Regulatory Proposal to the Australian Energy Regulator 2009 to 2014

Delivering efficient and sustainable network services

AER Public Presentation

30 July 2008

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Introduction – Vince Graham CEO

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Presentation –
Rod Howard, GM Network Development & Control

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Outline of this presentation

- Integral Energy
- Key issues
- Expenditure forecasts
- Revenue outcomes
- Reliability and pricing outcomes

Integral Energy's Network

- Serves 850,000 customers, or 2.1 million people
- 24,500 km^2
- Over 2,700 staff
- Over 28,400 substations, 312,650 power poles and 33,000 km of cables
- Covers Greater Western Sydney, Blue Mountains, Illawarra, South Coast and Southern Highlands and spans 18 LGA's
- $3.8B RAB, with a replacement value of approx $7.5B

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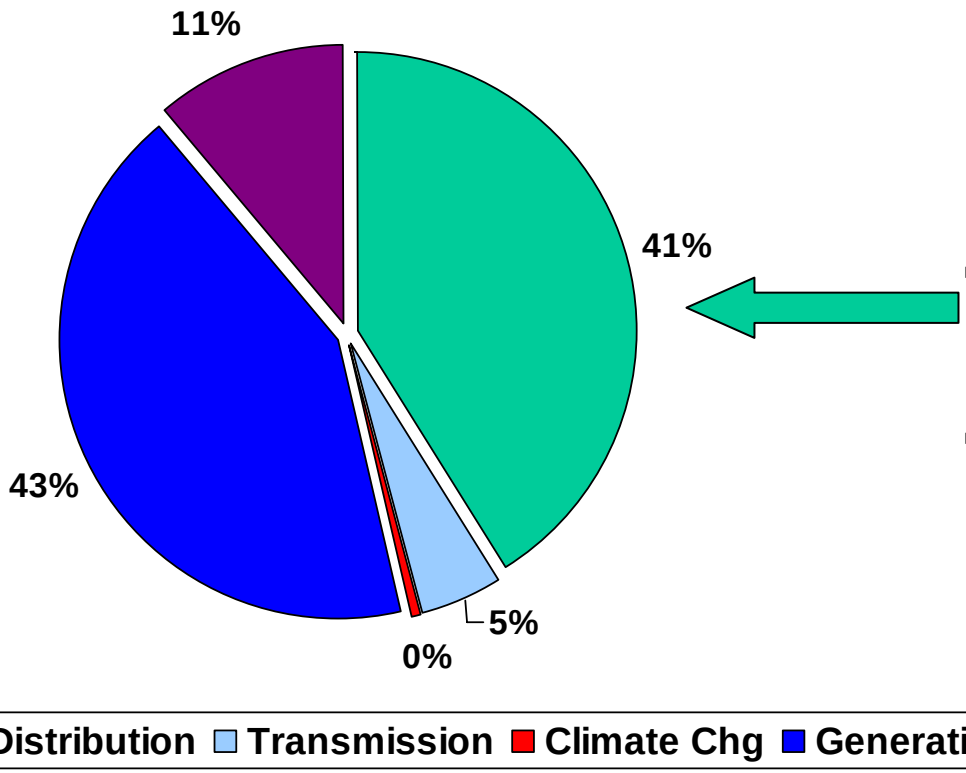
Components of your annual retail electricity bill



- An average Integral Energy residential customer's bill is made up of the following components:
  - *Distribution= 41%*
  - *Transmission = 5%*
  - *Generation = 43%*
  - *Retail = 11%*
- **Regulatory proposal addresses Distribution component of annual retail electricity bill**
- Regulation impacts all customers, even those on negotiated contracts.

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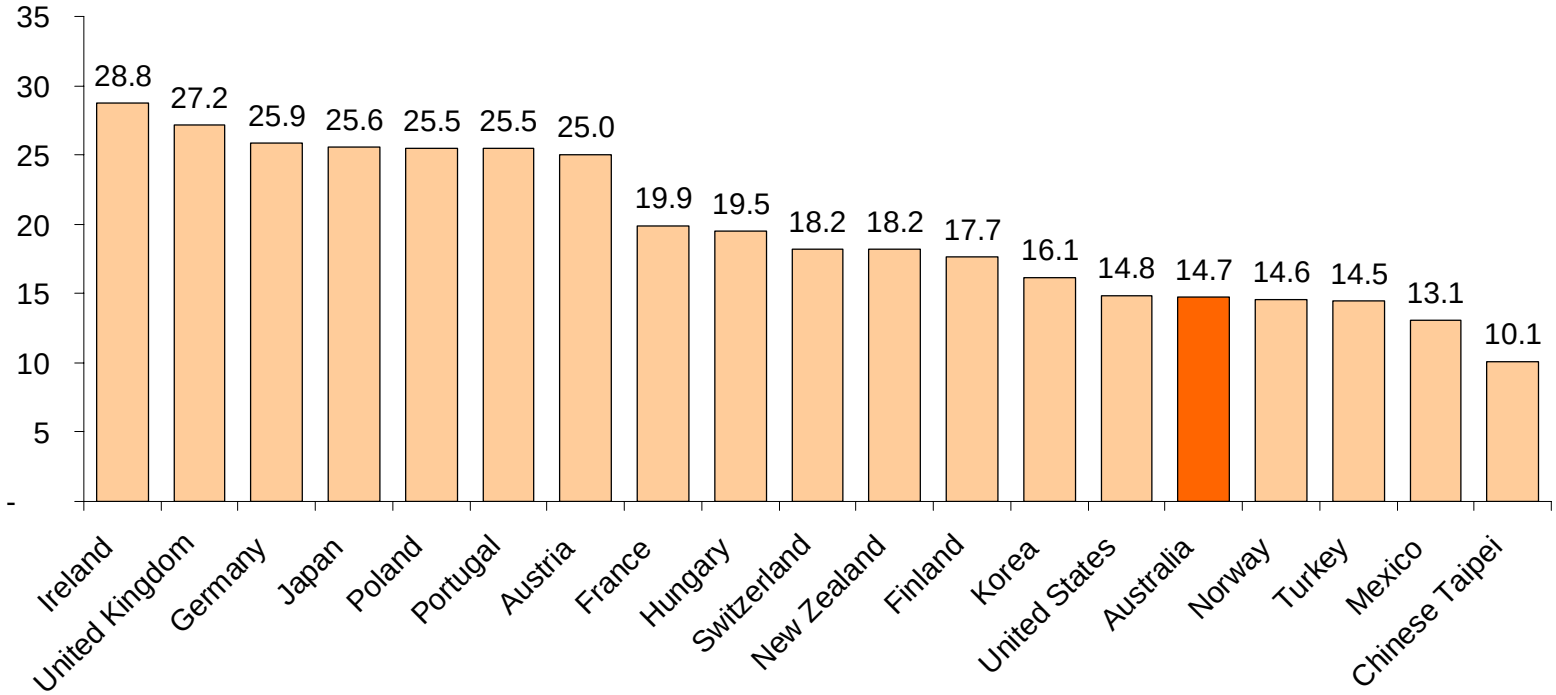
International residential electricity prices

International Residential Electricity Prices (Australian cents/kWh)
September 2006



1. This data was reported by the New Zealand Ministry for Economic Development in the Energy Data File June 2007. The data has been converted to Australian currency using 30 September 2006 exchange rate of 0.865.
2. The original data was mostly sourced from the International Energy Agency publication Energy Prices and Taxes Fourth Quarter 2006; Germany, Japan and United Kingdom data is based on older information.
3. The Australian price has been calculated using the 2004 average reported by the Australian Energy Regulator (State of the Energy Market 2007) and updated to September 2006 using ABS CPI quarterly data.

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The environment we will face in 2009-2014 and key issues impacting on expenditure

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Integral's Operating Environment

- Our operating environment is influenced by:

  1. Inherent features of our franchise area
  2. Changing customer behaviour and expectations
  3. Network age and condition
  4. Regulations (NSW DRP Licence Conditions)

1. Inherent features of our franchise area

- Serve some of Australia's fastest growing communities
  - *2 new developments, each the size of Canberra, are planned for Sydney's north-west and south-west*
  - *Impact of major state infrastructure projects in Integral Energy's network, including M7 and road upgrades*
- Land use shifting from rural and semi-rural to urban and light commercial, driving increasing customer expectations of reliability
- Peak temperatures typically higher and more sustained than those of coastal regions and experienced more consistently

Growth centres in North West and South West Sydney

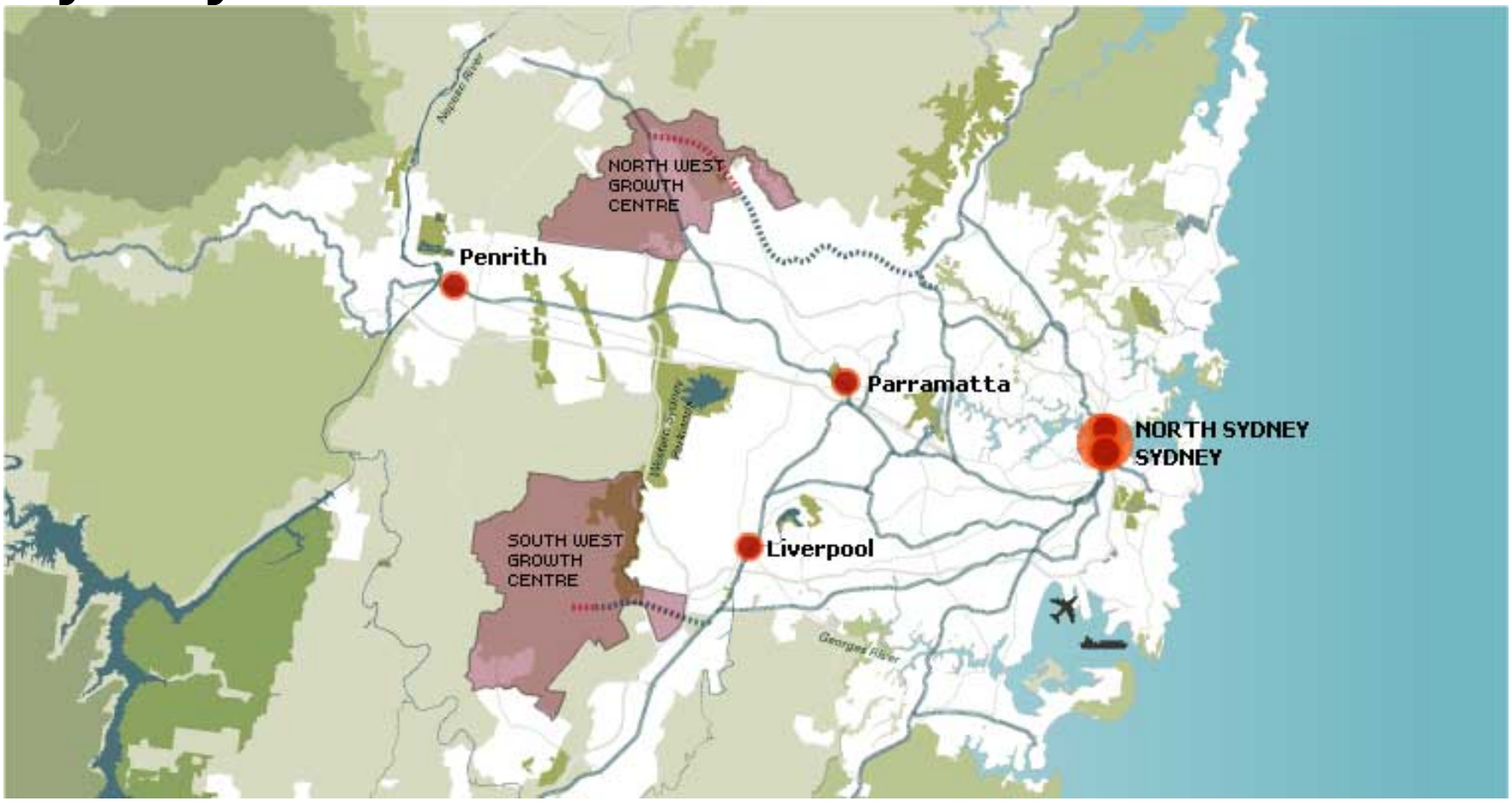

Image courtesy of the NSW Growth Centres Commission

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Parklea - 1997


Parklea - 2004


Kellyville - 1996


Kellyville - 2005

Norwest Business Park – early 1990s

Norwest Business Park – 2007

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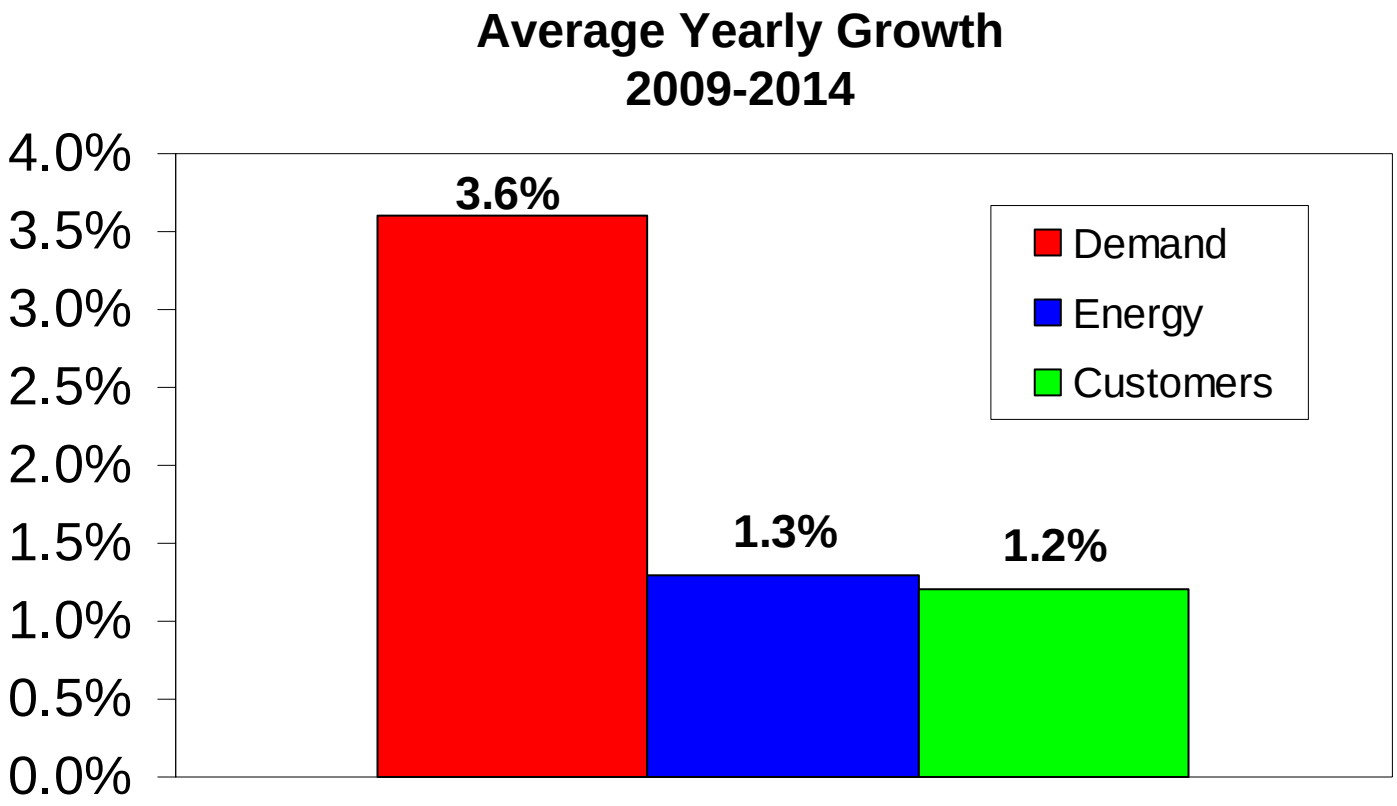
Expected growth 2009-2014



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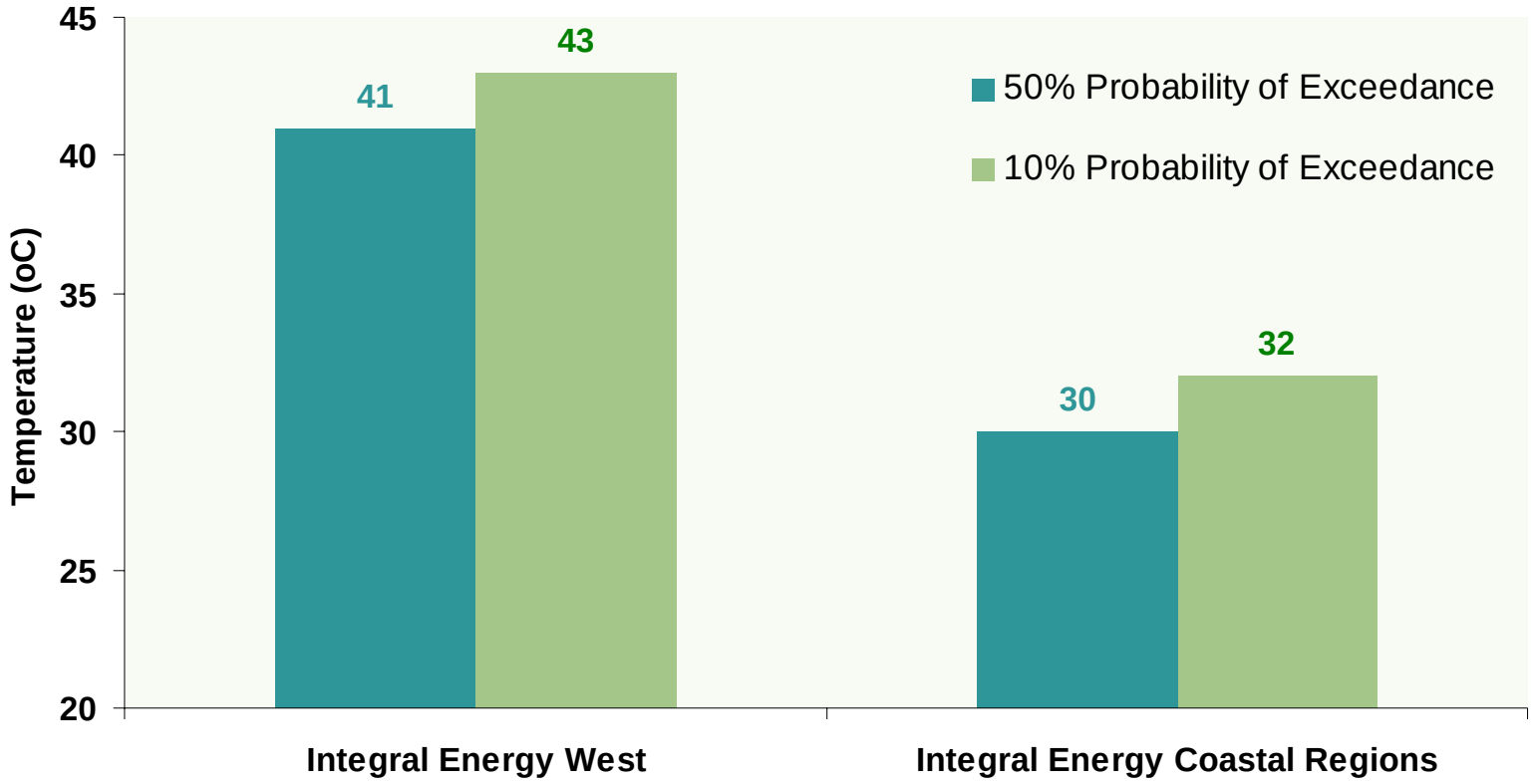
Peak temperatures are much higher in Integral's western area



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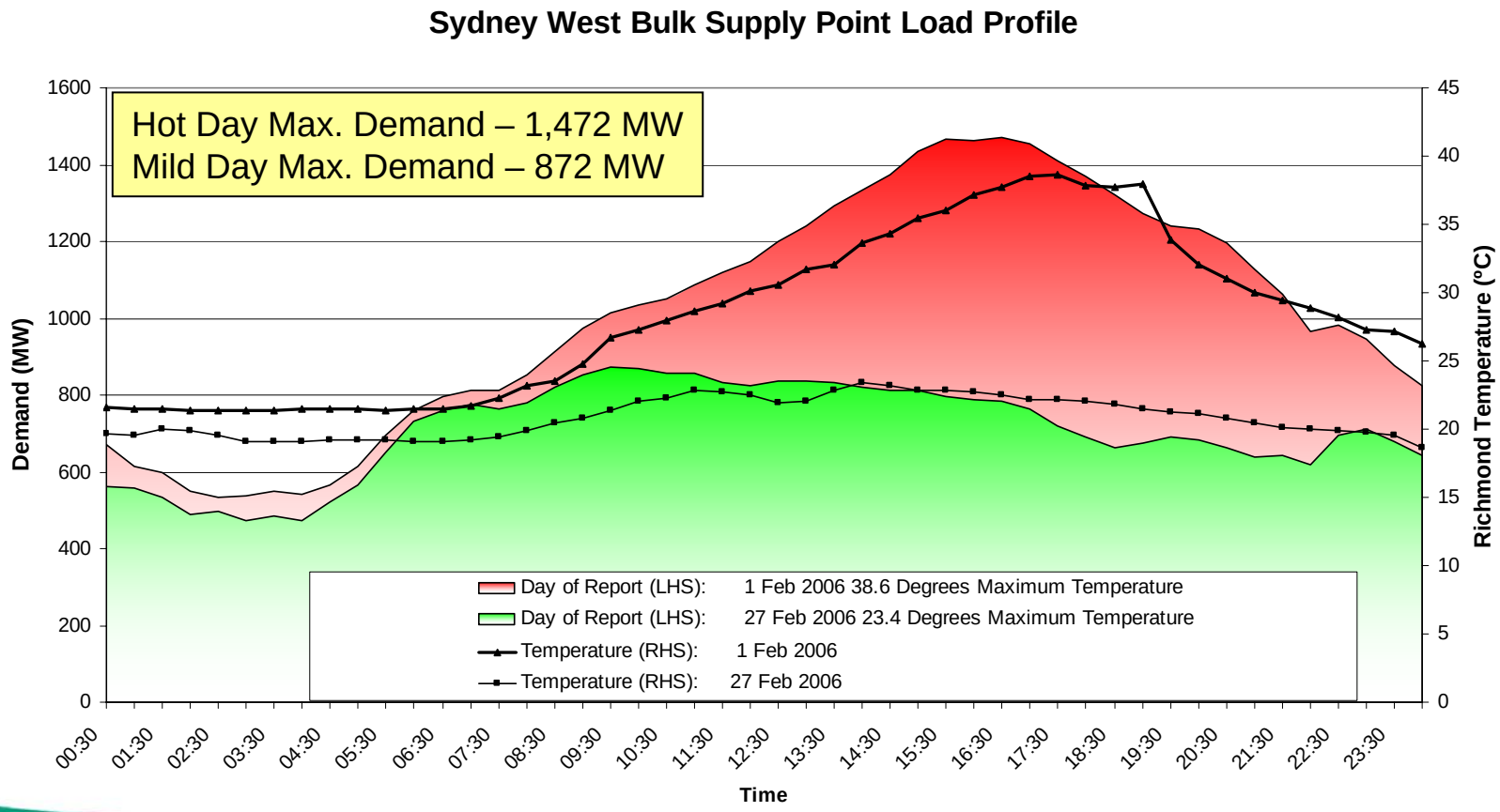
2. Changing customer behaviour

- Customers' use is changing
  - In 2006, air-conditioning penetration was 62% across the network and **74%** in Western Sydney, compared to 25% 10 years ago
  - June 2008 survey shows a/c penetration now at 72% across the network and **81%** in Western Sydney – a 10% and 7% increase, respectively, in 2 years
  - There has also been a significant up-take of appliances such as home computers and entertainment systems, increasing consumption
  - Rural and urban customer expectations are now aligned

Air-conditioners contribute significantly to the summer peak



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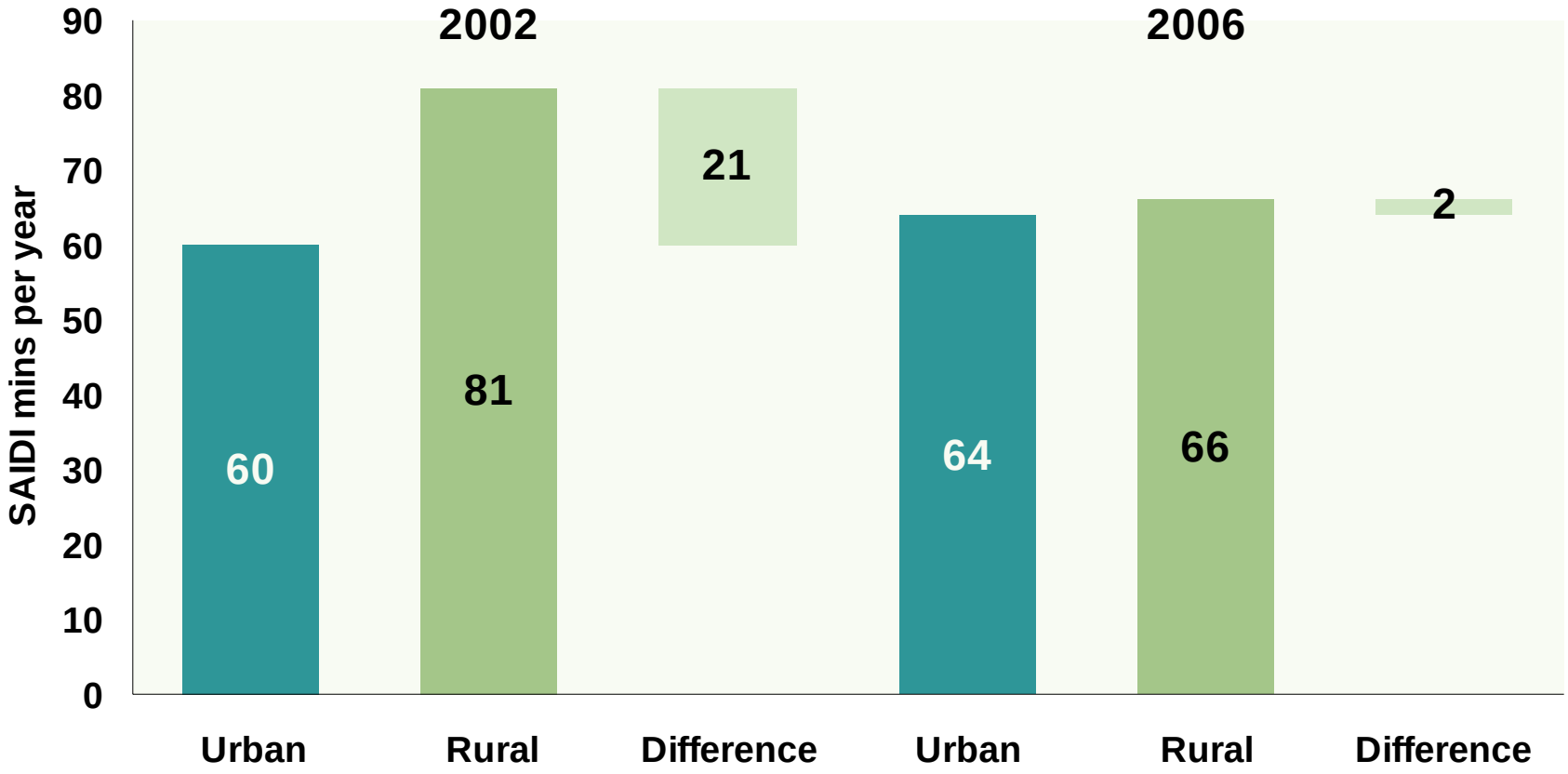
Rural customers' reliability expectations are now in line with urban customers' expectations



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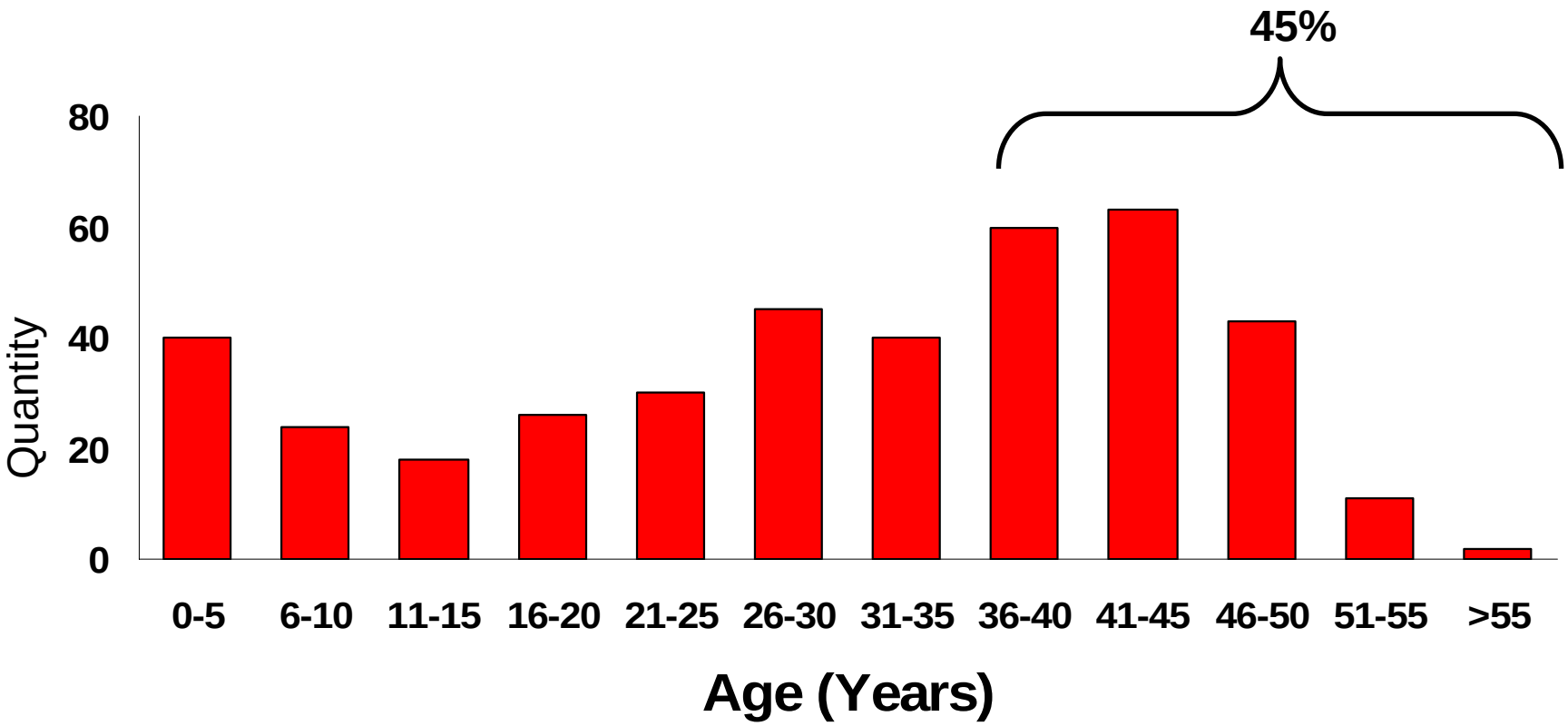
3. An ageing network requires the replacement of an increasing number of assets



Total number of power transformers = 402

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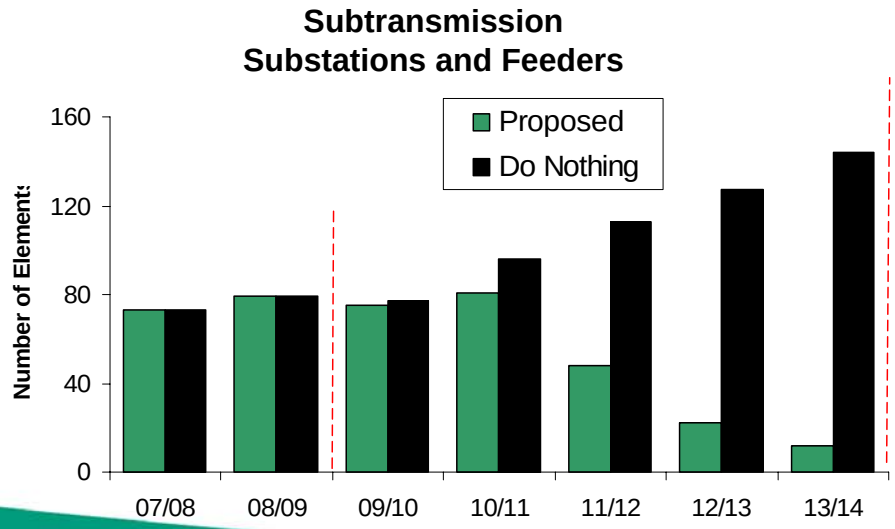
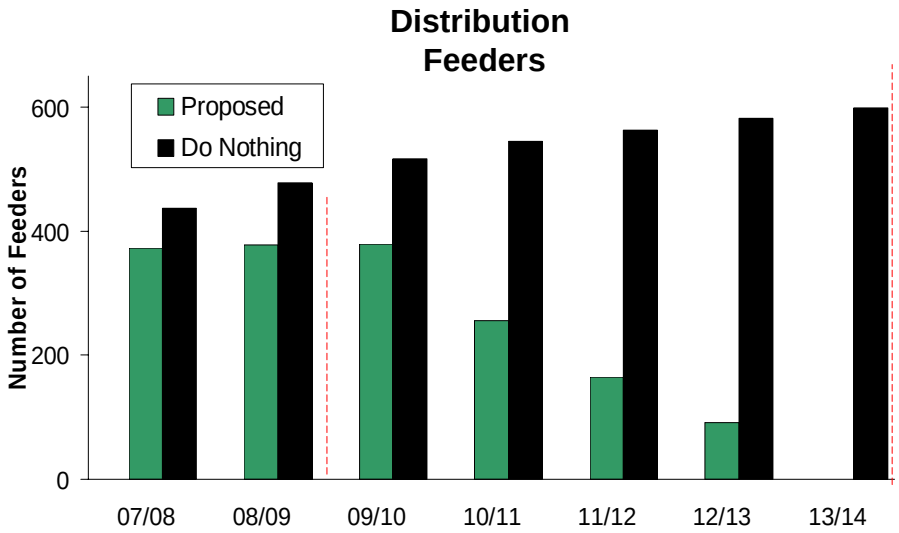
4. Licence compliance

- NSW Design & Reliability Performance licence conditions introduced in 2005 and amended in 2007 include design planning standards which must be met by 2014
- Significant number of network assets require investment to ensure compliance
- This work is mandatory – provides N-1 security and reliability performance





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Our Network Strategy

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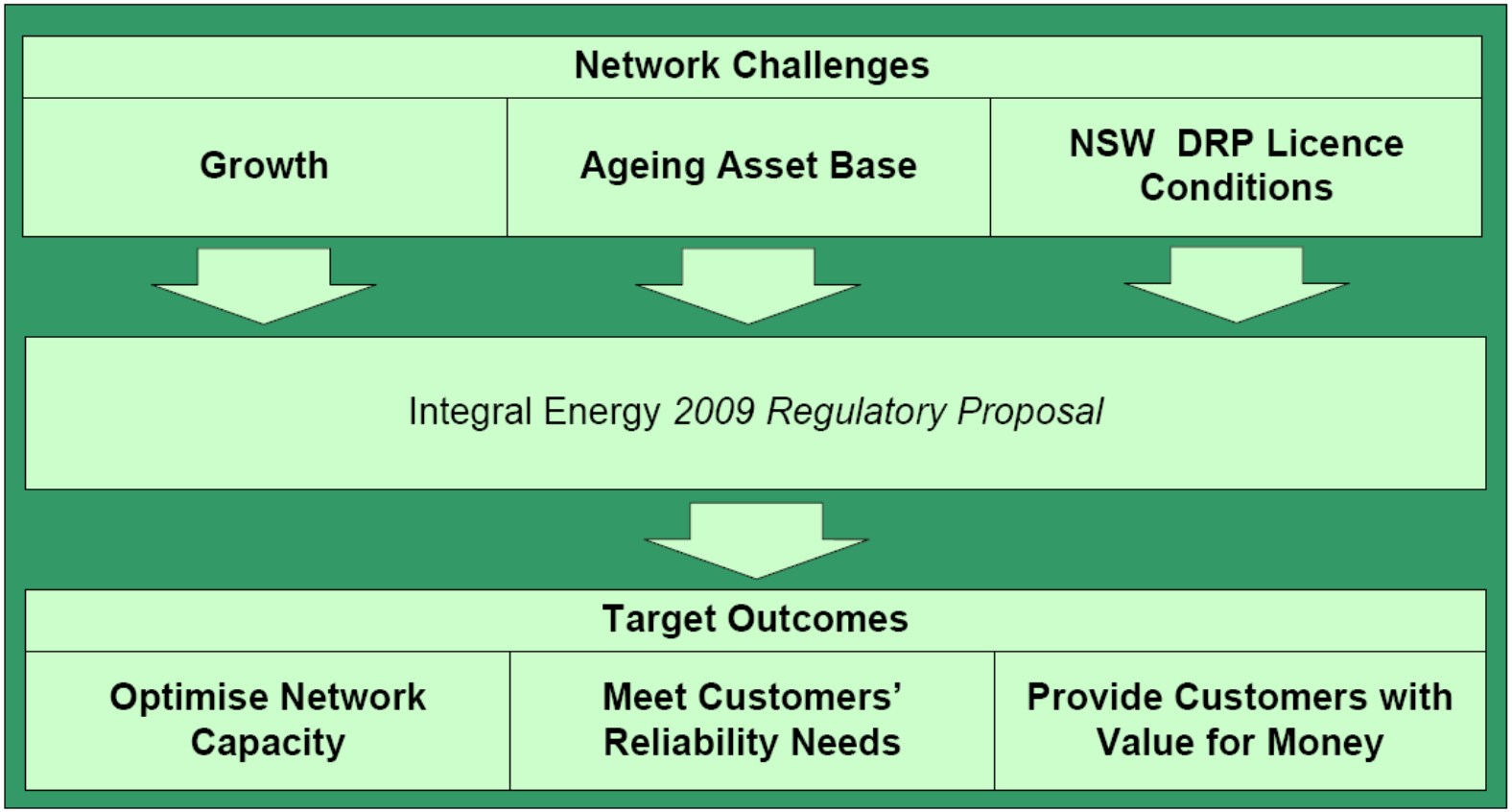
We have explicitly considered the challenging environment in developing our network strategy



Capital Expenditure

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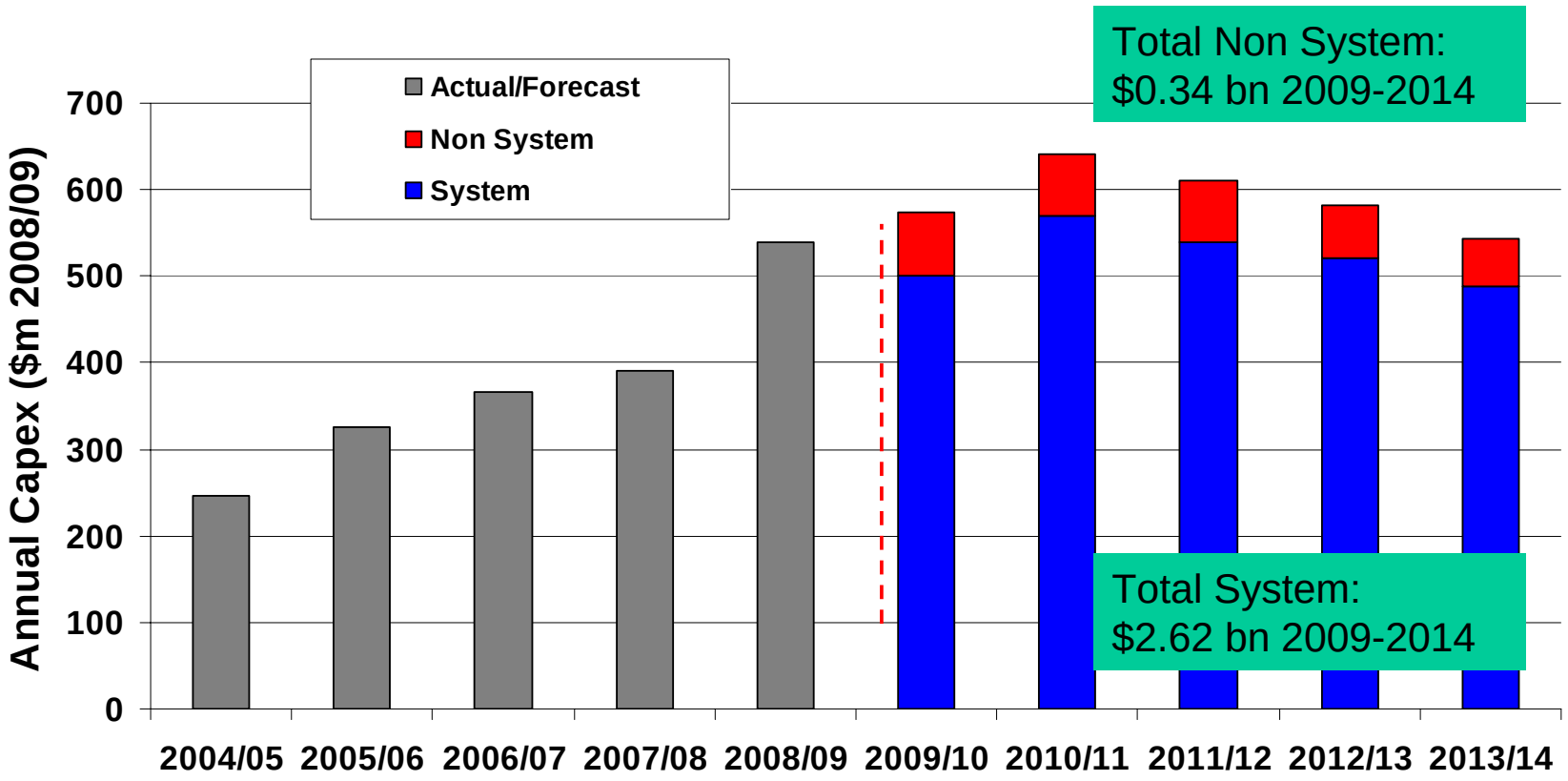
Development of capital program

- Integral Energy proposes a capital program of $2,953 million
- Developed to meet the key network challenges:
  - Servicing growth (46%);
  - Replacing an ageing network (27%);
  - Achieving compliance with the NSW DRP Licence Conditions (14%); and
  - Non system assets to support the network (11%).
- Program prepared in accordance with a rigorous network planning and governance process designed to achieve prudent and efficient outcomes.

Total capital expenditure 2009 – 2014 is $2.95bn

(2008/09 $)



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Operating Expenditure

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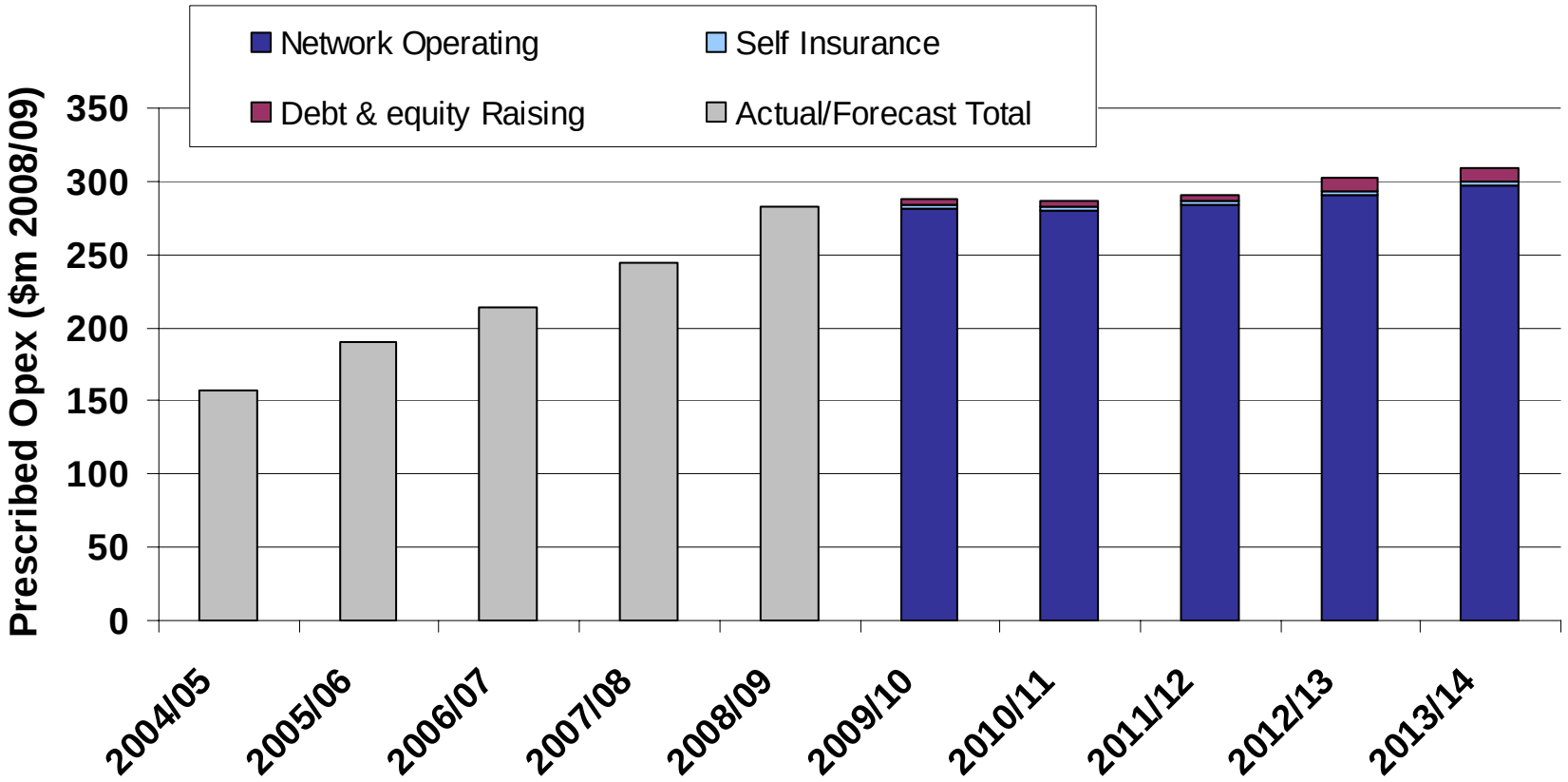
Development of operating program

- The core network operating expenditure forecasts have been derived by:
  - Establishing an efficient base year (2007/08);
  - Incorporating a growing asset base;
  - Applying productivity savings; and
  - Incorporating forecast cost increases over the *2009 regulatory control period*.

Total operating expenditure 2009 – 2014 is $1.48bn

(2008/09 $)



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Demand Management

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Demand Management Strategy

1. Reduce peak network demand and therefore defer/avoid capital expenditure

2. Develop optimal pricing signals and better customer information to promote efficient use of energy and provide appropriate incentives to customers to modify their usage

3. Contribute to the development of public policy relating to energy efficiency and network demand management to create a sustainable future

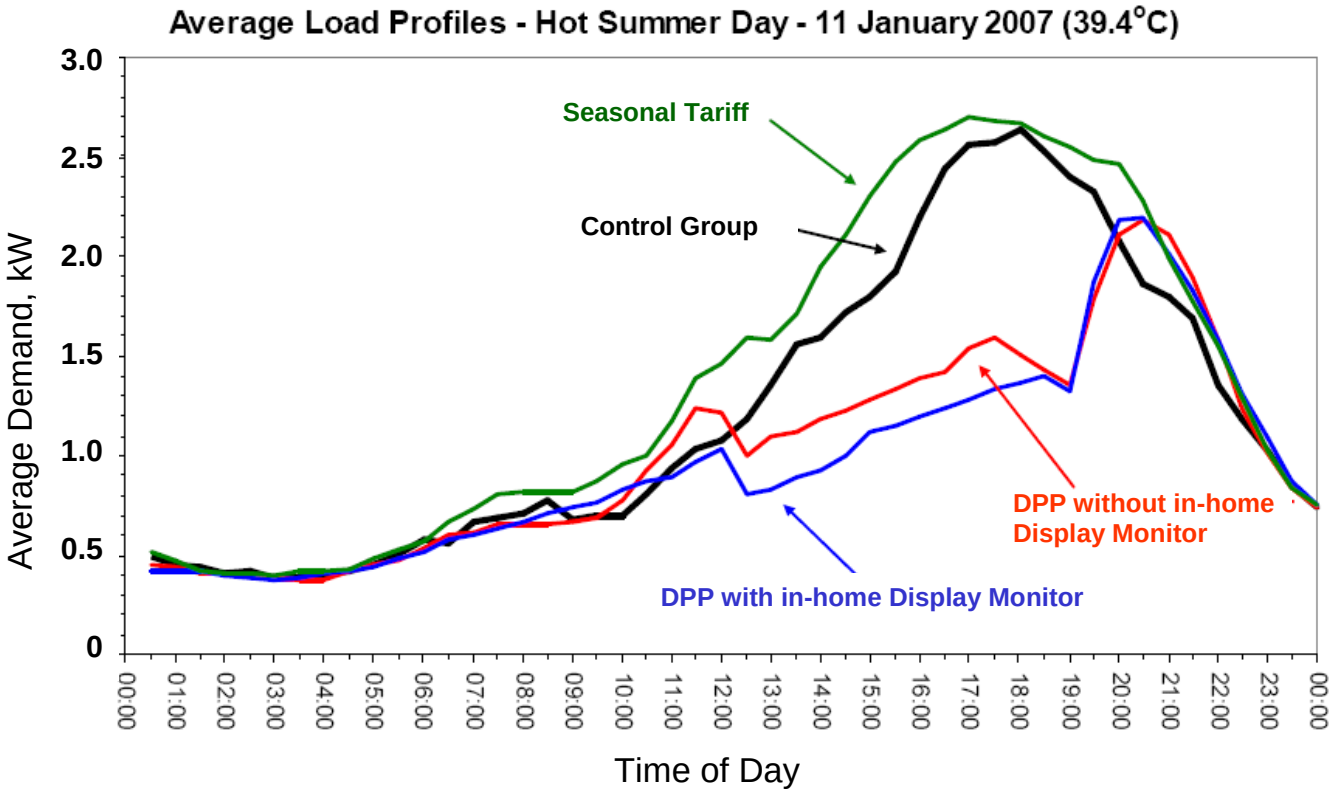
Demand Management

- Integral has undertaken extensive activities in regard to demand management
  - Demand Management is fully integrated into the major projects (growth driven) capital expenditure process, and has been for the last 10 years
  - Address requirements of NSW DM Code of Practice, NSW Electricity Supply Act and National Electricity Rules
  - Implemented ongoing tariff reform
  - Undertaking extensive trials – Western Sydney Pricing Trial and Blacktown Solar Cities
  - Operate within the D-factor framework – for 3 years up to June 2007, 22 programs have avoided or deferred $26m of expenditure

Network DM Programs

- Market based solutions employed. Successful examples:
  - Castle Hill – 1.3 MVA
  - Blacktown – 3.7 MVA
  - Wetherill Park – 5.6 MVA
  - Parramatta – 2.1 MVA
  - Blacktown and Westmead hospitals – 2.1 MVA
  - Unanderra – 2.0 MVA (ongoing, further 4.5 MVA identified)
  - Liverpool – 1.0 MVA (ongoing, further 3.0 MVA identified)
- Impact of past demand management programs included in forecast capital expenditures

Better Customer Information (WSPT)



Western Sydney Pricing Trial

- 1,200 customers
- 22 events called
- Generally positive customer response

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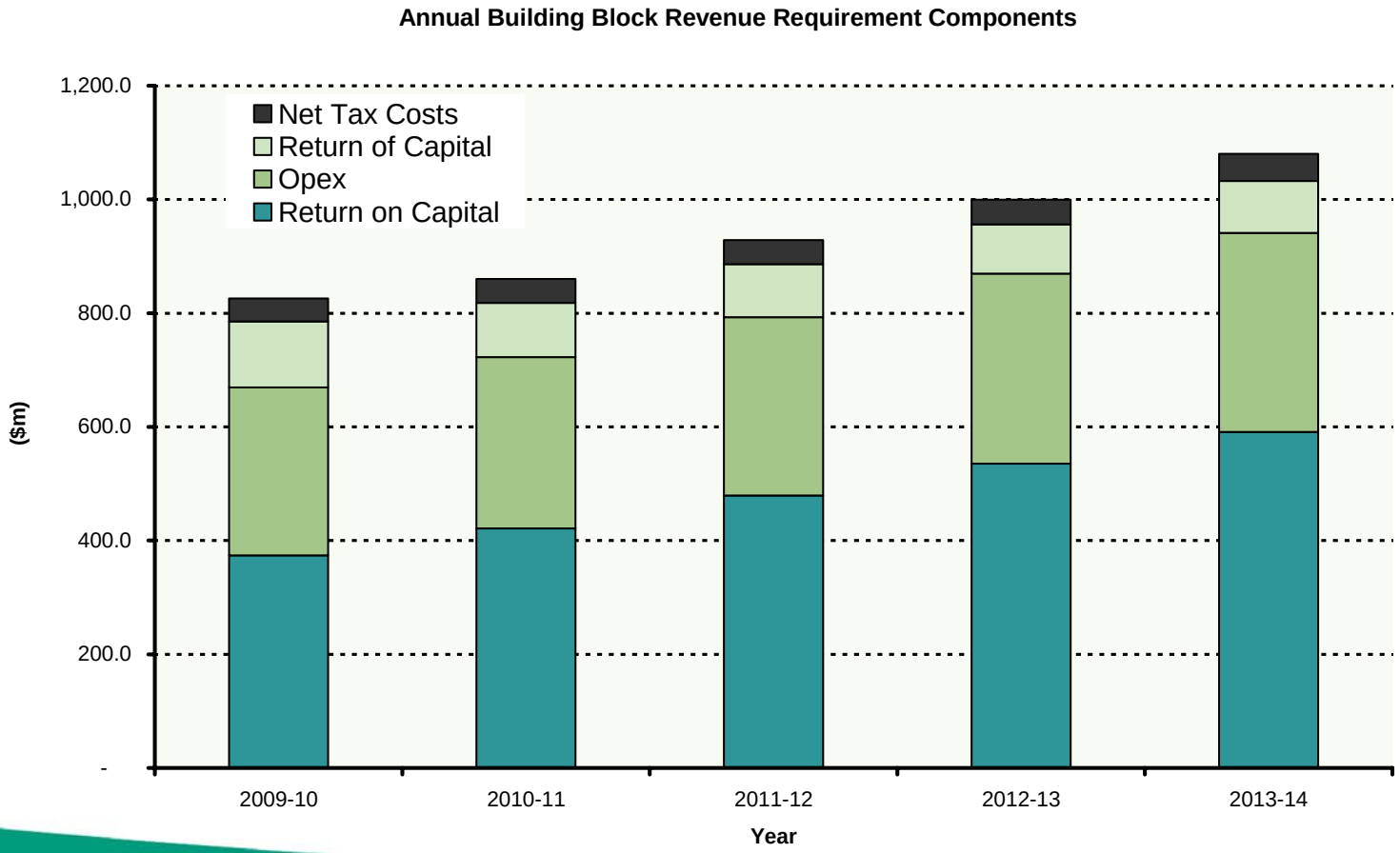
Better Customer Information (Blacktown Solar City)

- Objectives
  - To influence energy use behaviour
  - To evaluate energy efficiency programs
  - To reduce peak demand
  - To reduce greenhouse gases
- Outcomes – saving:
  - 22GWh of electricity annually
  - 24,000 tonnes of greenhouse gases
  - $3m in electricity bills

Revenue Requirement



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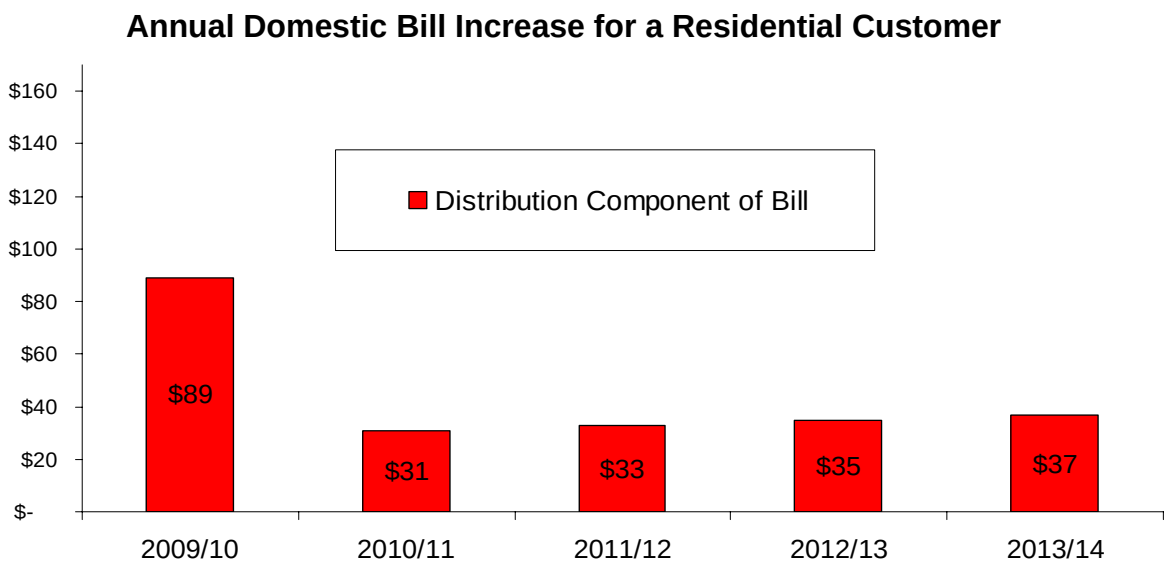
Price outcomes

	2009/10	20010/11	2011/12	2012/13	2013/14
X factors	-18.2%	-3.5%	-3.5%	-3.5%	-3.5%



To meet investment, the following bill impacts are expected:

- Residential bills to increase by approx $1.70 per week ($89 in first year)
- Business customers' bills to increase by about $5.80 per week ($301 in first year)

Customer bills estimated based on annual consumption of 6,000 kWh

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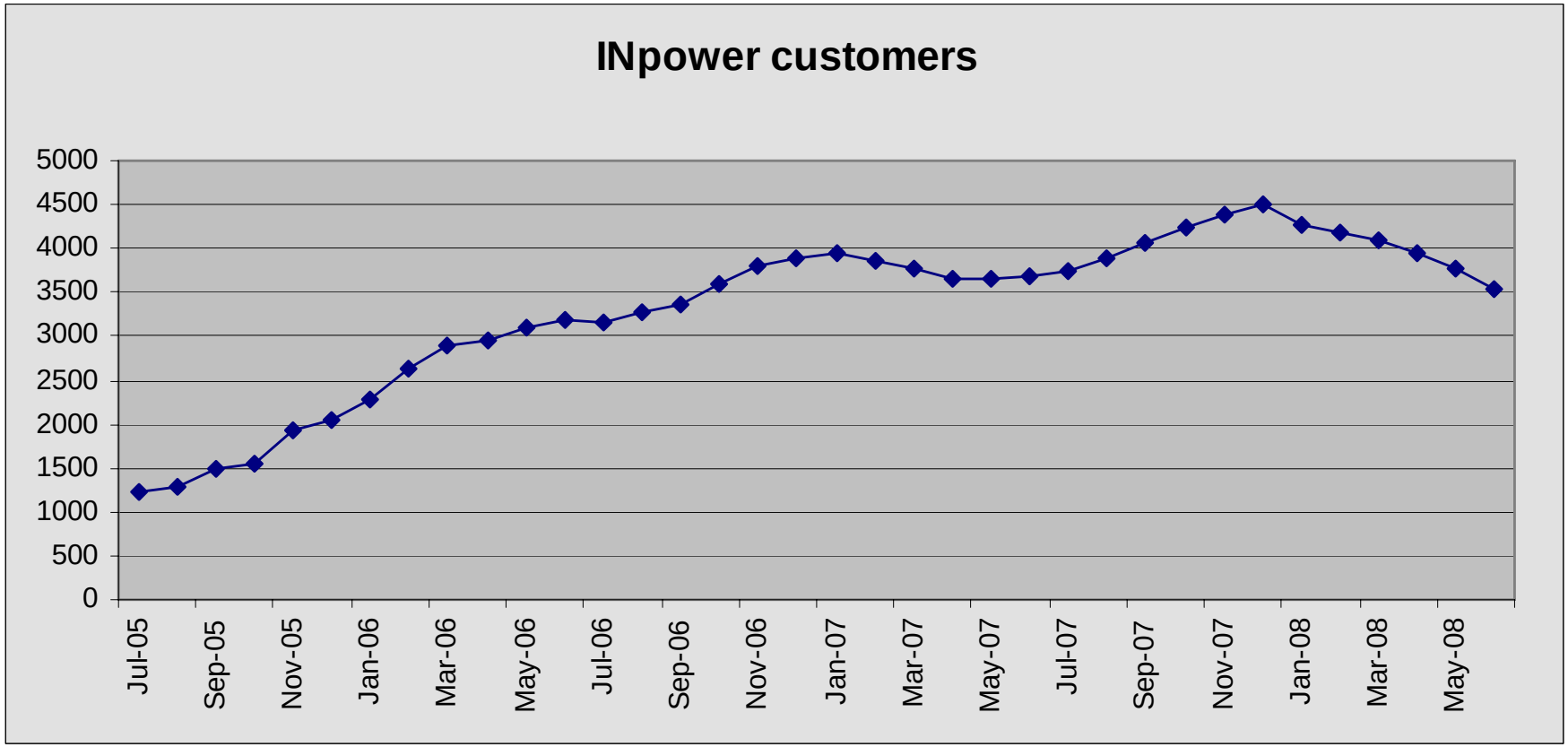
Customer Protection – *IN*Power customers



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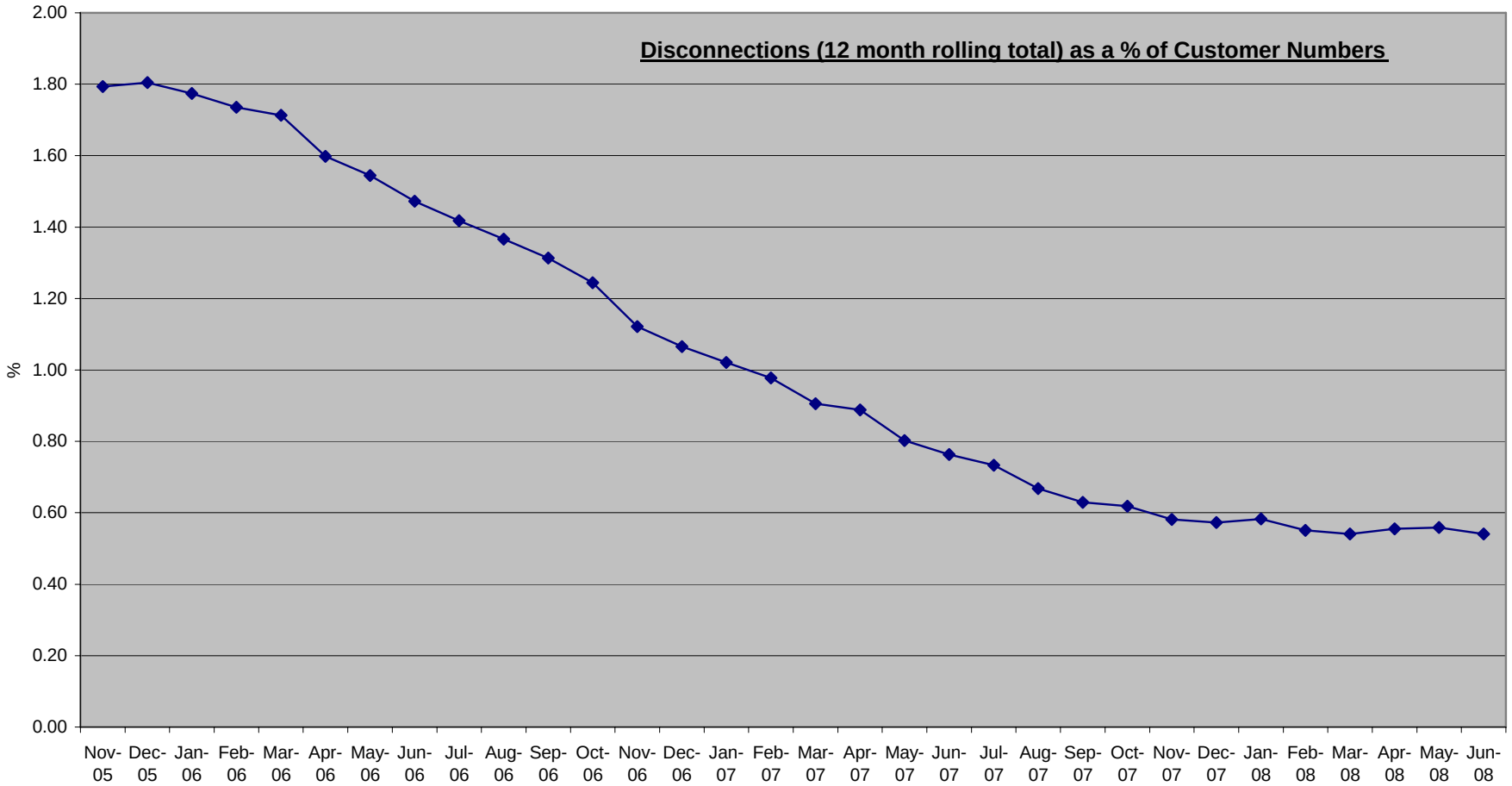
Customer Protection – Reduced disconnections



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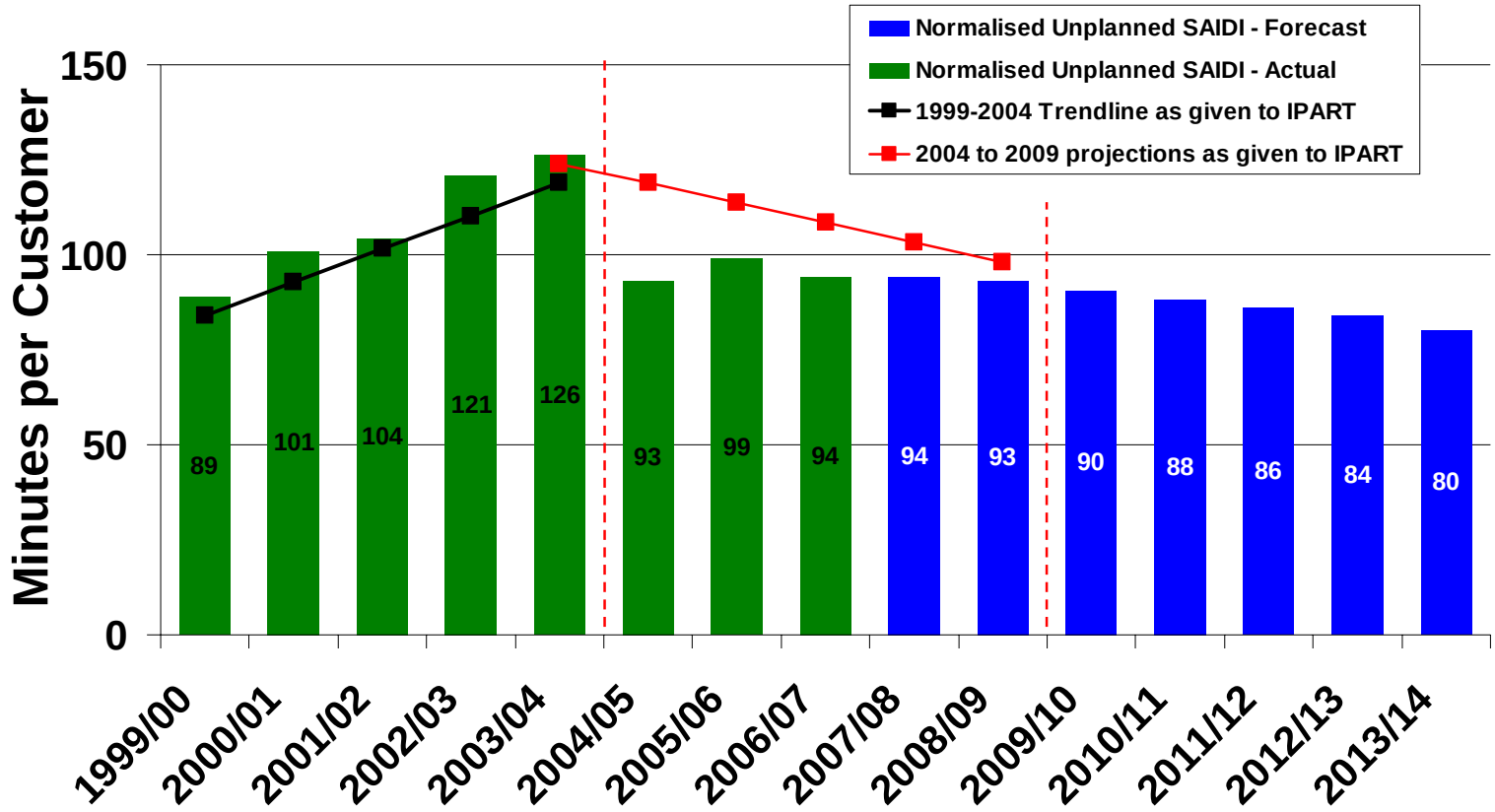
Service outcomes



- We are working towards a stretch target of 75 minutes in 2013/14
- Note these SAIDI outcomes are normalised using the 2.5 Beta method

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