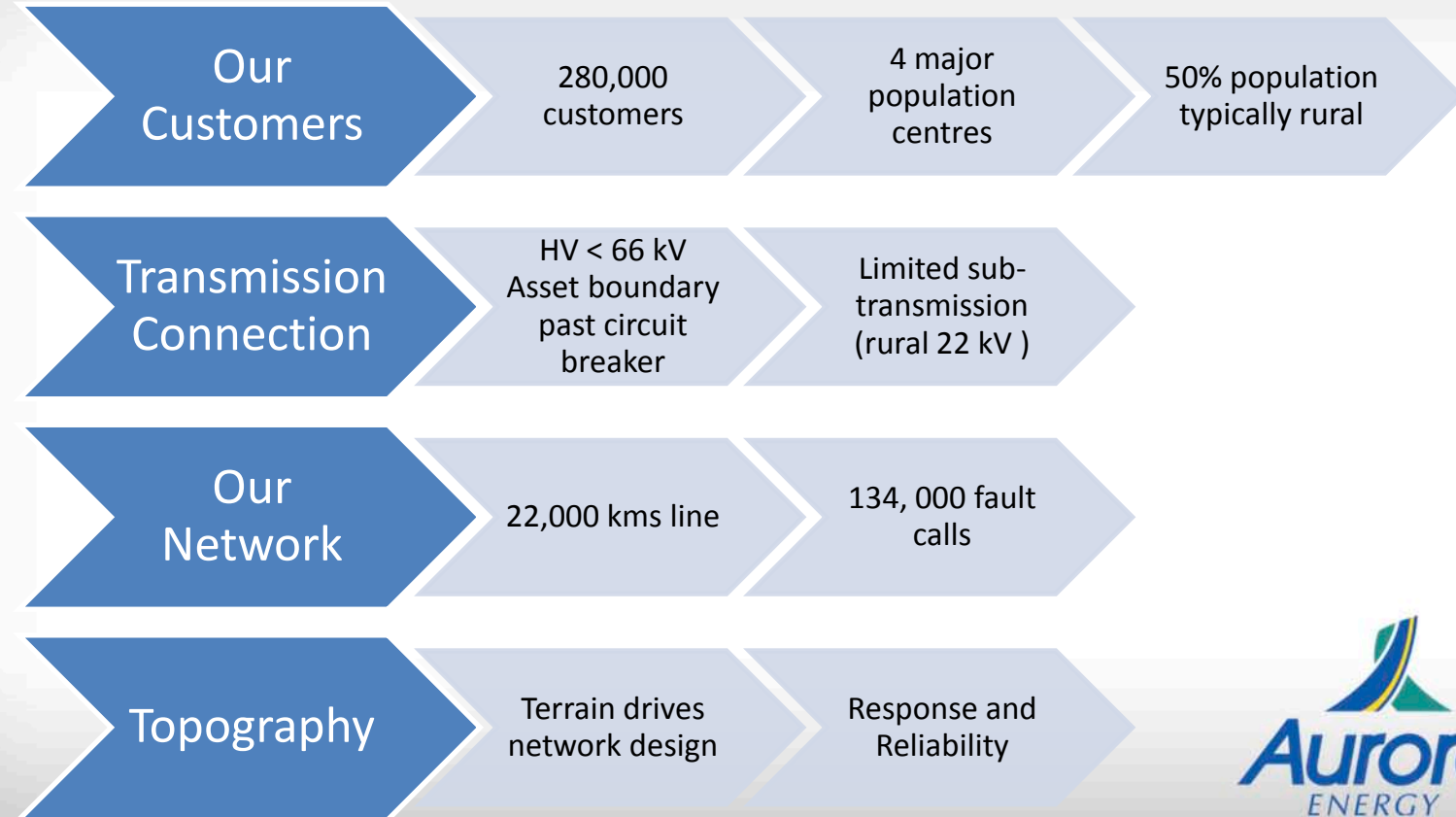
- Aurora is a fully integrated energy and network business with complementary activities in telecommunications and energy-related technologies.
- Our purpose is “to see the Tasmanian community prosper from our efforts”.



# Energy supply chain



# Aurora's distribution network



# Our customers

- Aurora's Distribution Business has approximately 280,000 residential and business customers:
  - 60% are located in urban areas with the remainder in rural areas; and
  - 4 major population centres (Hobart, Launceston, Devonport and Burnie).
- Our success as a business is dependant on our ability to understand customer expectations and deliver to those expectations.
- The Distribution Business has a dedicated Customer Service Group with responsibility for all customer-related roles and functions.



# Our network

- Aurora constructs, maintains and operates the electricity distribution network on mainland Tasmania:
  - We also construct, maintain and operate the electricity distribution assets on King and Flinders Island on behalf of Hydro.
- The network:
  - Comprises a network of power poles, cables, wires and smaller transformers to deliver the electricity from terminal and zone substations to homes and businesses in Tasmania;
  - Delivers electricity to Tasmanians living across an area of approximately 67,800 square kilometres; and
  - Is primarily connected to the transmission network operated by Transend.



# Our People

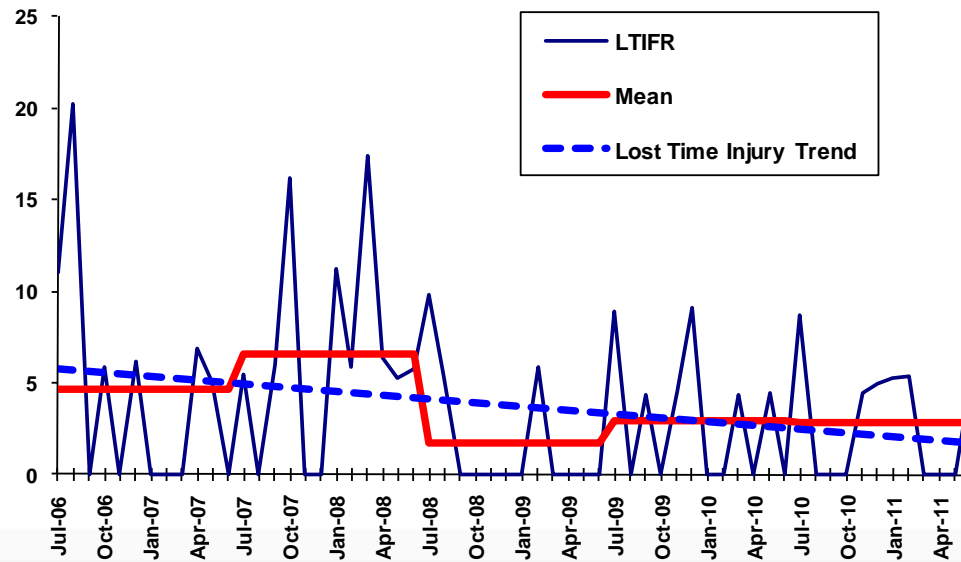
- Aurora's Distribution Business, which includes the Network and Network Services Divisions, employs around 800 staff.
- This includes:
  - Nearly 500 operational staff located at sites around the State; and
  - Approximately 40 apprentices.
- The Distribution Business's organisational structure has been redesigned to ensure a greater emphasis on technical capability and multi-skilling to ensure that it is well placed to deliver on our Regulatory Proposal.





# Safety

AURORA ENERGY PTY LTD  
Lost Time Injury Frequency Rate (LTIFR)



# Distribution Business investment

- Aurora's Distribution Business manages an asset base comprising high and low voltage overhead powerlines, underground cables, distribution substations, street lights and poles worth \$1.48 billion.
- Investment in Tasmania's networks has been significant over the past 5 years in keeping with the State's economic growth and in order to meet more stringent reliability and safety standards.
- Current 5 year capital program of work of \$588 million is coming to an end.



# Distribution Business activities

- In the past year alone, we have:
  - Invested \$6 million to improve reliability in regional communities;
  - Spent \$50 million on major capital investment to replace ageing assets and cater for increasing load growth;
  - Connected 3,500 new customers;
  - Taken 134,000 calls through our fault centre and dispatched crews to 33,819 jobs; and
  - Customer generated work of approximately \$40 million (\$220m over the past 5 years).



# Benchmarking Aurora's performance

- Our investment program has been delivered while ensuring Aurora is operating at an efficient level relative to other distribution companies.

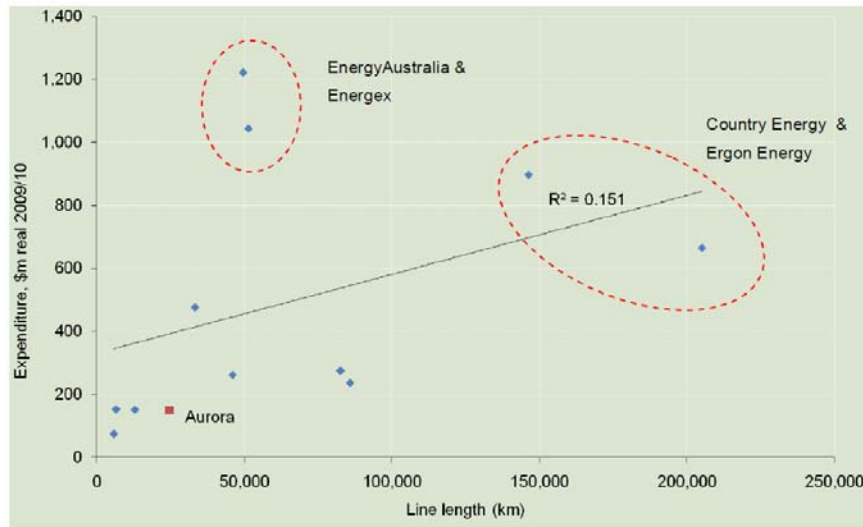


Figure 3.4 Annual System Capex v line length

Source: PB Analysis

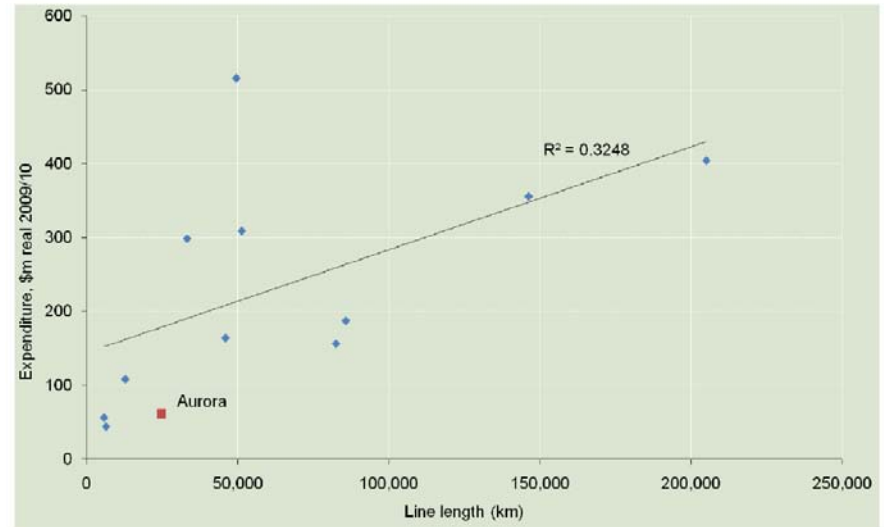


Figure 3.10 Opex vs line length

Source: PB Analysis

# Distribution Business investment

- Past investment in the network has resulted in a strong and robust distribution network, delivering a level of reliability and system security appropriate to the needs of the Tasmanian community.
- Aurora is well positioned to take advantage of new technology and more innovative approaches to network management.



# Focus on electricity pricing

## **Power pain to 'double'**

Power prices  
to rise 30pc  
nationwide

RENEWABLES SCHEMES ADD TO HIKE

NSW power bills to increase by 17pc

**Electricity  
bills forced  
up by 30pc**

**Tasmanians  
will be least  
affected**

**State power  
sends bills  
sky high**

Power bills to rise again after appeal

Ageing state networks blamed



# Comparative retail prices

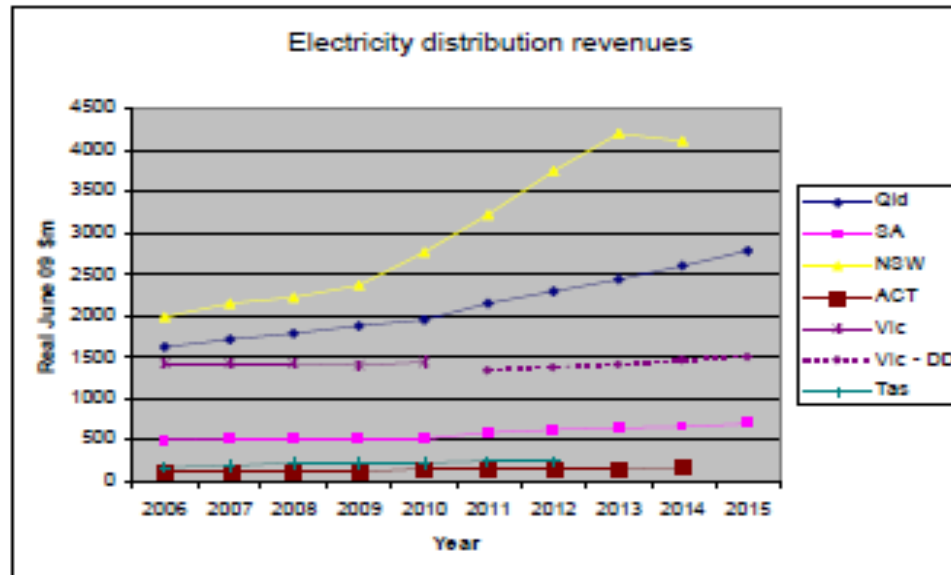
Table 3 - Effective residential electricity costs, c/kWh

State/Territory	Effective cost per kWh		
Australian Capital Territory	16.3		
Queensland	19.5	-	20.6
Northern Territory	20.8	-	21.0
Tasmania	20.9	-	22.8
Western Australia	21.7	-	23.0
Victoria	20.3	-	25.2
New South Wales	19.5	-	26.5
South Australia	23.9	-	27.2



# Comparative revenue

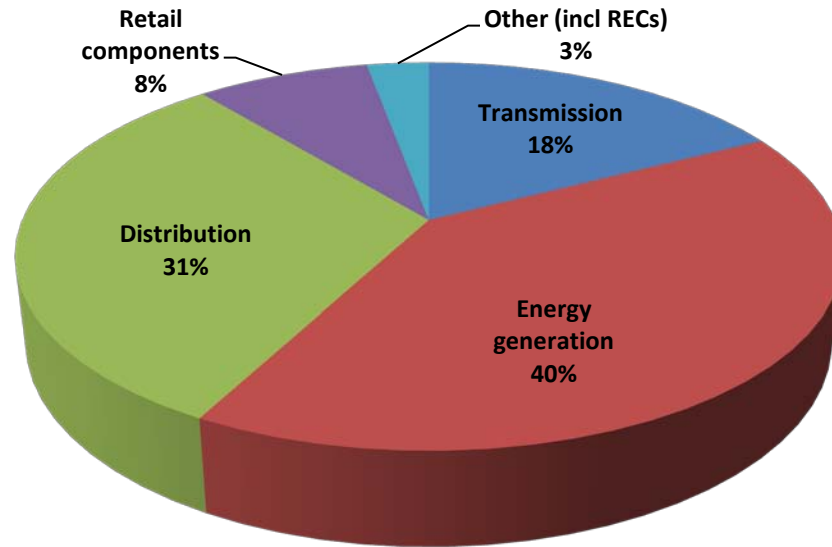
Figure 2 Annual revenue, distribution networks (by state)



Source: "Finding the balance – rules, prices and network investment", Speech by Andrew Reeves, Chairman, AER, 20 June 2011

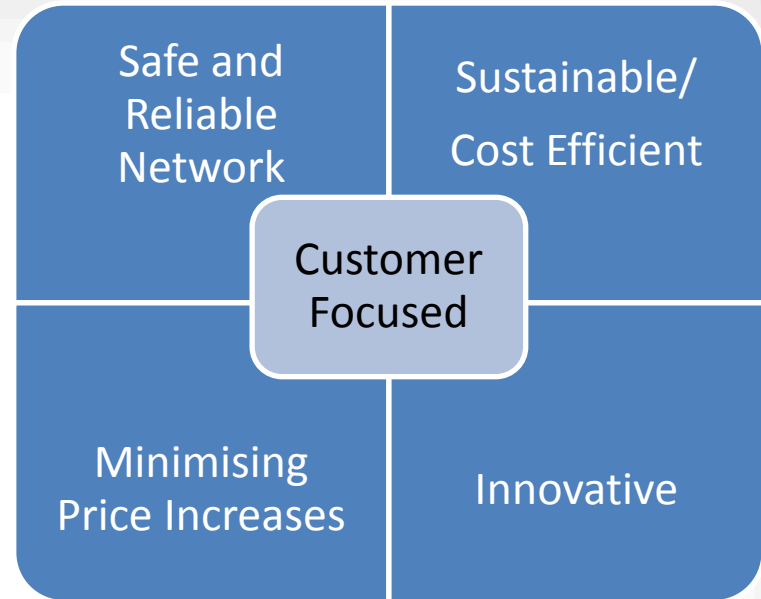


# Components of electricity retail prices as at 30 June 2011



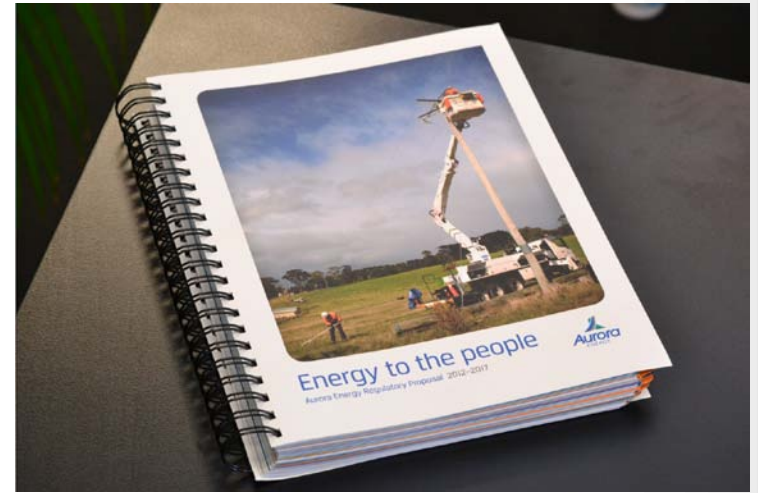
# Meeting customer needs at the lowest sustainable cost

- Aurora acknowledges that the cumulative impact of electricity price increases is a significant issue for Tasmanian households and businesses.
- This impact, together with changes in customers' expectations, has driven a new strategic focus for Aurora:
  - “To meet customer needs at the lowest sustainable cost”



# Aurora's approach to its Regulatory Proposal

- The need to limit the impact of price increases to Tasmanian customers is a fundamental driver underpinning Aurora's proposal to the AER.
- We are committed to showing industry leadership by continuing to deliver appropriate service levels while minimising future distribution-related price increases.
- However, Aurora is unable to influence the other elements of the supply chain.



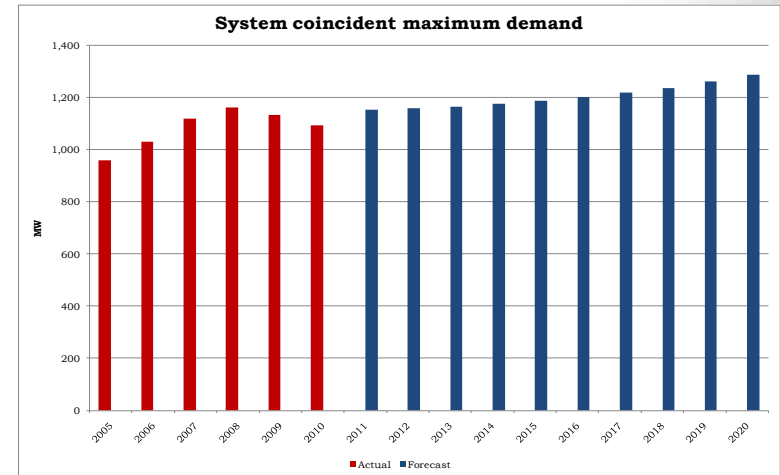
# How Aurora will deliver on its commitment

- Aurora will deliver on its strategy by maintaining capital and operating expenditure at existing or reduced levels relative to the latter years of the current regulatory period.
- Aurora will achieve this in the initial years by:
  - operational efficiencies – Aurora is optimising staffing levels, improving contract management processes and optimising all other processes; and
  - the selective deployment of a number of proven technologies.
- The critical second phase will focus on driving efficiency by changing the way services are delivered through:
  - the deployment of innovative and modern technology to deliver efficient and sustainable customer outcomes in the future.



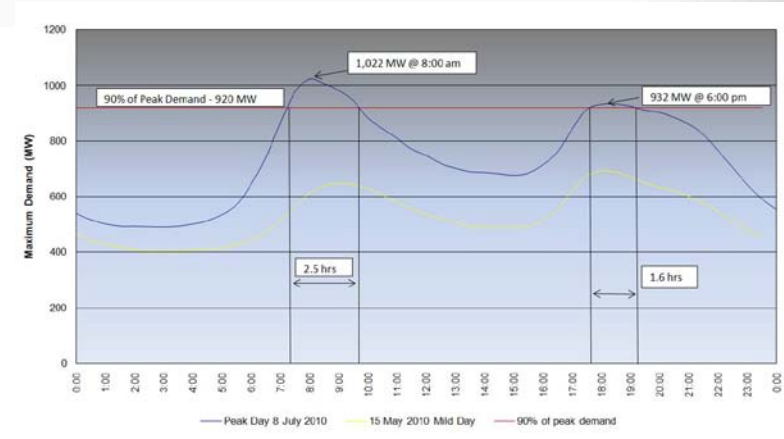
# Demand profile

- Customer usage patterns (particularly impacting on peak demand on the distribution network) drive the need for network infrastructure investment.
- Peak demand on Aurora's network historically occurs in the winter quarter with a strong correlation to the maximum daily temperature at the time of peak demand.
  - That is, in Tasmania demand increases as temperature decreases.
- The demand forecasts for the forthcoming Regulatory Period are below the long-term trend, representing a continued slowing in the Tasmanian economy.



# System load profile

- For the winter peak, approximately 10% of the demand occurs for only 6 hours of the winter quarter, representing 0.8% of the year.
- The network infrastructure required, and the associated cost of this, clearly indicates that the continued sole use of traditional network augmentation to deal with short duration peaks is sub-optimal.
- Demand side management and distributed generation options offer a far more cost effective strategy.



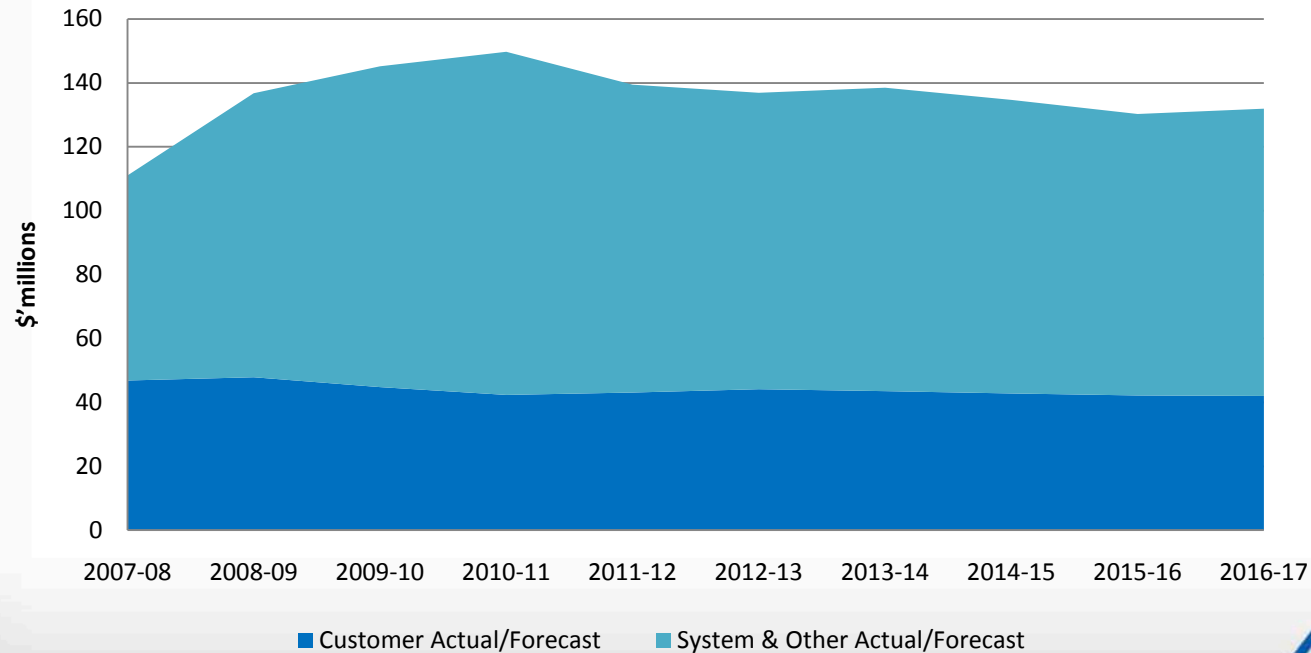
# Non-network solutions and demand management projects

- The following non-network alternatives have been proposed as alternatives to supply side augmentations:
  - Water heating load control programs;
  - Residential, small commercial and industrial new construction demand management programs;
  - Larger commercial and industrial curtailable loads and embedded generation programs;
  - Community load response program;
  - Peak shaving with distributed storage/generation project;
  - Power factor correction programs; and
  - Price signals (time of use).



# Capital expenditure

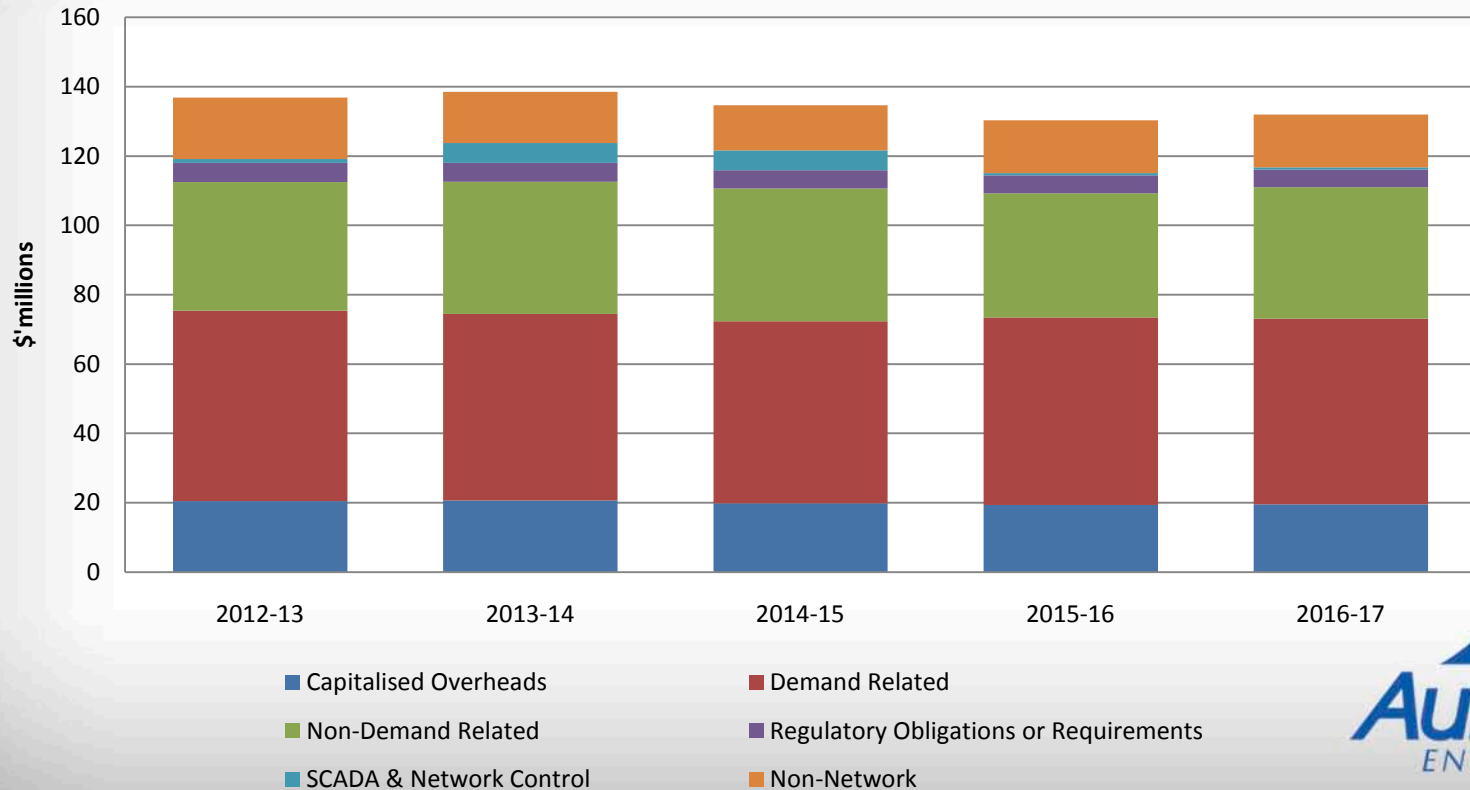
**Standard Control Services capital expenditure \$2009-10**



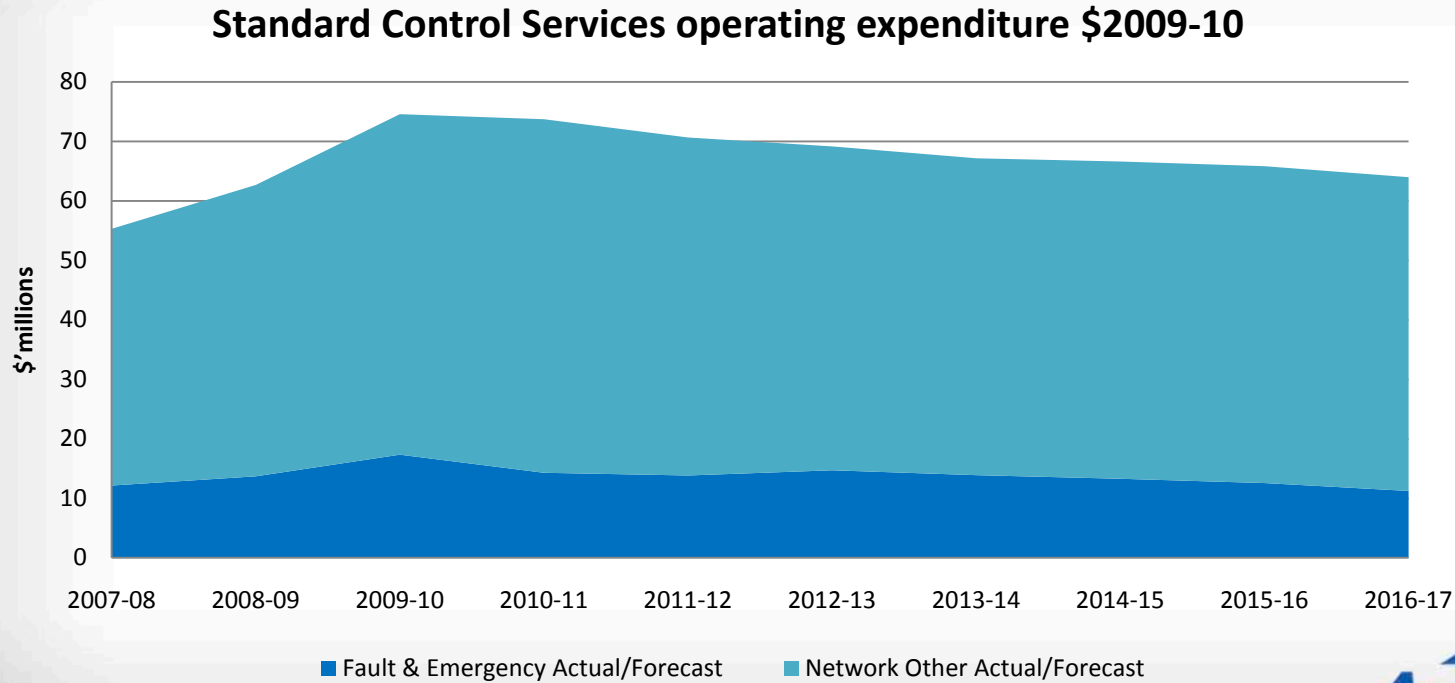


# Capital expenditure components

Aurora's forecast capital expenditure - \$2009-10

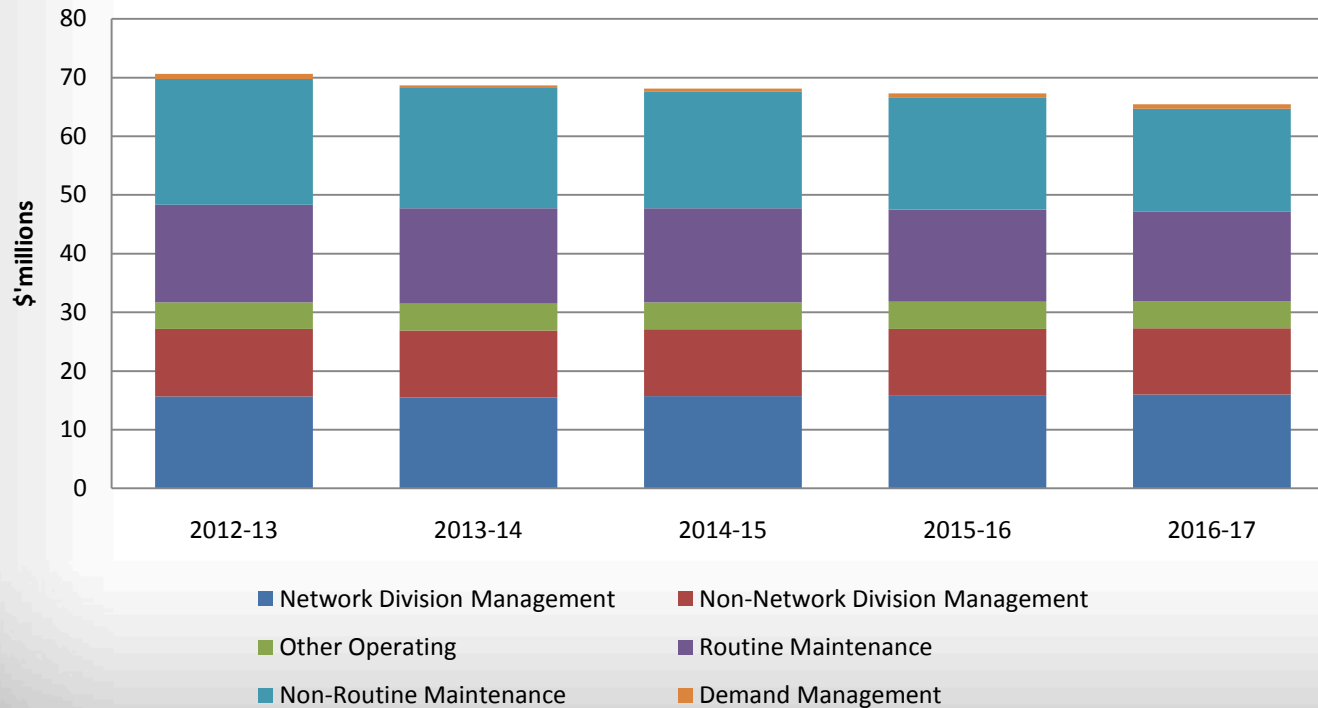


# Operating expenditure

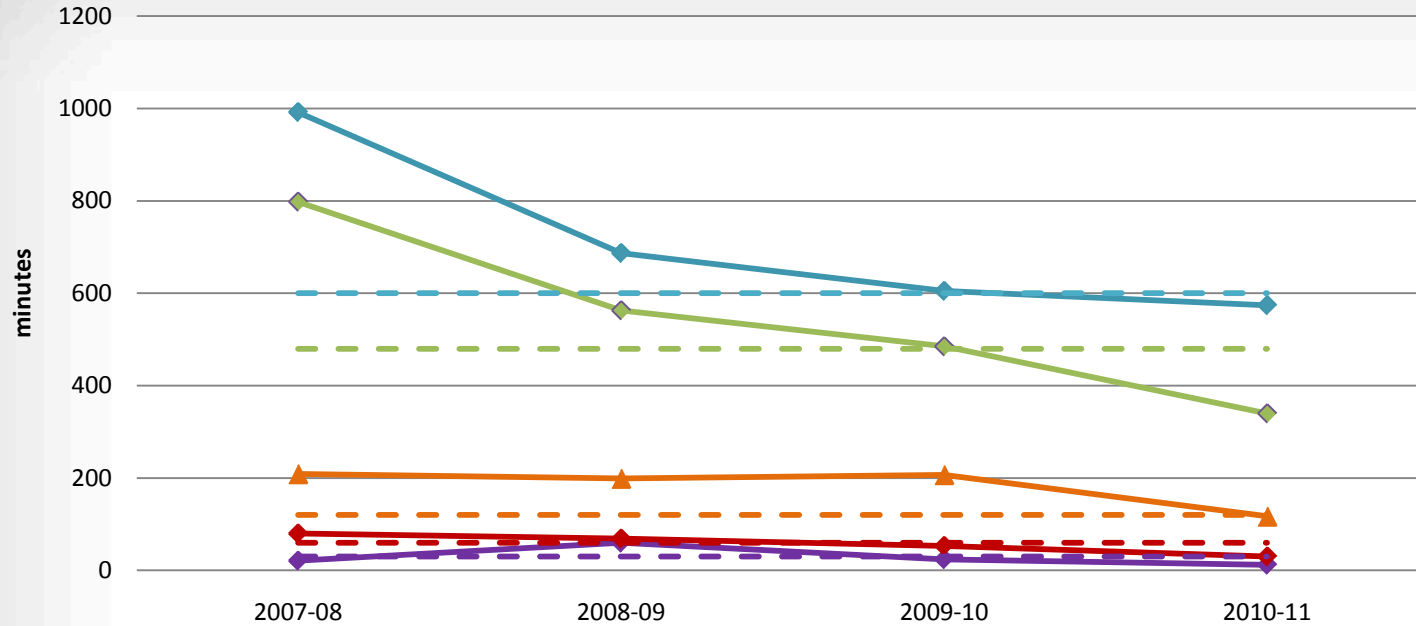


# Operating expenditure components

**Aurora's forecast operating expenditure - \$2009-10**



# Network reliability - duration

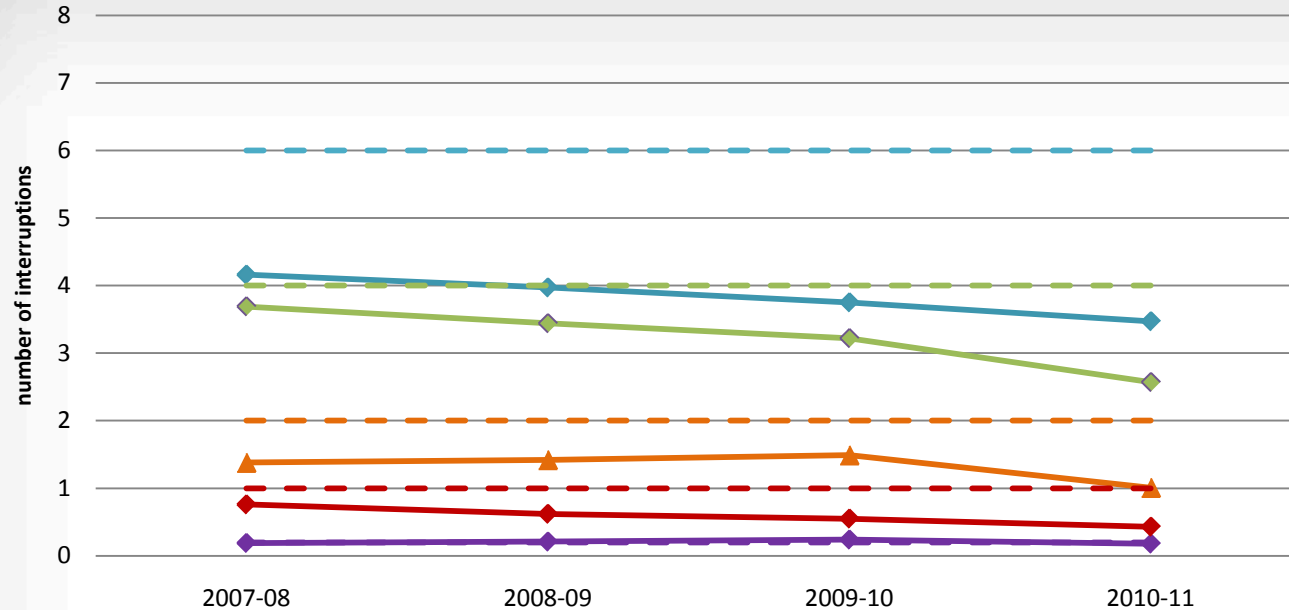


◆ Critical Infrastructure  
▲ Urban  
◆ Low Density Rural  
- - High Density Commercial Target

◆ High Density Commercial  
◆ High Density Rural  
- - Critical Infrastructure Target  
- - Urban Target



# Network reliability – frequency

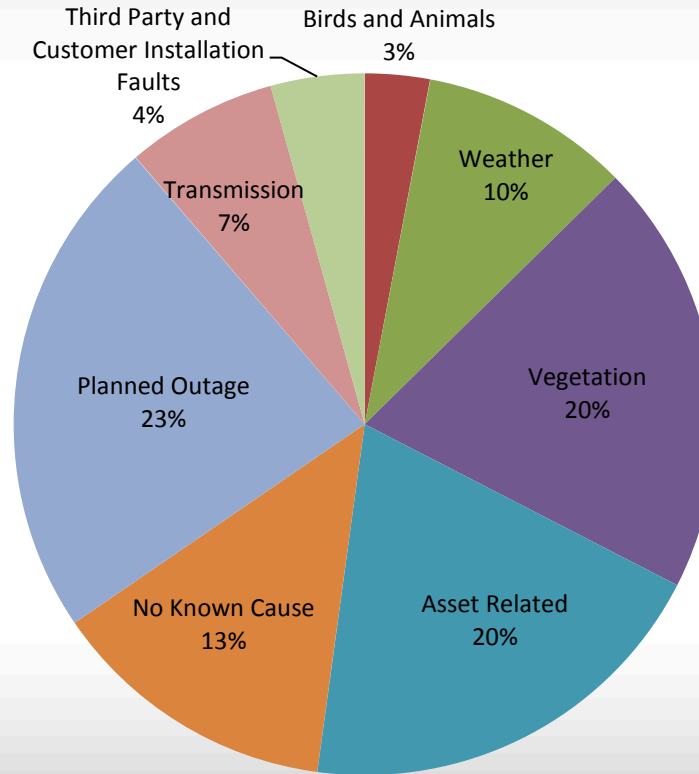


◆ Critical Infrastructure  
▲ Urban  
◆ Low Density Rural  
- - High Density Commercial Target

◆ High Density Commercial  
◆ High Density Rural  
- - Critical Infrastructure Target  
- - Urban Target



# Causes of faults - duration



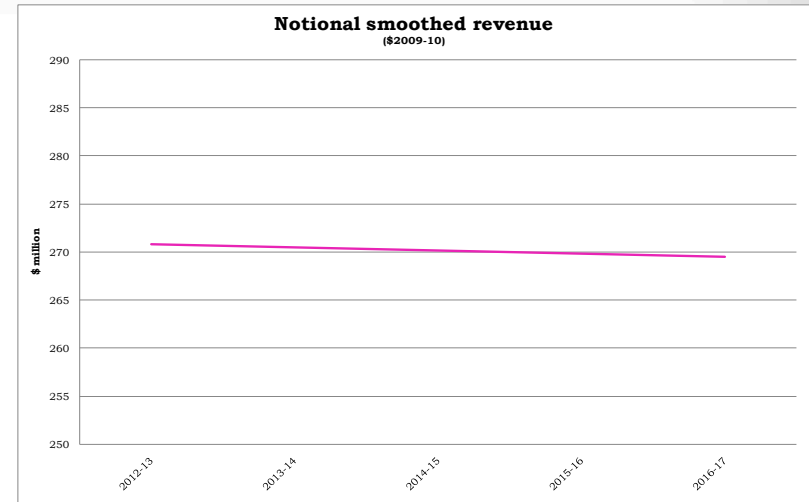
# Work program delivery

- Aurora has increased its capability to deliver over the current regulatory period.
- In addition, Aurora is positioning itself to ensure customers are provided with an efficient service by:
  - ensuring improvements in productivity through system and training improvements;
  - a review and alignment of the distribution engineering strategy; and
  - utilising external contractors to complement and benchmark internal work programs.



# Revenue

- Network revenue over the final four years of the Regulatory Control Period is projected to be negative in real terms, assuming no unforeseen pricing pressures.
- For the purposes of the cost of capital calculation used to determine the weighted average cost of capital (WACC), Aurora has accepted the parameters and methodologies detailed in the Statement of Regulatory Intent as amended by the AER or determined by the Australian Competition Tribunal.



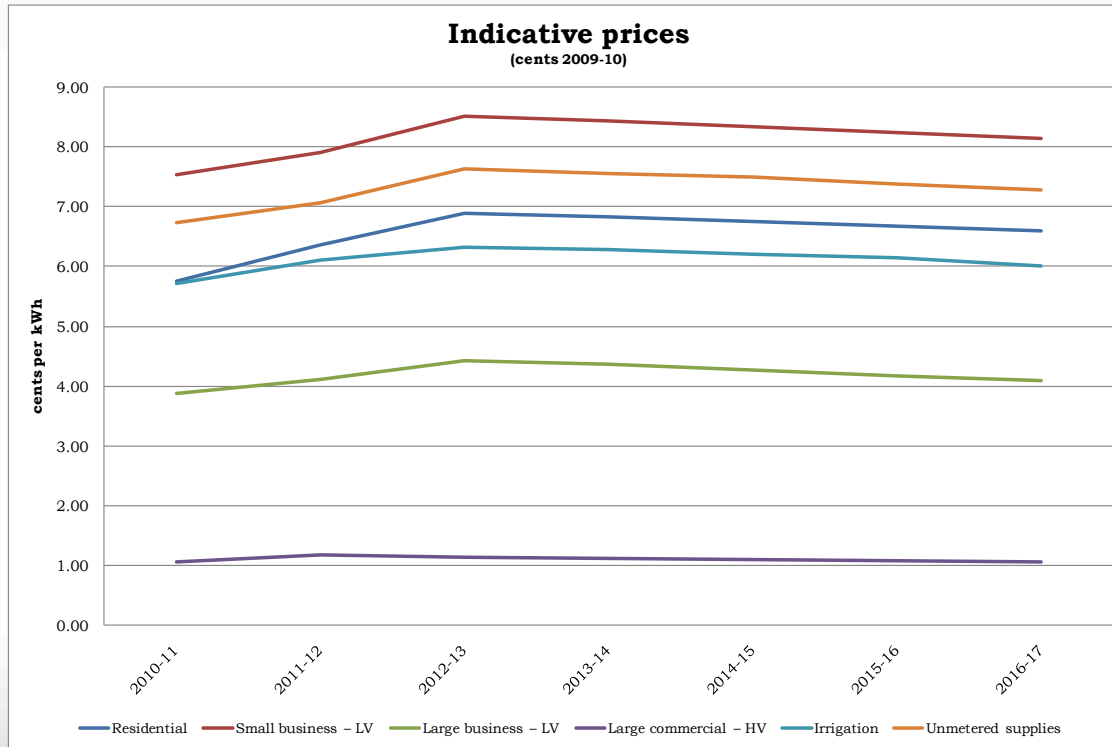


# Customer pricing outcomes

- A high level overview of the expected distribution price impact for the forthcoming Regulatory Control Period for each customer class is shown in the following chart.
  - However, actual prices depend on specific tariffs which are made up of additional components including fixed, energy and demand charges.
- Indicative price outcomes should see distribution prices increase by 10% in real terms on 1 July 2012.
- However, indicative distribution prices should fall by an average 1% in real terms for the following 4 years.
- Electricity distribution prices currently make up approximately 31% of the electricity bills paid by Aurora's customers.



# Customer pricing outcomes



# Conclusion

- Aurora is committed to demonstrating a customer focused approach by:
  - continuing to deliver a safe, secure and reliable electricity supply;
  - while minimising the impact on Tasmanian households and businesses of any future distribution related price increases.
- This is the fundamental driver underpinning this proposal.
- This commitment will be delivered through challenging productivity improvements and cost cutting across the business, together with significant changes to the way services are delivered.
- This will involve a move over time to a smarter and more efficient network that will deliver sustainable and efficient outcomes for our customers.



Questions?

