Regulatory Proposal to the AER 2011-2015

AER Public Forum, Melbourne

17 December 2009

CITIPOWER

Powercor AUSTRALIA

Presenters and Outline

- Shane Breheny – CEO
- Neil Watt – Manager Asset Strategy and Performance

- Ongoing expectations and challenges
- Past reliability and customer service performance
- Key messages
- Expenditure development process
- Network

- Energy & demand forecasts
- Work program drivers
- Key investments
- Operating costs
- Pricing & tariff outcomes

Expectations & Challenges

Ongoing Expectations

- Good reliability and supply restoration performance
- Security of the network
- Strong emphasis on bushfire risk mitigation
- High levels of safety for the public and employees
- Focus on efficient investment choices
- Facilitating customer choice in retail

Emerging Challenges

- Environmental challenges
  - growth in air conditioning load
  - evolving environmental policy initiatives impacting operations and sales
- Containing ‘energy at risk’
- Ageing infrastructure
- Smarter network

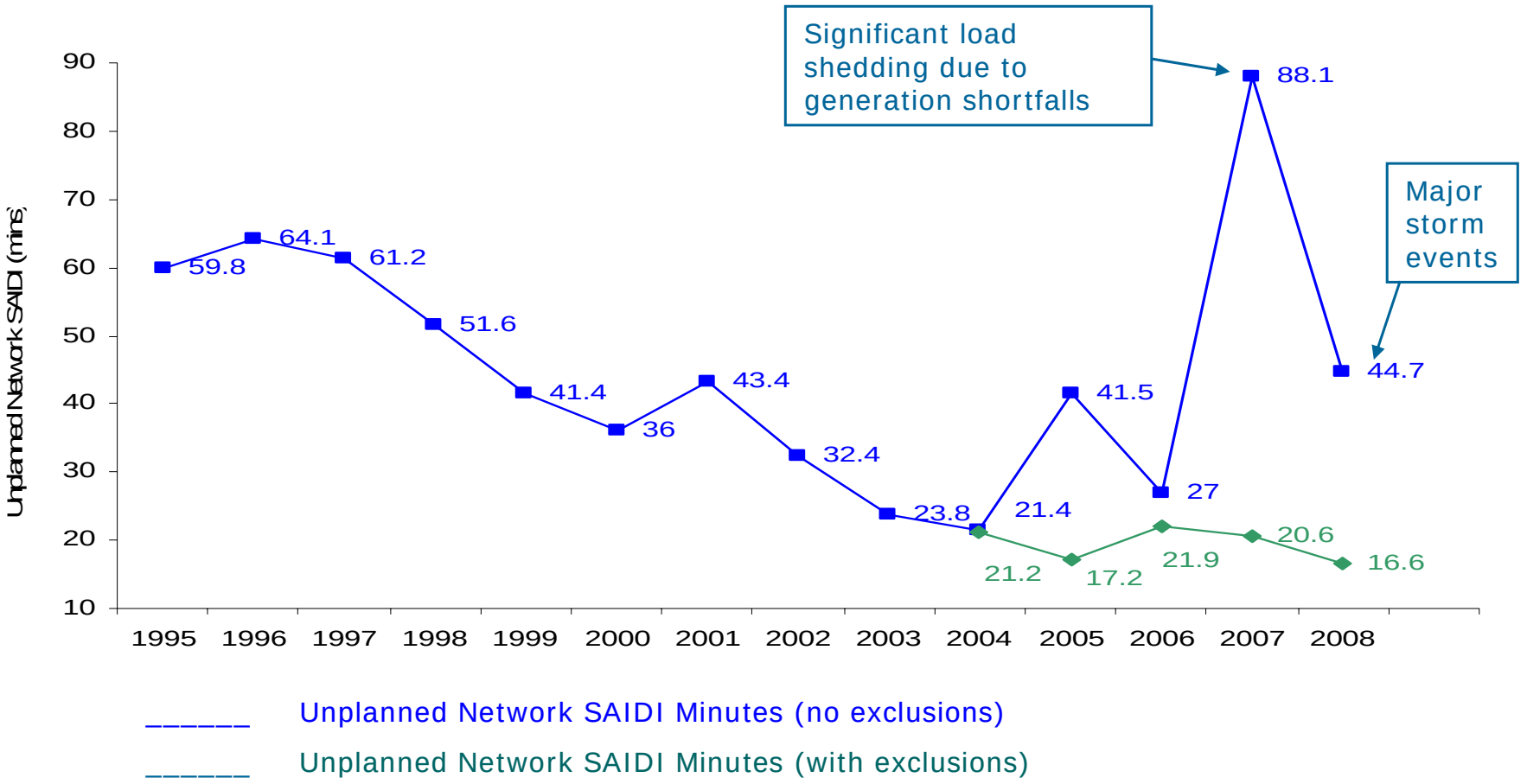
CitiPower

CitiPower's Network

Key statistics

- 157 kms supply area
- Region covers Melbourne CBD and inner suburbs
- Region generates 22% of GSP
- 310,000 customers
- 46.6% network underground
- 1,907 customers per sq km

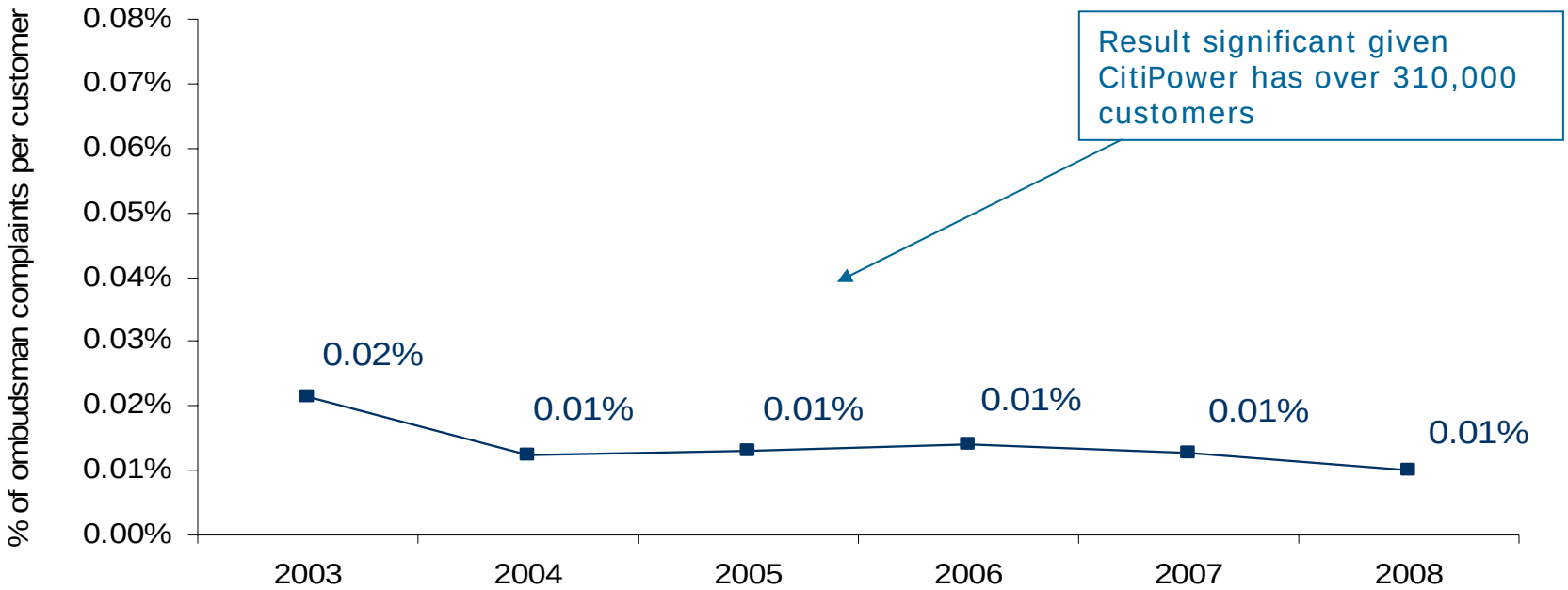
Australia's most reliable CBD distribution network



Major investments 2006-10

- Upgrade of the network servicing the Port of Melbourne and surrounding area to include a second major zone substation supply
- Installation of additional 60MVA of substation capacity at south western end of CBD to service the CBD and West Melbourne
- Commencement of major security and growth related upgrades to Melbourne's CBD
- Replacement of Southbank zone substation

Customer service



CitiPower's commitment to exceptional service was acknowledged at the 2008 Customer Service Institute of Australia Australian Service Excellence Award

Customer service levels & safety performance

- CitiPower's commitment to customer service is demonstrated by:
  - average complaints per 1,000 customer below the industry average since 2002
  - a reduction in complaints escalated to the Energy and Water Ombudsman
  - consistently high satisfaction ratings across residential customers (79 per cent), major customers (86 per cent) and retailers (89 per cent).
- CitiPower was recognised with a Highly Commended Award at the 2008 National Safety Awards of Excellence

Proposal highlights - CP

- Forecast net capital expenditure of $1,058m ($2010)
- Forecast operating expenditure of $222m ($2010) over 2011-15
- Maintenance of existing reliability and quality levels
- Enhancement of system security in the CBD
- Mitigation of fault level exceedence in the CBD and surrounding areas
- Maintain ‘energy at risk’ at or below 2010 levels
- Continued renewal of urban areas driving new connections
- Prudent replacement of aging assets
- Introduction of smarter network technologies using AMI functionality

Expenditure development process

- Methodology:
  - Capex: bottom-up approach based on asset management plans & demand forecasts
  - Opex: revealed costs using recurrent efficient 2009 as base year
  - Where appropriate subject to external advice/review
- Based on prudent asset management plan
- Subject to rigorous governance process
- Aimed at meeting NEL objectives & rule requirements

Safety

Reliability

Security

Quality

Price

Energy forecasts & Max demand trends

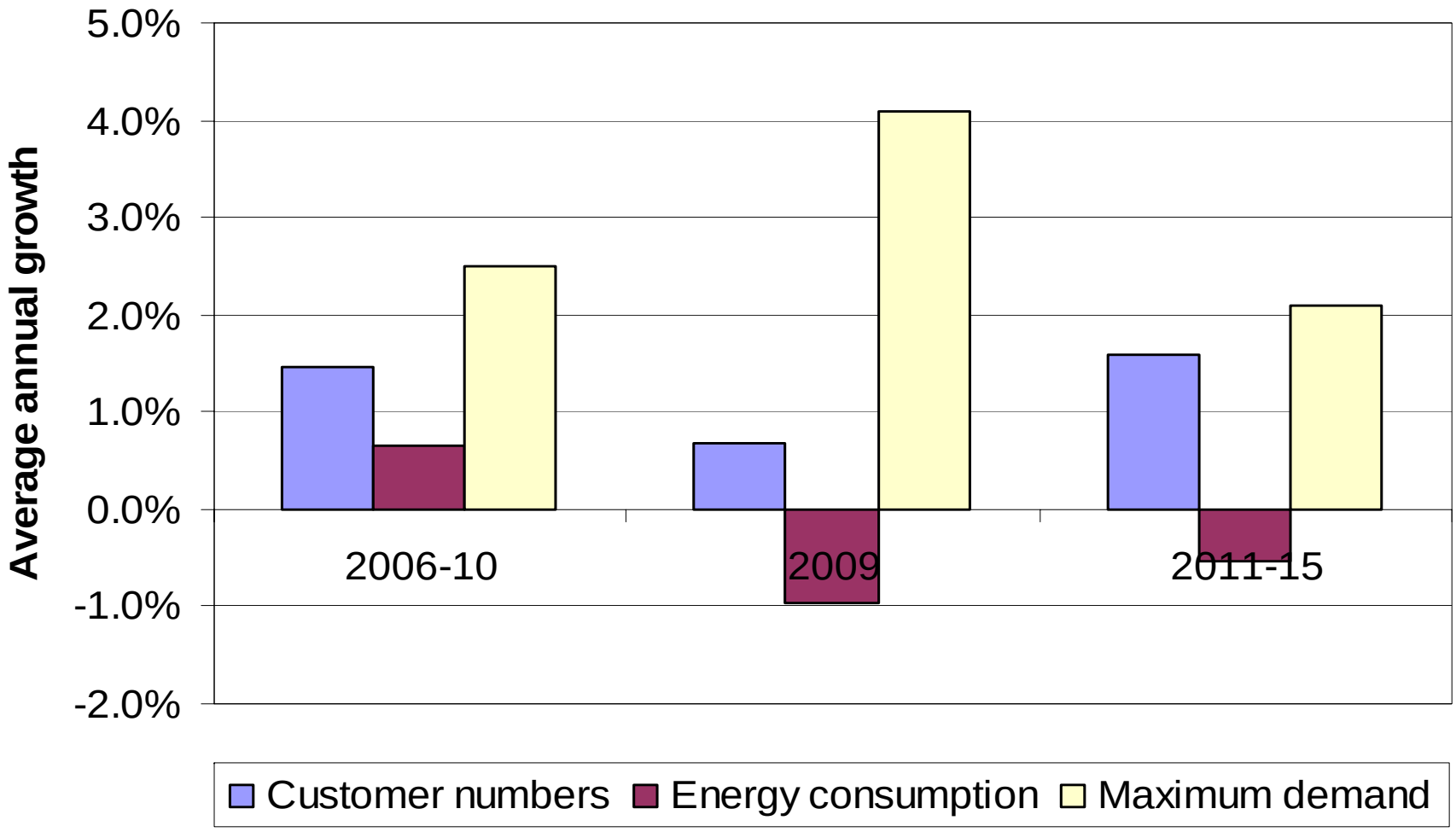
Energy forecasts

- Energy consumption used in establishing prices
- Energy forecasts developed by NIEIR
- Energy forecasts influenced by:
  - Government energy policy
  - Global financial crisis impacts
  - AMI

Maximum demand

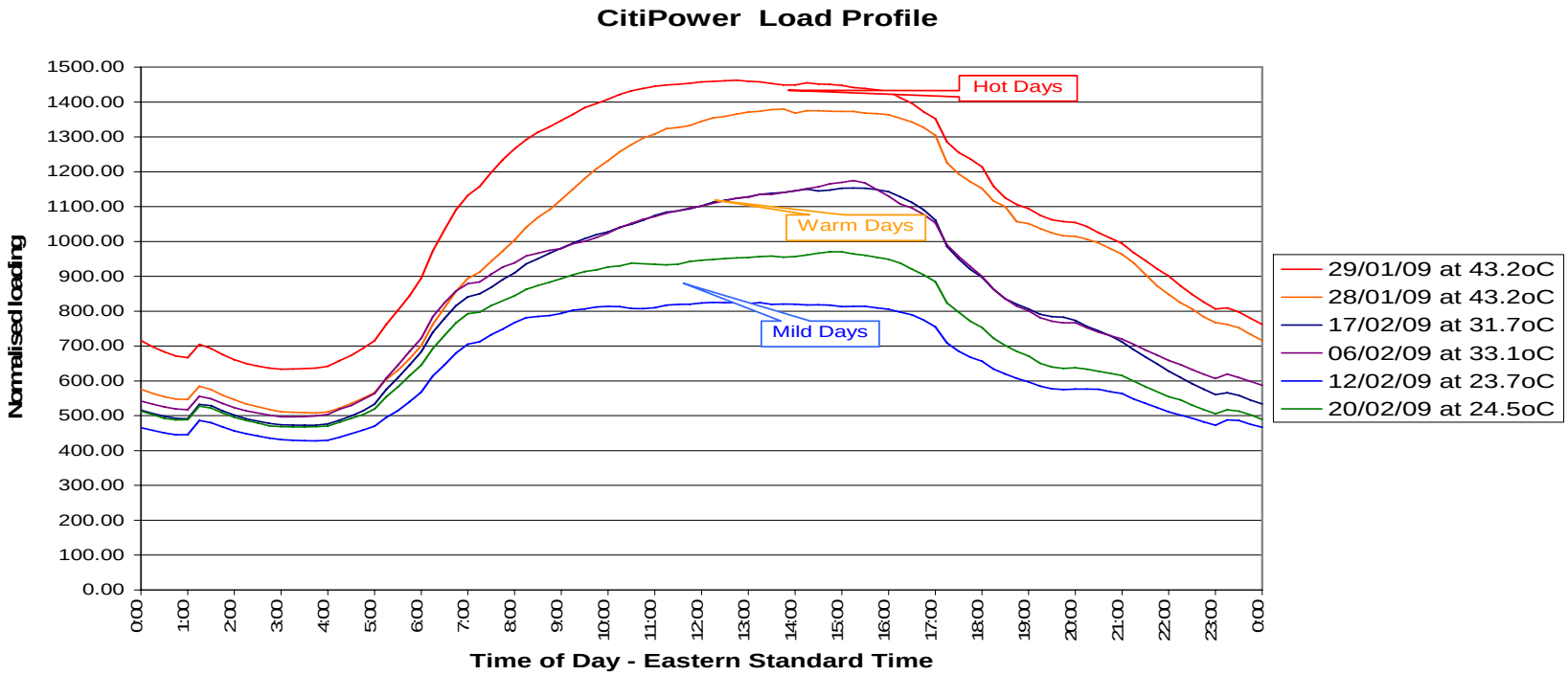
- Maximum demand used in determining Reinforcement Capex
- Forecasted internally and verified with NIEIR
- Maximum demand influenced by:
  - Economic conditions
  - Population growth
  - Appliance purchase & usage patterns

Growth trends



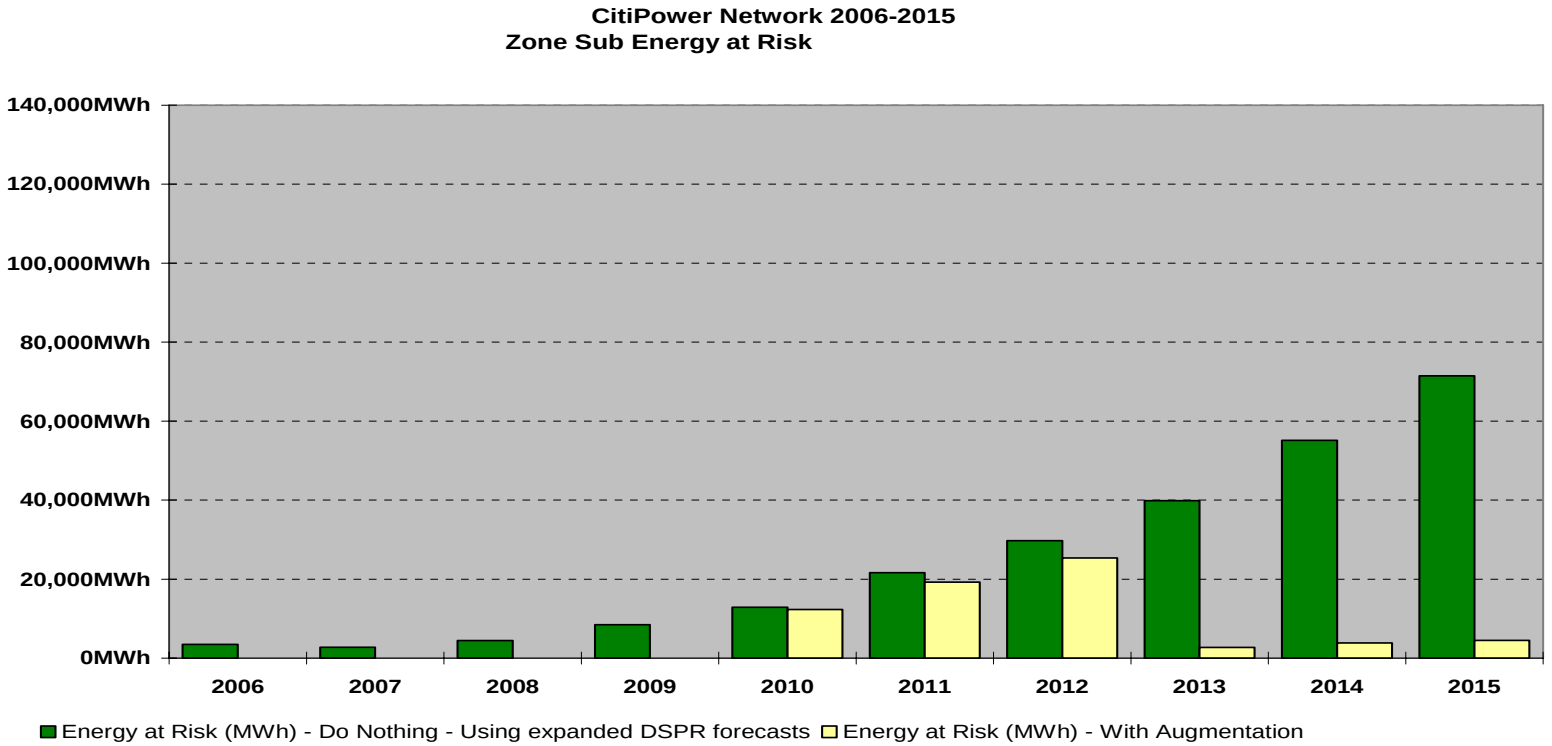
Work program drivers – peak demand & asset utilisation

- Peak demand growth driven by air conditioning:
  - 2009 heatwave, record demand
  - New phase, from penetration to upgrade
- Expenditure driven by highest utilised assets



Work program drivers – energy at risk

- Containment of energy at risk to 2010 levels:
  - energy at risk has more than doubled in last 4 years
  - implies augmentation expenditure levels greater than historic levels



Work program drivers – Ageing assets

Asset Replacement:

- Portfolio of ageing assets
- Average age in excess of 40 years
- Increasing risk of higher failure rates and rising maintenance costs
- Prudent conditioning monitoring to manage risk
  - replacement of poles
  - replacement of underground cables
  - Replacement of major plant

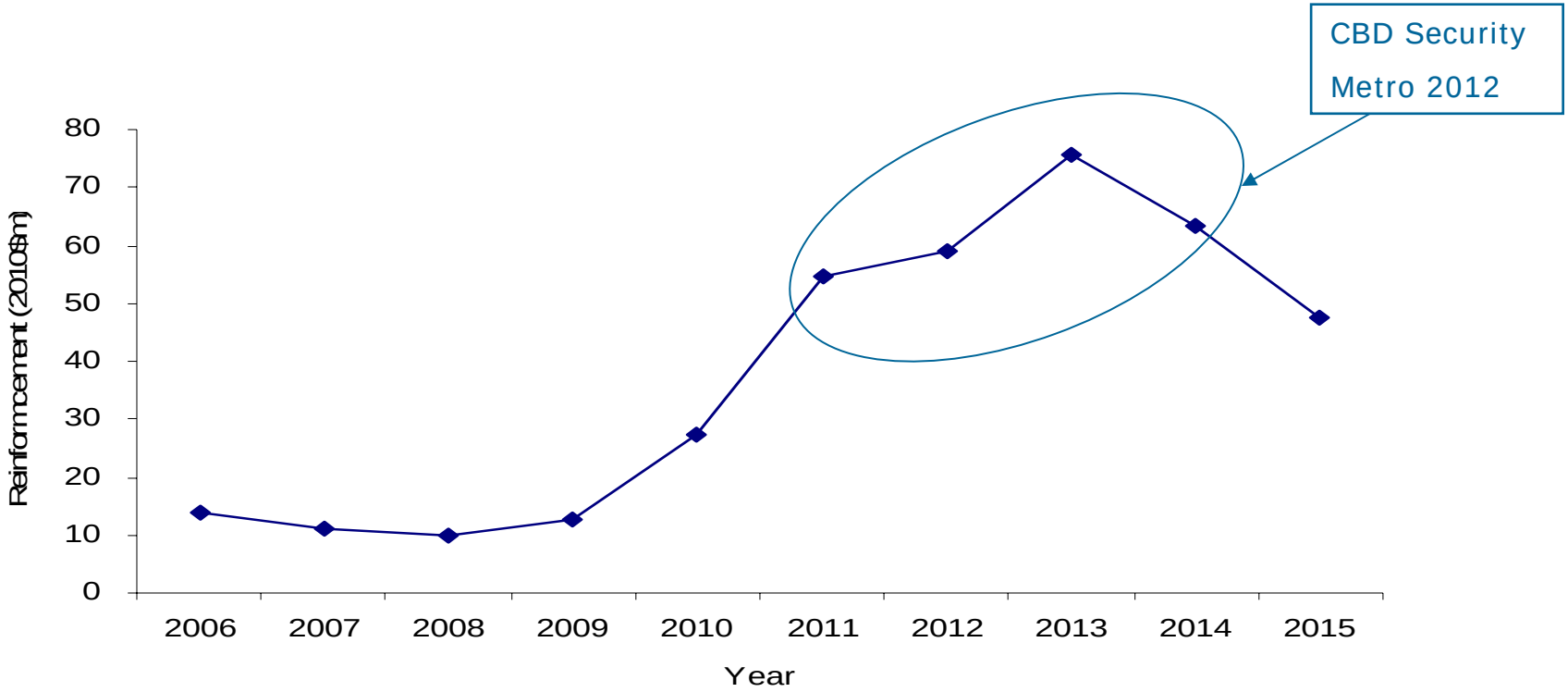
Demand management

- Network planning process to identify and implement demand management alternatives where they are economically efficient
- Demand management and/or non network initiatives:
  - West Melbourne
- Extent to which demand management and/or non- network alternatives are considered depends on:
  - CitiPower receiving expressions of interest from proponents of feasible alternatives
  - advances in technology which may lead to a greater number of viable and feasible alternatives

Key investments 2011-15

Reinforcement of a highly utilised network

- Metro 2012 Capacity Upgrade
- CBD Security Upgrade
- Regulatory test process completed for both projects



Key investments 2011-15

- Enabling connection of embedded generations whilst ensuring security of the network
  - maintaining fault levels at or below plant and equipment ratings has become an increasing challenge due to an increase in embedded generators
  - installation of impedance reactors to ensure compliance with fault levels
  - proposed charge being levied on embedded generation connections
- Safety and the environment
  - noise control
  - drainage of oil and asbestos management
- Creating a network for the future
  - AMI leveraged projects
  - replacement/renewal of the SCADA network

Approach to operating expenditure forecasts

- Use revealed cost methodology using 2009 as base:
  - most recent actual performance (5 months of forecast)
  - efficiency carry over mechanism applies
  - audited accounts available before AER final decision

± Add/subtract changes in service classification

± Add/subtract change in overhead allocation

\+ Add step changes

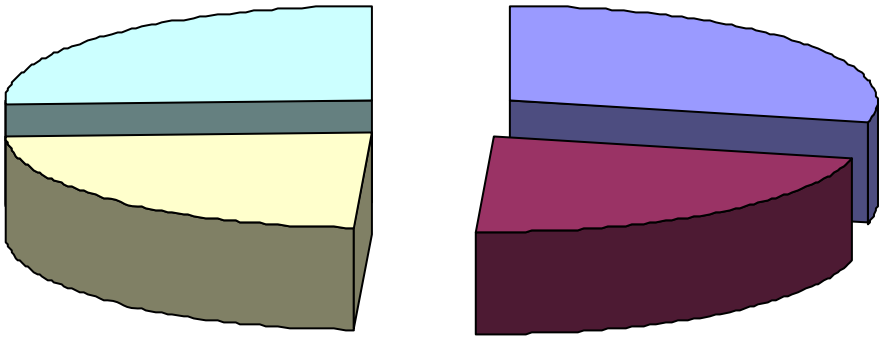
\+ Add scale escalation for growth across network

\+ Add cost escalation

= Forecast operating expenditure

Opex – key drivers of cost increases

Debt raising costs:
$22m

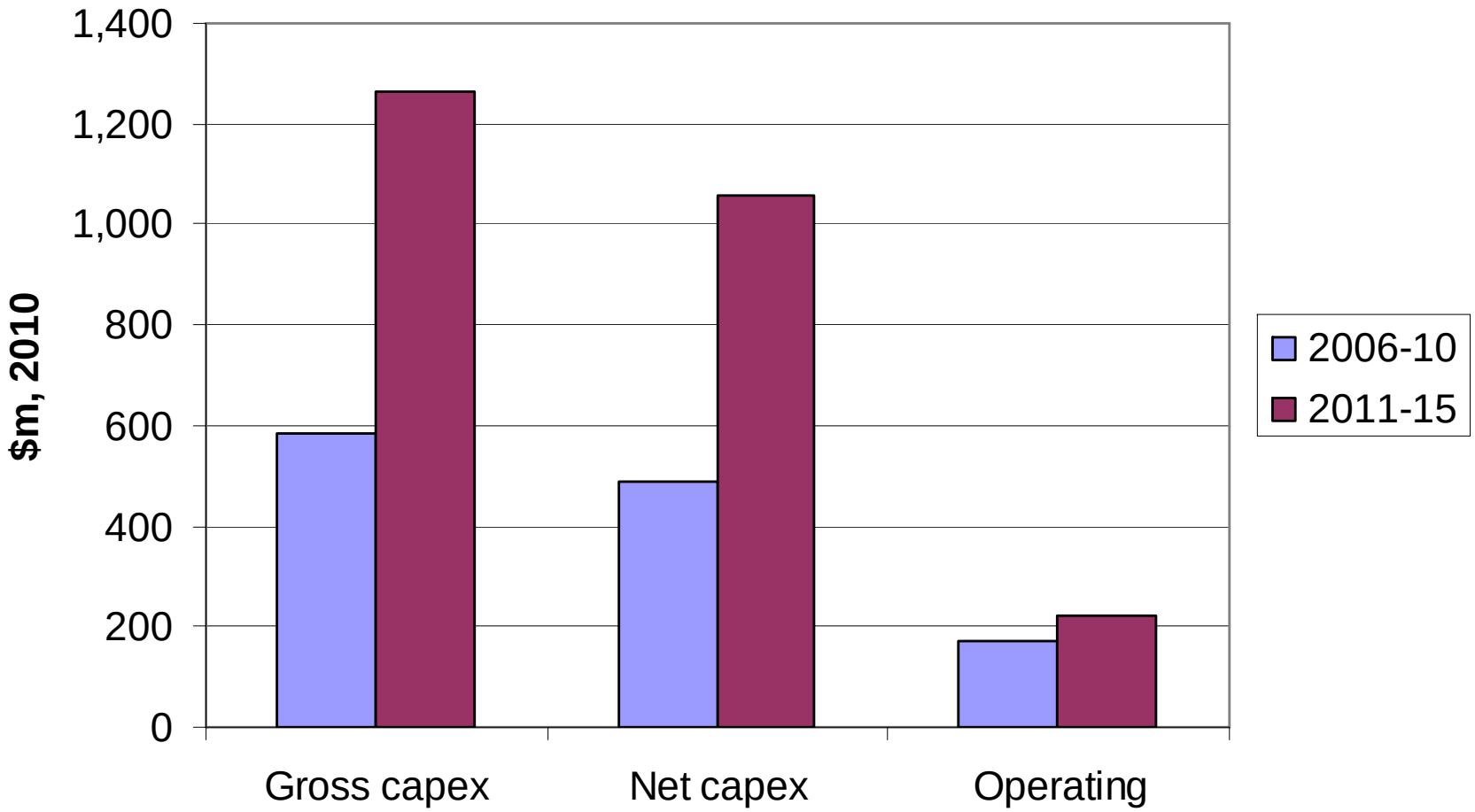


Scale escalation:
$20m
- Increased network size
- Increased work volume
- Additional customers

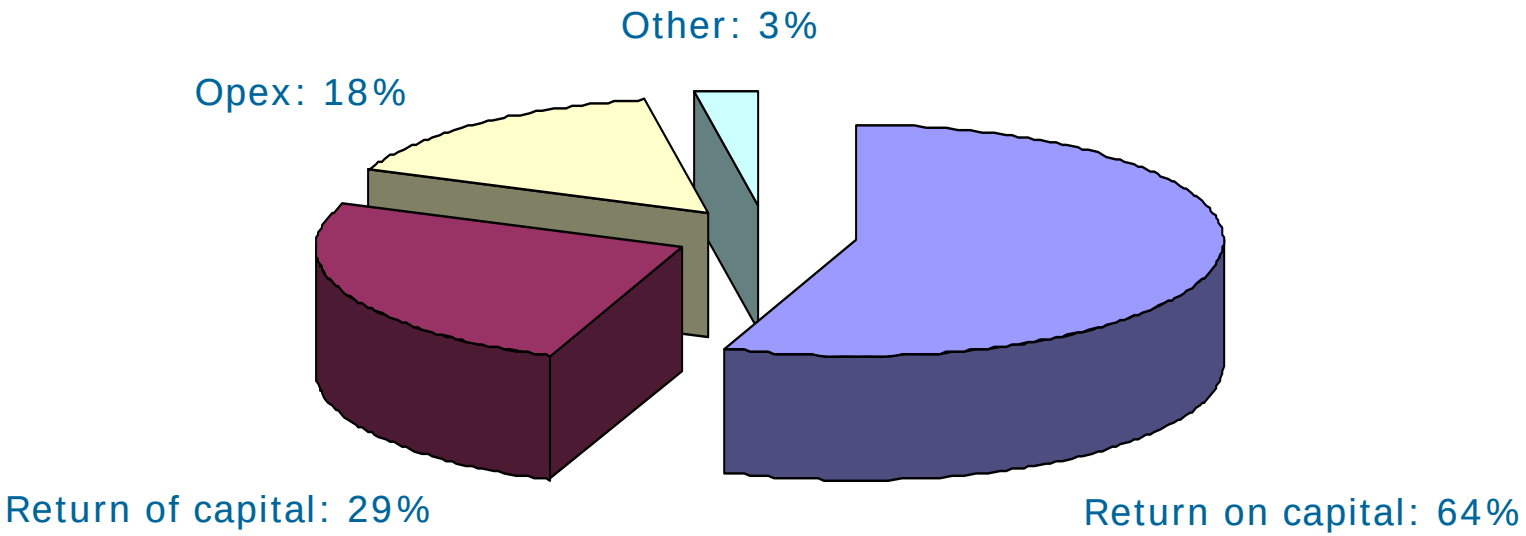
Input cost escalation:
$19m
- Increased labour
- Increased materials

Scope Step Changes:
$24m
- Climate change
- Demand Management (WMTS)
- Insurance
- Self insurance
- AEMC Distribution Planning Rule changes
- Safety management

Expenditure 2011-15



Revenue requirement



Price outcomes for customers - CitiPower

- CitiPower's success has been achieved whilst delivering real decreases in average distribution charges of 36 per cent over the last ten years
- CitiPower will continue to ensure value to its customers by:
  - maintaining current good performance in the face of increasing peak demand and asset utilisation
  - enabling connection of embedded generators whilst ensuring security of the network
  - ensuring sustainable performance in the face of climate change and addressing increasing aging infrastructure
- These challenges mean that prices will be increasing this regulatory control period:
  - 10.1 per cent increase in 2011 and a 8 per cent increase in price per annum over the rest of the regulatory control period

Incentive arrangements

- CitiPower supports continuation of an efficiency benefits sharing scheme applying to operating expenditure
- CitiPower supports the introduction of a demand management incentive scheme
- CitiPower supports the proposed service incentive arrangements with business specific amendments

Network tariffs - CitiPower

- Roll out of AMI meters allows for the development of more innovative and efficient tariff structures
- CitiPower are considering a number of changes to their tariff design for possible start-up in 2011
- Customers will be transitioned throughout the 2011-15 regulatory control period as meters are changed over
- CitiPower will be consulting with their customers over 2010 on proposed tariff design changes
- Final set of tariffs will be outlined in CitiPower's Pricing Proposal following the AER's Final Decision

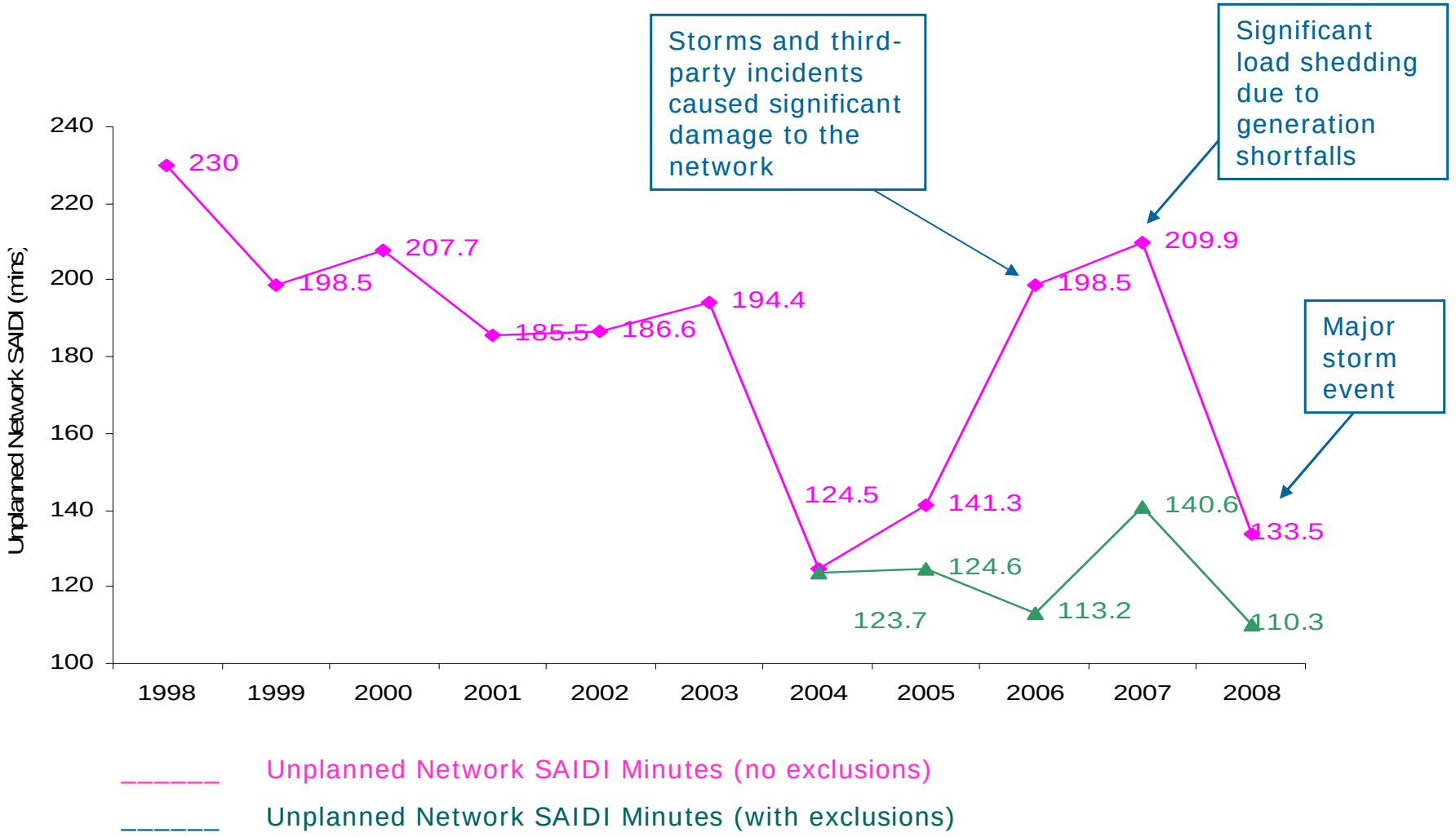
Powercor Australia

Powercor Australia's network

Key statistics

- 150,000 sq kms supply area
- Region covers 65 % of state
- Serves key regional cities
- 683,000 customers
- 4.5 customers per sq km
- 95% network overhead

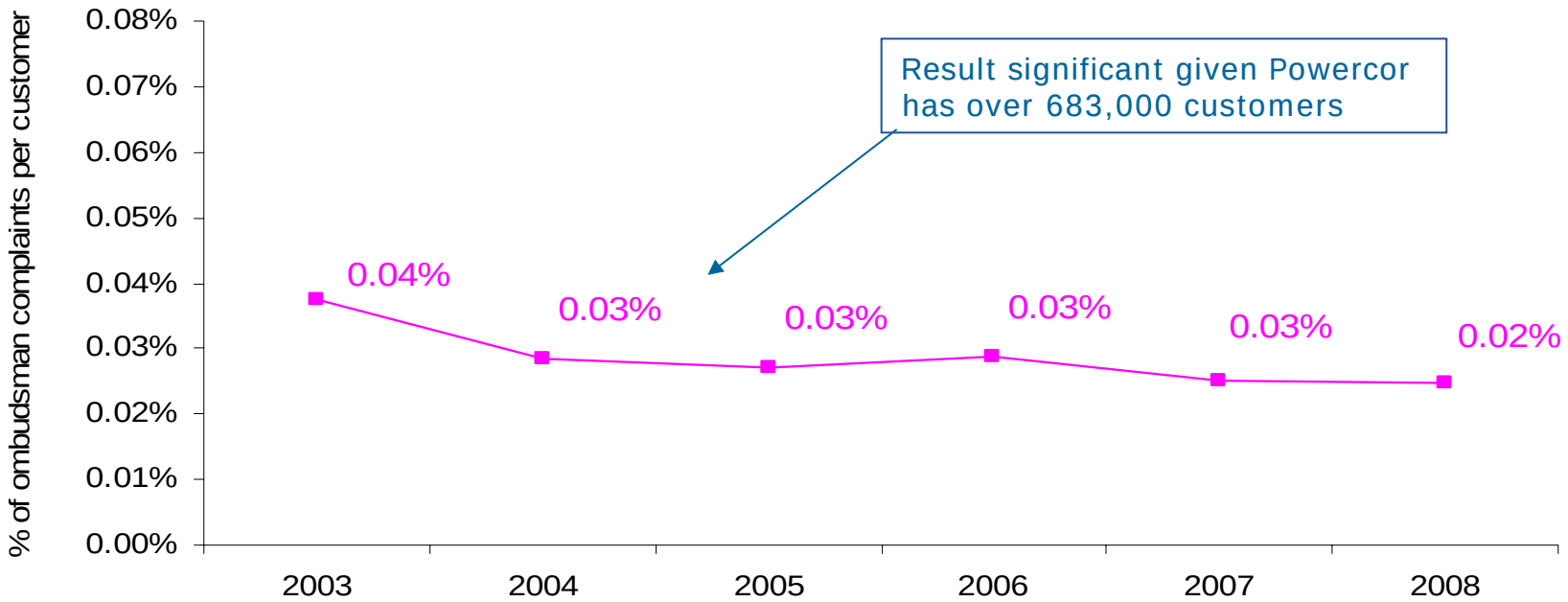
Australia's most reliable rural distribution network



Key investments 2006-10

- Specific projects targets delivered in the last regulatory control period include:
  - focus on small areas of customers receiving low levels of service (Otways)
  - improving identification and rectification of supply quality issues
  - additional supply capacity in the Sunshine/St Albans and Geelong areas to meet demand growth
  - reinforcement of supply capacity along the Murray River between Mildura and Swan Hill

Customer service



Powercor's commitment to exceptional service was acknowledged at the 2008 Customer Service Institute of Australia Australian Service Excellence Award

Customer service levels & safety performance

- Powercor's commitment to customer service is demonstrated by:
  - average complaints per 1,000 customer below the industry average since 2002
  - a reduction in complaints escalated to the Energy and Water Ombudsman
  - consistently high satisfaction ratings across residential customers (84 per cent), major customers (86 per cent) and retailers (89 per cent).
- Powercor was recognised with a Highly Commended Award at the 2008 National Safety Awards of Excellence
  - lost time injuries has exhibited a downtrend since late 1990's
  - average annual lost time injury rate below one since 2001

Proposal highlights - PAL

- Forecast net capital expenditure of $1,588m ($2010)
- Forecast operating expenditure of $869m ($2010) over 2011-15
- Maintain existing reliability and quality of supply levels
- Maintain ‘energy at risk’ at or below 2010 levels
- Prudent condition based asset replacement and renewals
- Managing the impacts of climate change on the network
- Continued growth in new connections across the network
- Introduction of smarter network technologies using AMI functionality

Expenditure development process

- Methodology:
  - Capex: bottom-up approach based on asset management plans & demand forecasts
  - Opex: revealed costs using recurrent efficient 2009 as base year
  - Where appropriate subject to external advice/review
- Based on prudent asset management plan
- Subject to rigorous governance process
- Aimed at meeting NEL objectives & rule requirements

Safety

Reliability

Security

Quality

Price

Energy forecasts & Max demand trends

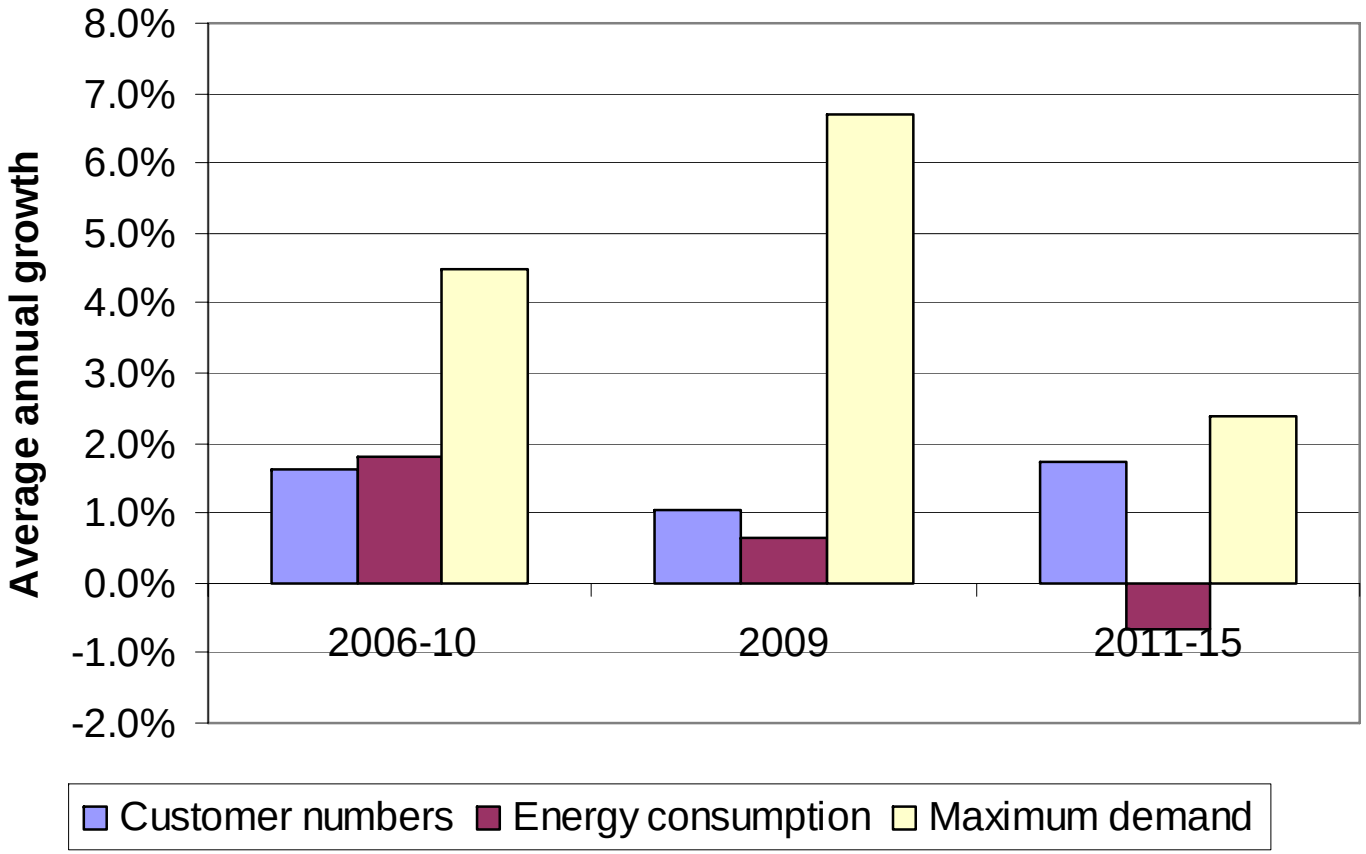
Energy forecasts

- Energy consumption used in establishing prices
- Energy forecasts developed by NIEIR
- Energy forecasts influenced by:
  - Government energy policy
  - Global financial crisis impacts
  - AMI

Maximum demand

- Maximum demand used in determining Reinforcement Capex
- Forecasted internally and verified with NIEIR
- Maximum demand influenced by:
  - Economic conditions
  - Population growth
  - Appliance purchase & usage patterns

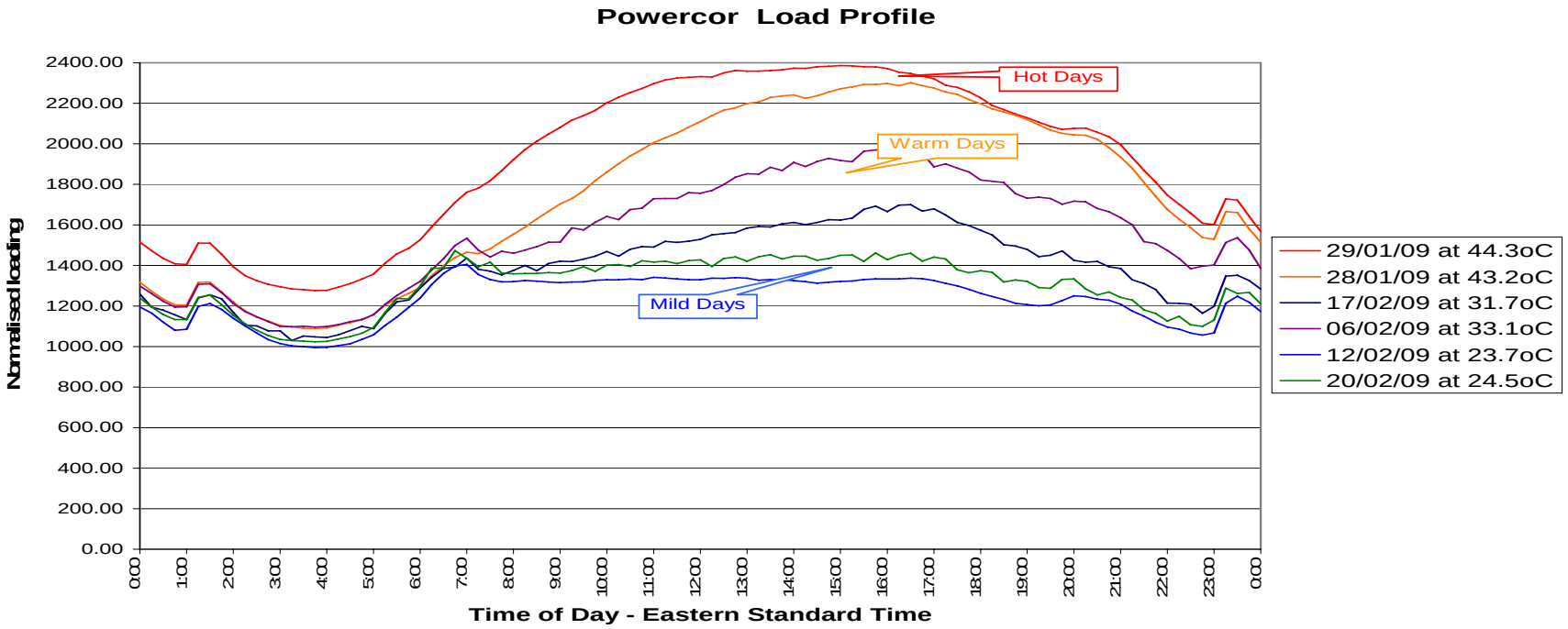
Growth trends



Work program drivers – peak demand & asset utilisation

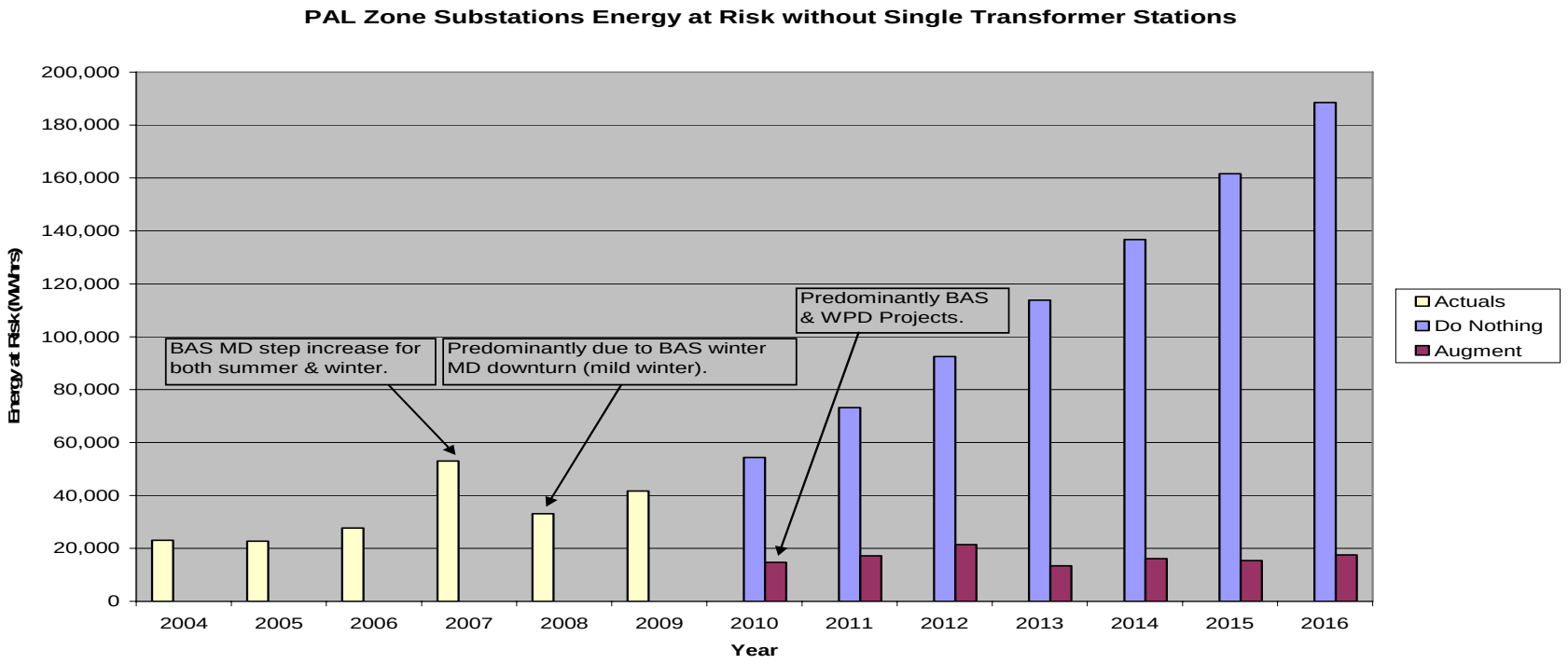
- Peak demand growth driven by air conditioning:
  - 2009 heatwave, record demand
  - New phase, from penetration to upgrade

- Expenditure driven by highest utilised assets.



Work program drivers – energy at risk.

- Containment of energy at risk to 2010 levels:
  - energy at risk has more than doubled in last 4 years
  - implies augmentation expenditure levels greater than historic levels



Work program drivers – Ageing assets

- Asset Replacement:
  - portfolio of ageing assets
  - average age in excess of 30 years
  - increasing risk of higher failure rates and rising maintenance costs
  - prudent conditioning monitoring to manage risk
    - replacement of poles
    - replacement of cross arms
    - replacement of conductor
    - replacement of major plant

Demand management

- Network planning process to identify and implement demand management alternatives where they are economically efficient

- Demand management and/or non network initiatives:
  - Charlton zone substation
  - solar SWER photovoltaic system trial
  - hot water load management
- Extent to which demand management and/or non- network alternatives are considered depends on:
  - PAL receiving expressions of interest from proponents of feasible alternatives
  - advances in technology which may lead to a greater number of viable and feasible alternatives

Key investments

- Reinforcement of a highly utilised network
  - augmentation of the existing Geelong East Zone Substation
  - augmentation of the 66kV lines in the Geelong area
  - increasing the capacity of the 66kV line in the Charlton area
- Maintaining reliability and quality through renewals and replacement
  - major replacement of conductors
  - replacement of poles
  - replacement of cross arms

Key investments (cont)

- Replacement of conductors
  - Powercor will conduct a major replacement conductor program based on condition of assets
  - enhanced program aims to ensure reliability is maintained in light of continued ageing and deterioration of overhead conductors in rural areas
- Creating a network for the future
  - AMI leveraged projects
  - replacement/renewal of SCADA network

Approach to operating expenditure forecasts

- Use revealed cost methodology using 2009 as base:
  - most recent actual performance (5 months of forecast)
  - efficiency carry over mechanism applies
  - audited accounts available before AER final decision

± Add/subtract changes in service classification

± Add/subtract change in overhead allocation

\+ Add step changes

\+ Add scale escalation for growth across network

\+ Add cost escalation

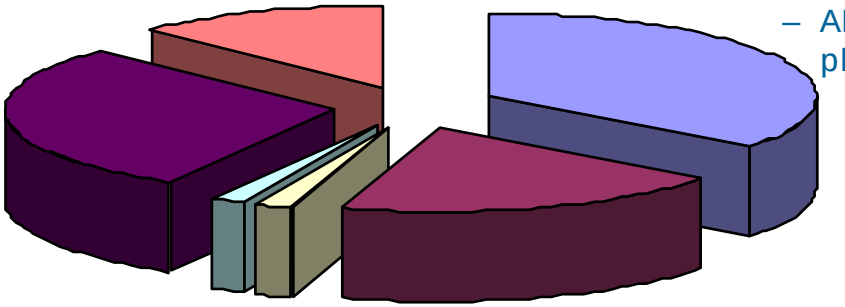
= Forecast operating expenditure

Opex – key drivers of cost increases

Scope Step Changes: $94 m
- Climate change
- High risk Victorian towns
- Insurance
- Self insurance
- Vegetation management
- Safety management scheme
- AEMC Distribution planning changes

Debt raising costs: $33m

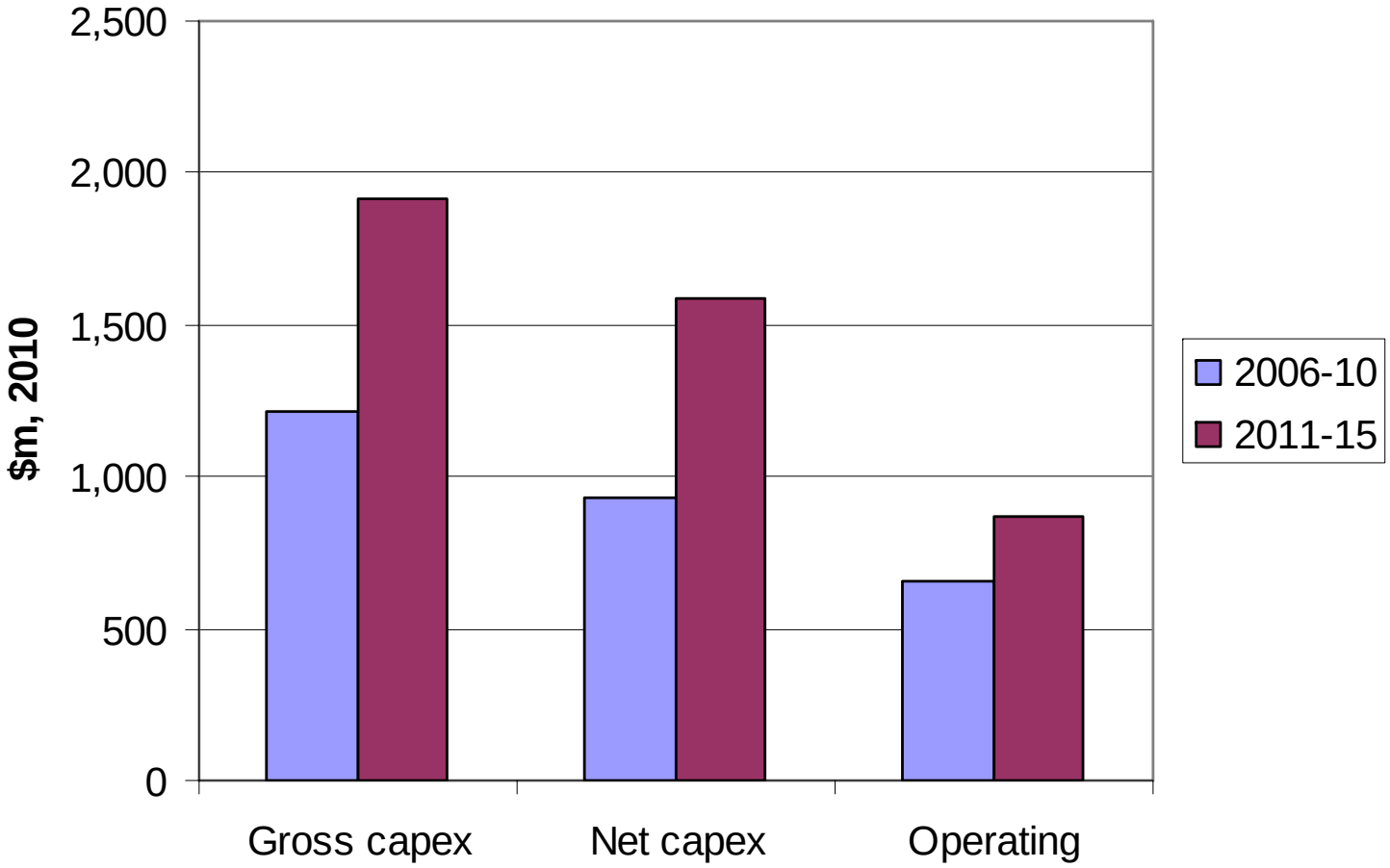
Input cost escalation: $78m
- Increased labour
- Increased materials



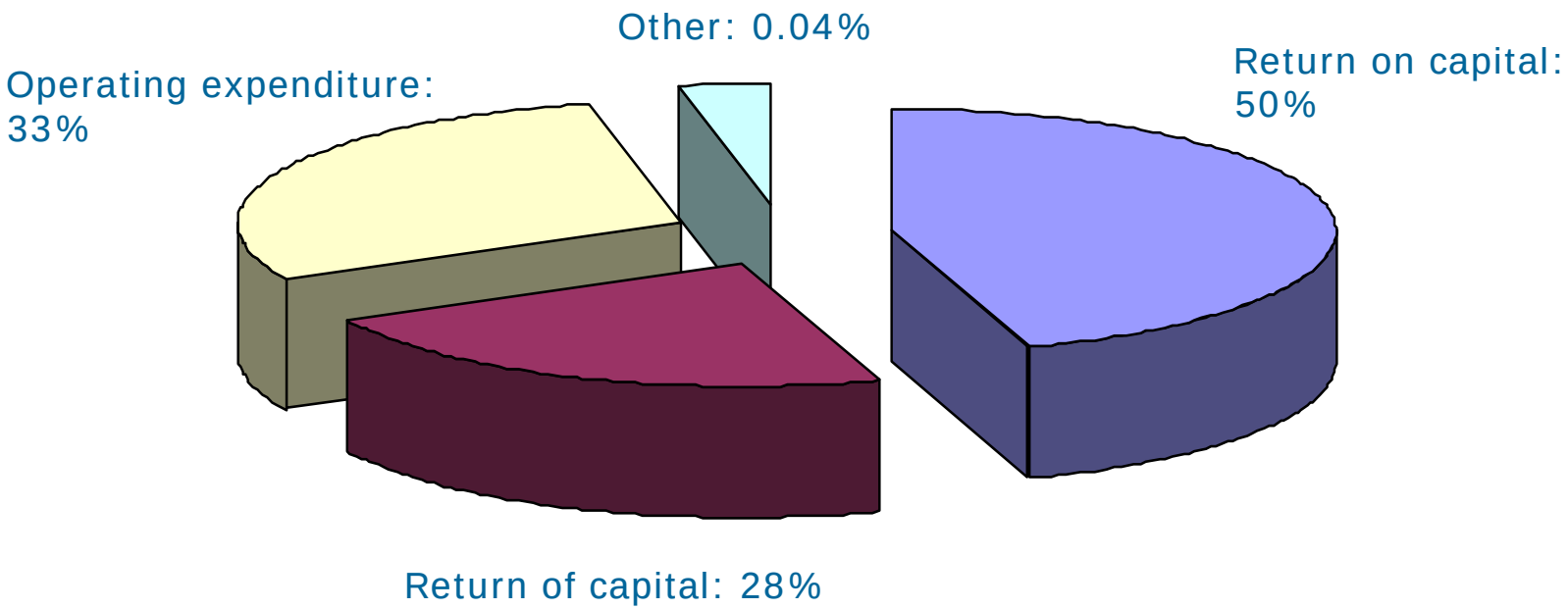
Work volume & Customer growth escalation: $9m

Network growth escalation: $53m
- Increased network size

Expenditure 2011-15



Revenue requirement



Price outcomes for customers - Powercor

- Powercor's success has been achieved whilst delivering real decreases in average distribution charges of 45 per cent over the last ten years

- Powercor will continue to ensure value to its customers by:
  - maintaining current good performance in the face of increasing peak demand, asset utilisation and increasing bushfire risk
  - ensuring sustainable performance in the face of climate change and addressing increasing aging infrastructure

- These challenges mean that prices will be increasing this regulatory control period:
  - 22.3 per cent increase in 2011 and a 5 per cent increase in price per annum over the rest of the regulatory control period

Incentive arrangements

- Powercor supports continuation of an efficiency benefits sharing scheme applying to operating expenditure
- Powercor supports the introduction of a demand management incentive scheme
- Powercor supports the proposed service incentive arrangements with business specific amendments

Network tariffs - Powercor

- Roll out of AMI meters allows for the development of more innovative and efficient tariff structures
- Powercor is considering a number of changes to its tariff design for possible start-up in 2011
- Customers will be transitioned throughout the 2011-15 regulatory control period as meters are changed over
- Powercor will be consulting with their customers over 2010 on proposed tariff design changes
- Final set of tariffs will be outlined in Powercor' Pricing Proposal following the AER's Final Decision

Thank you