Future Challenges

Powerlink's Revenue Proposal

Merryn York – Chief Executive Officer
Stewart Bell – Manager Revenue Reset

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Outline

- Key drivers
  - Challenges
  - Stakeholder consultation

- Revenue proposal
  - Current period performance
  - Forecast capital expenditure
  - Forecast operating expenditure
  - Overall revenue requirement

- Impact on prices

Key drivers

- Demand growth
  - Maintaining reliability of supply
  - Resource growth
- Transmission supporting lower emissions NEM
- Replacing aged assets
- Challenges

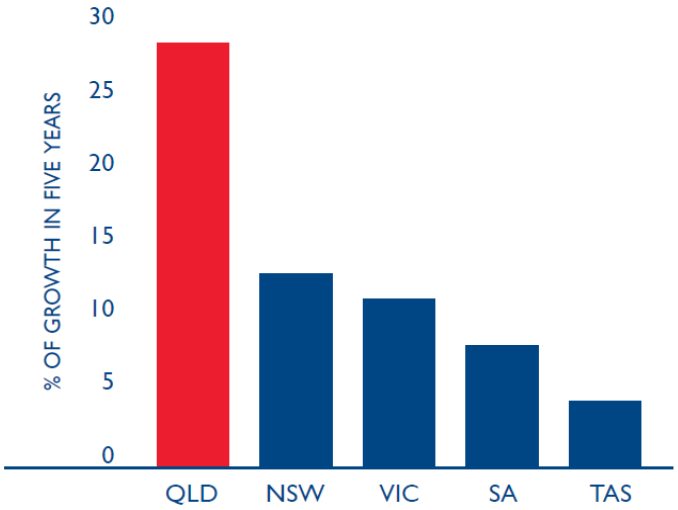
Powerlink's transmission network

- Transmission network runs 1,700km from Cairns to NSW – approximately half of Australia's eastern seaboard
- Network dimensions
  - More than 13,000 circuit kilometres of transmission lines
  - 112 high voltage substations
- Transmit power about three times as far as other states – e.g. 700km from major power stations to load centres

Queensland's growth vs other states

- Queensland's peak demand growth is higher than other states in the National Electricity Market

Forecast growth in electricity demand from 2010/11 to 2015/16

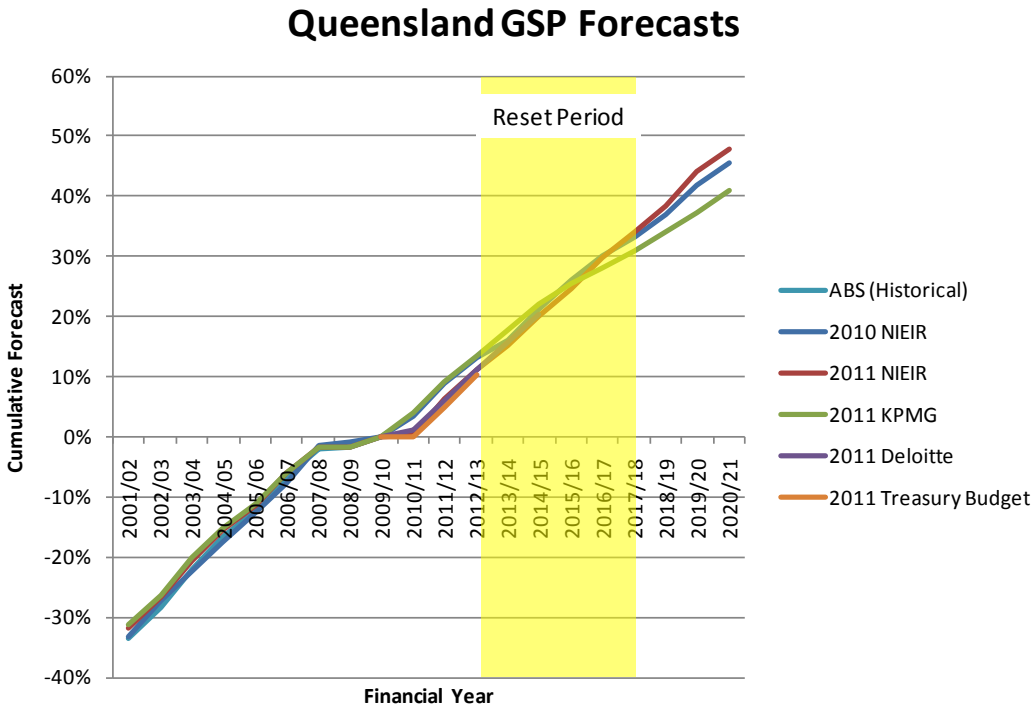


SOURCE: AEMO'S 2010 ELECTRICITY STATEMENT OF OPPORTUNITIES

Complexity challenges

- 2010/11 summer demand
  - adversely affected by significant loads that went offline for extended periods due to floods and cyclone
  - one large coal miner, BMA, reported its production in calendar 2011 Q1 was down by 25%
  - This will recover - anomaly in the trend line
- Queensland hasn't had a 'stinking hot and humid' summer since 2003/04
- Mixed economic growth patterns
  - Tourism regions e.g. Cairns adversely affected by high $A
  - dwarfed by the emergence and ramp up of very large new loads in the resources sector (LNG, coal) across the State

Economic outlook



"...businesses are still complaining loudly about the weakness of the economy. Yet that rebound will come: coal output will lift sharply, reconstruction and repair work will begin on homes and infrastructure..."

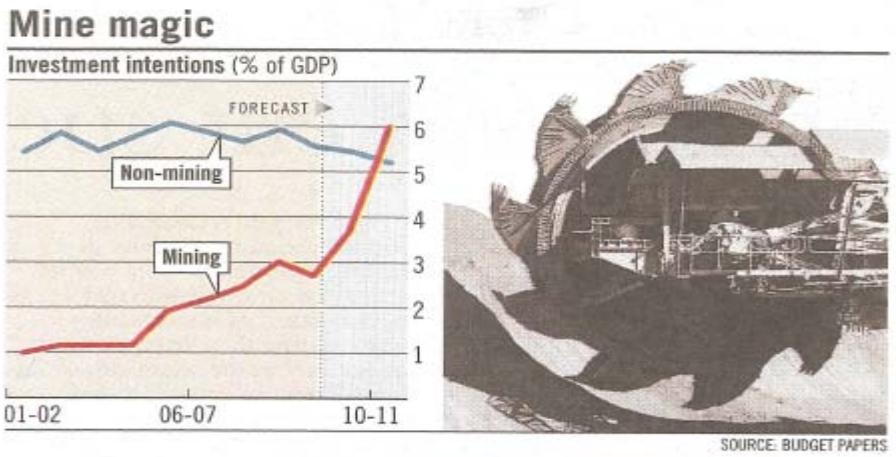
Economic Business Outlook, Deloittes March 2011

Resources ramp-up .....bigger than ever!

- Powerlink has over 3,000MW (not including already-committed Surat Basin load) of active connection enquiries for new loads seeking direct connection to the grid:
  - Surat Basin – many upstream processing and compression plants, and some new coal mines, water treatment and service towns
  - Bowen Basin (CQ) – new and expanded coal mines, increased electric rail haul capacity, new and existing port expansions (Gladstone, Mackay ports)
  - North Bowen Basin / Galilee Basin (NQ) – new and expanded coal mines, rail haul capacity increases, port expansions (Abbot Point)
- Only approximately 300MW of the 3,000MW is included in Powerlink's demand forecast

Investment surges to 50-year high

- … a level of capital expenditure eight times the average annual rate …



SOURCE: AUSTRALIAN FINANCIAL REVIEW, PAGE B7, 11 MAY 2011

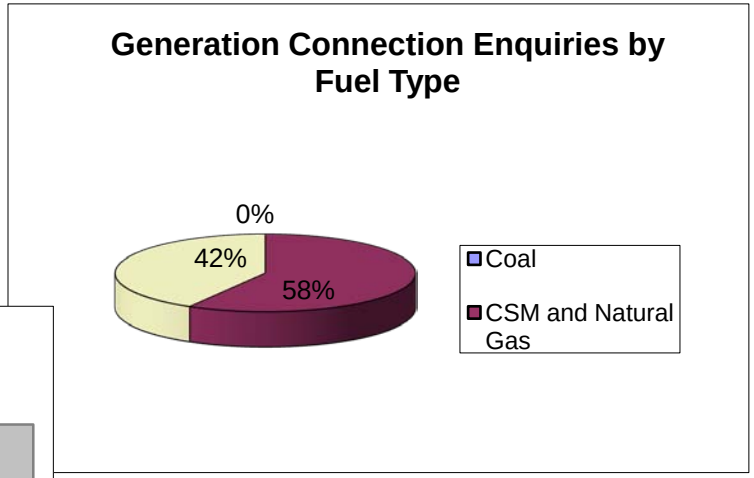
- "Boom set to resound for years to come" … coal-related port and rail developments are expected to rocket over the next five years and beyond….

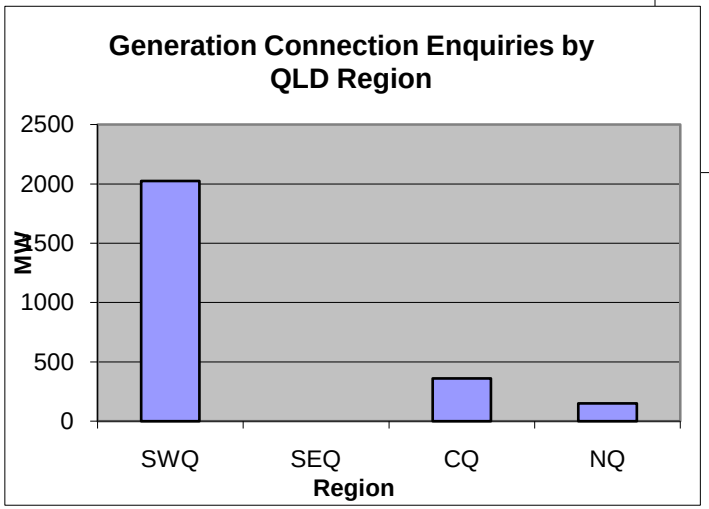
SOURCE: AUSTRALIAN FINANCIAL REVIEW, PAGE 17, 12 MAY 2011

Supporting a lower emission NEM

Active new generation enquiries

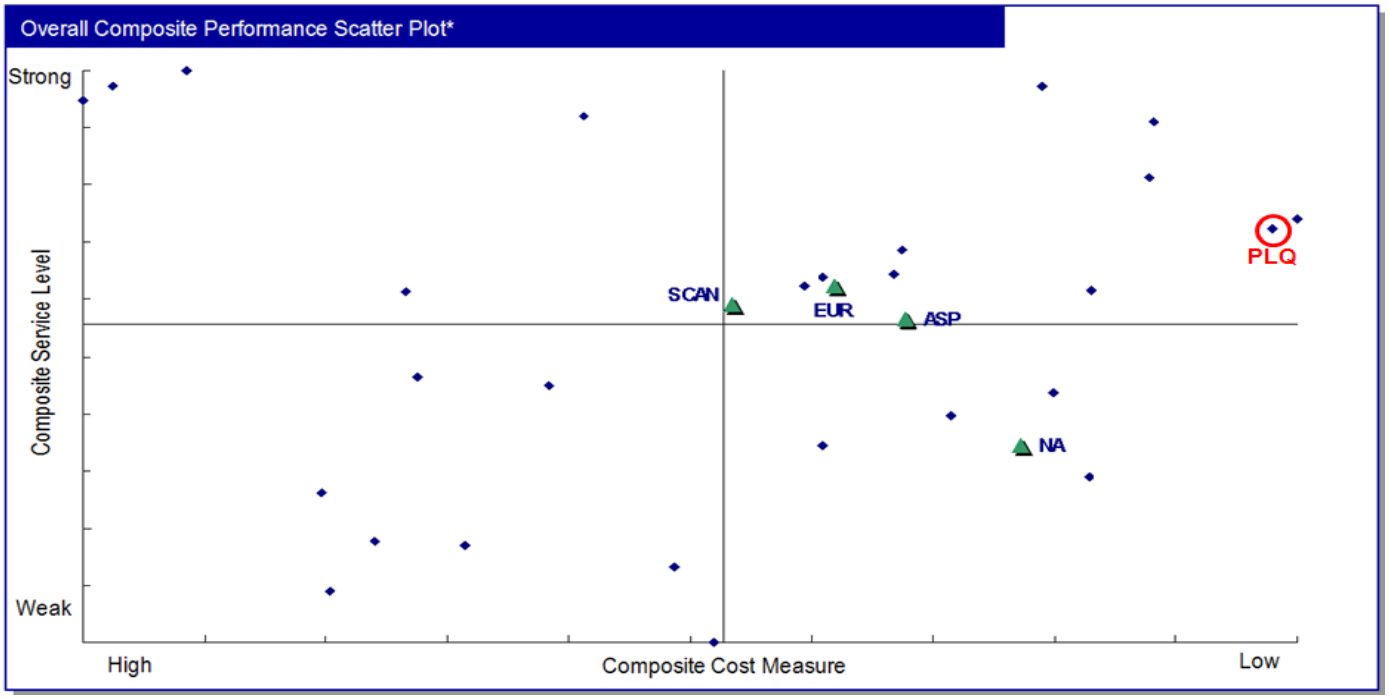
- all gas-fired or renewable generation
- mostly in south-west Queensland
- together with SEQ load growth driving grid augmentation SWQ-SEQ





Cost efficiency

Overall composite benchmark – weighted average



SOURCE: INTERNATIONAL BENCHMARKING (ITOMS 2009)

Stakeholder consultation

- Powerlink regularly meets with its customers
  - including for revenue proposal

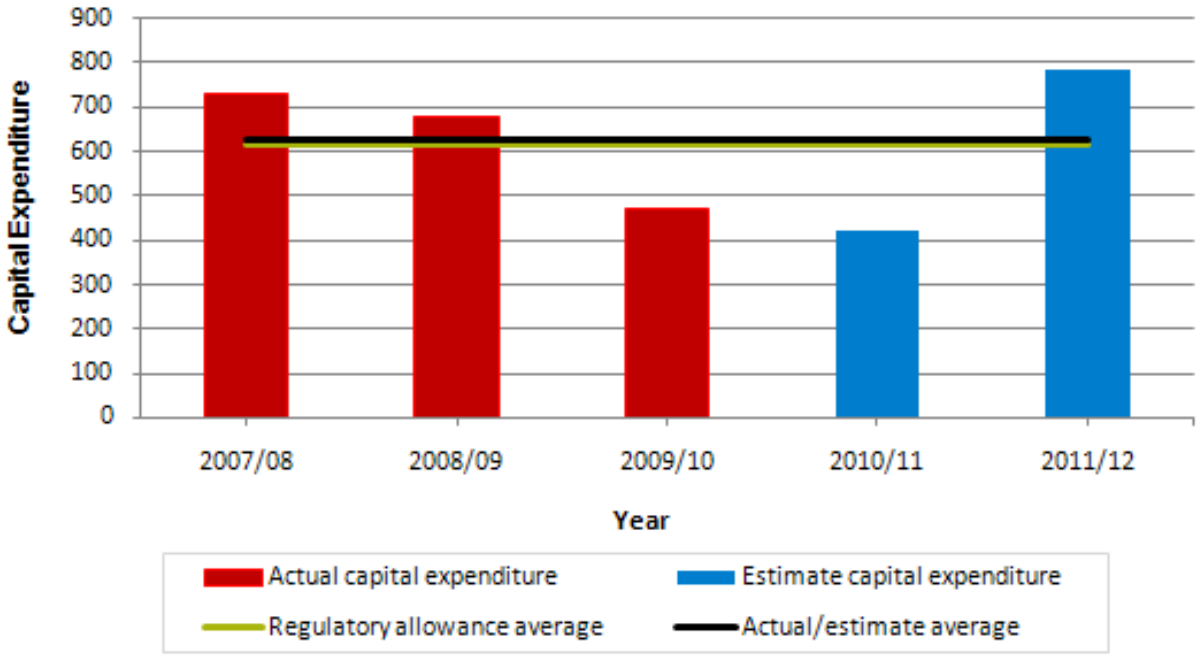
- Themes identified from customers
  - Importance of transmission infrastructure to Qld
  - Timeliness of augmentations needed
  - Importance of reliability and security of supply
  - Prepared to pay reasonable price
  - Very significant developments in coal and LNG will require substantial augmentation of the existing grid

- Met with EUAA and presented at Queensland and national conferences

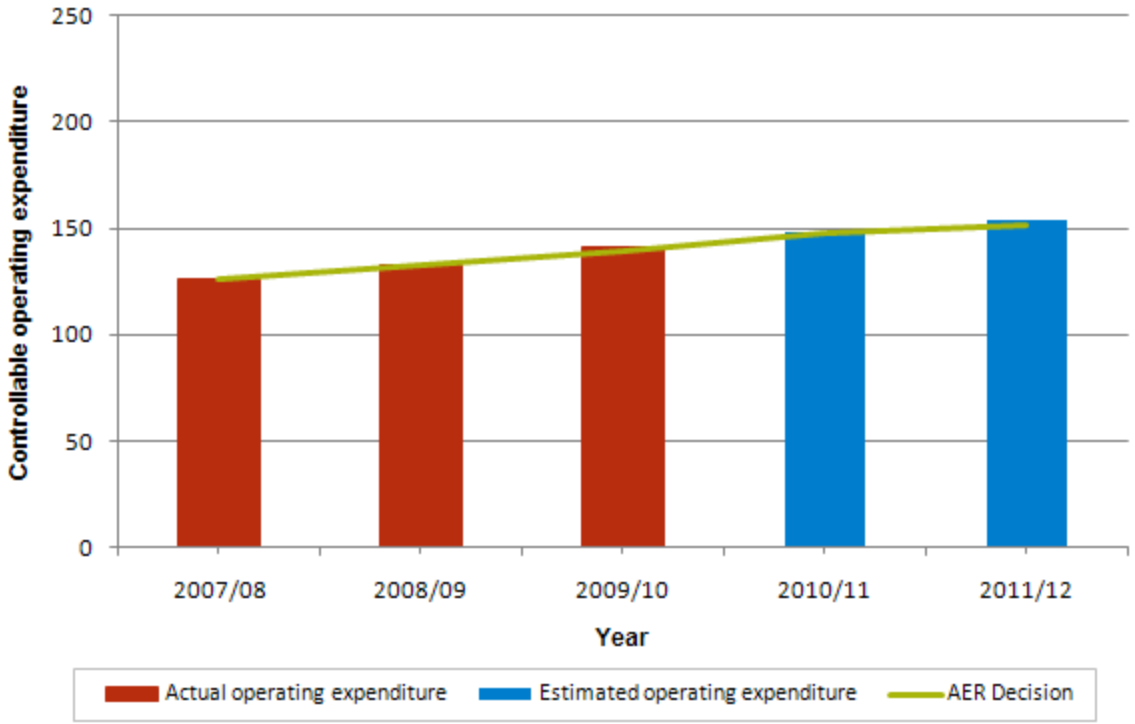
- Liaised with AEMO regarding NTNDP

Revenue Proposal
- Current regulatory period performance

Current period capital expenditure (2011/12)



Current period operating expenditure (2011/12)



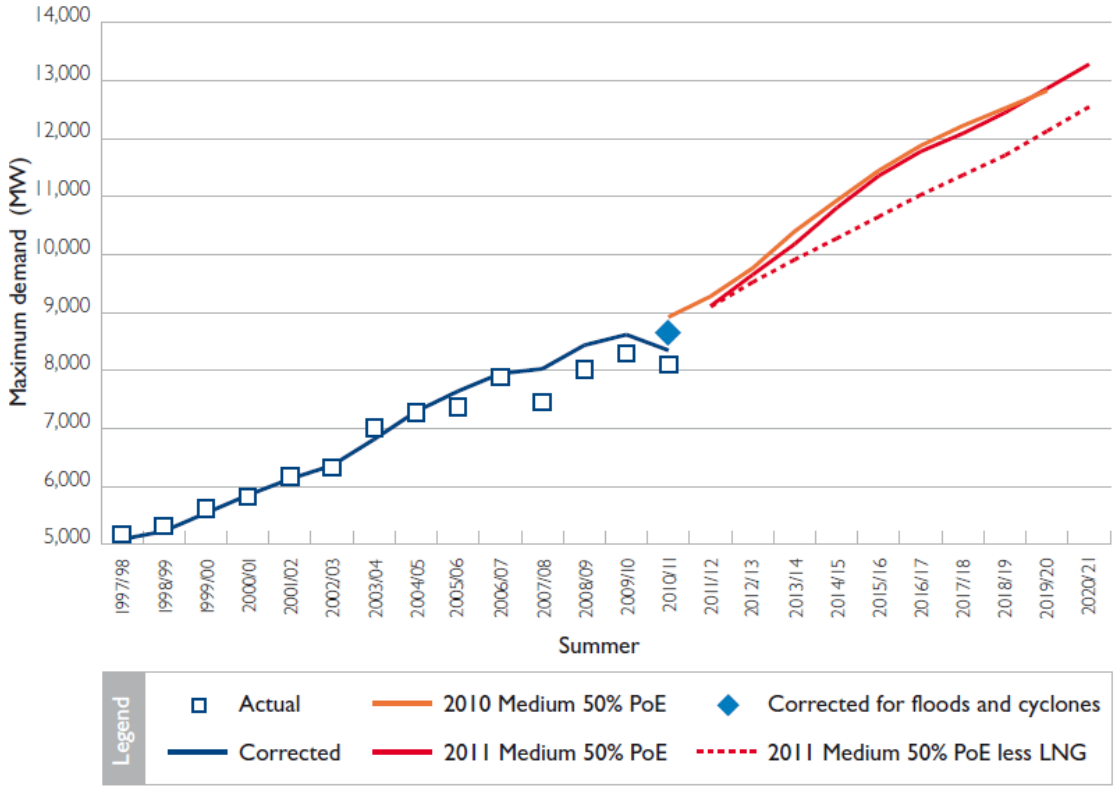
Current period incentive scheme performance

- Efficiency Benefit Sharing Scheme
  - Small negative carry over

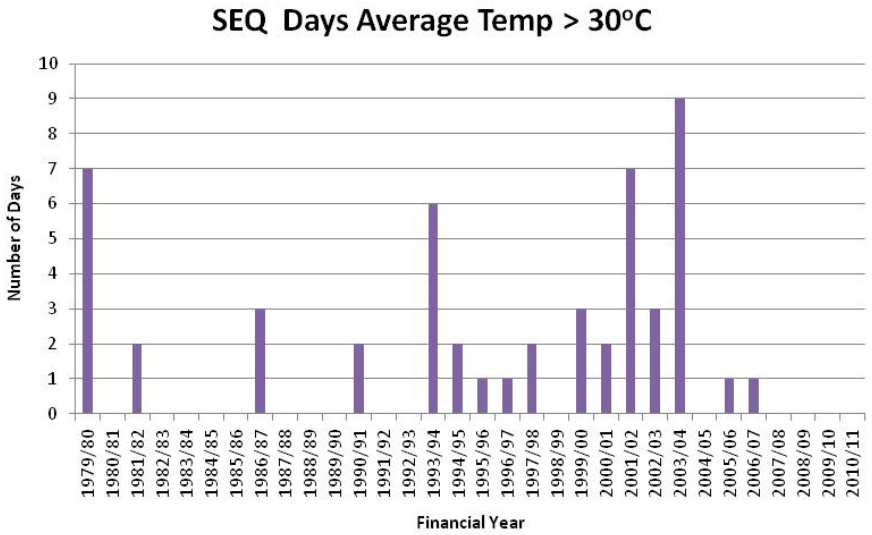
- Service Target Performance Incentive Scheme
  - Over the period exceeded the AER targets

Revenue Proposal
- Forecast capital expenditure

Summer peak electricity demand – history and forecast



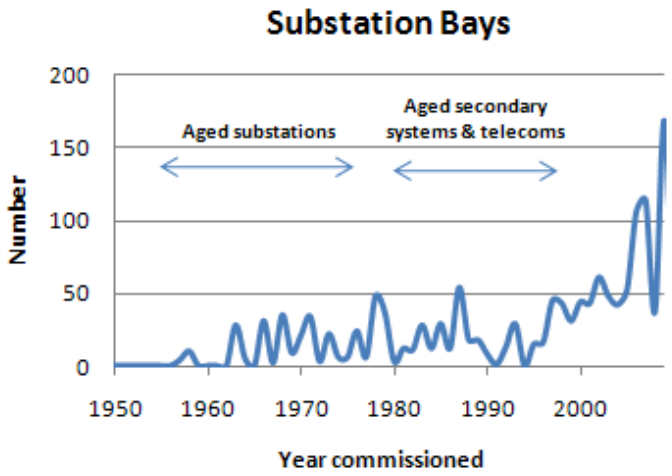
Temperature impacts on demand

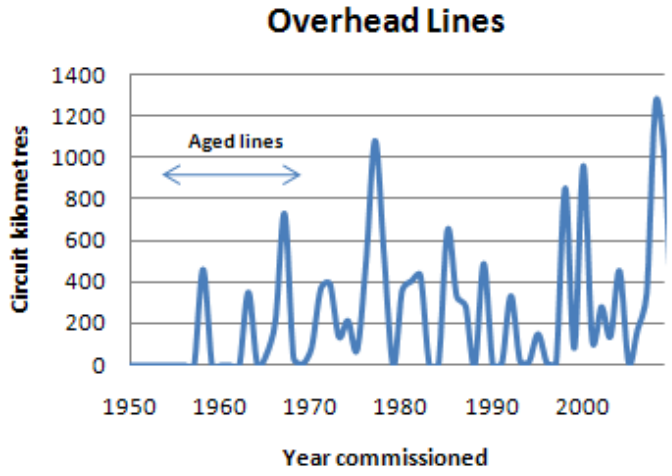


- South East Queensland "standard" summer peak conditions occur on days with 30oC daily average
- Last four summers have been milder than average – similar patterns have occurred in the past

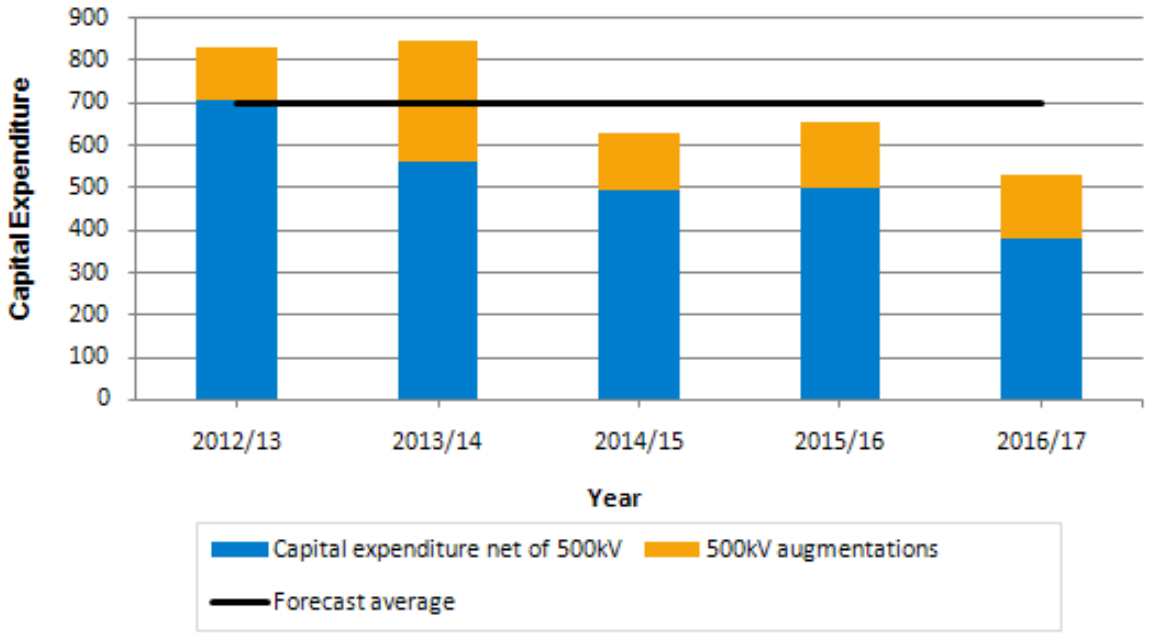
Continuing to replace end of life assets

- Need timely asset replacement to maintain reliability

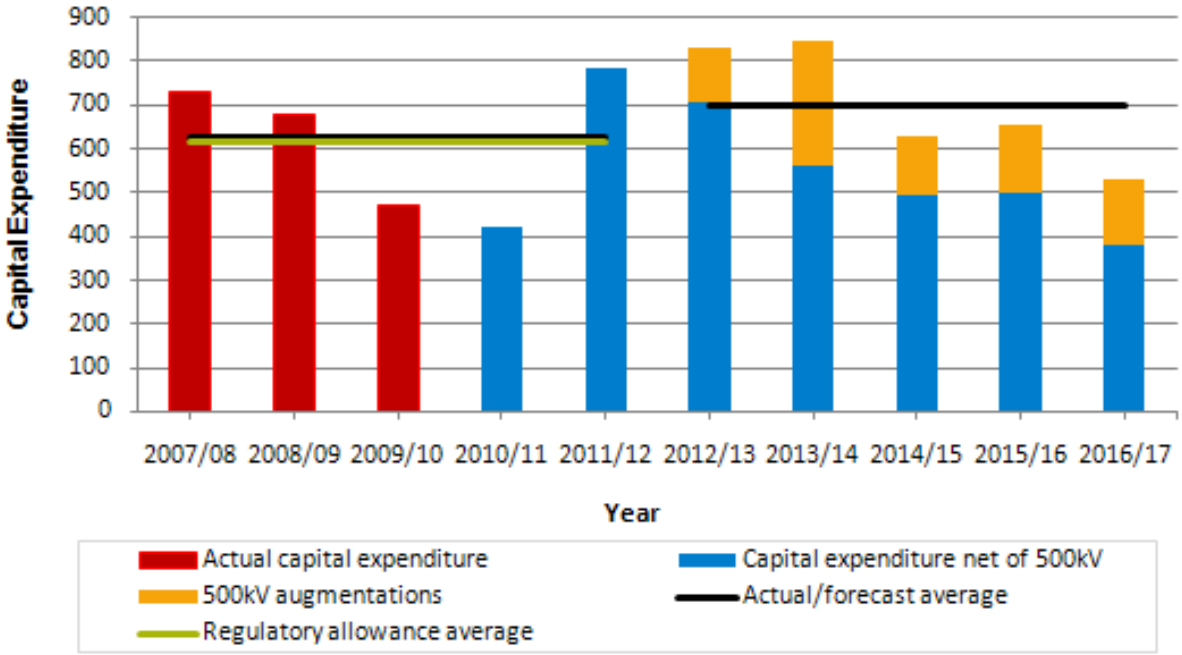




Forecast capital expenditure (2011/12)



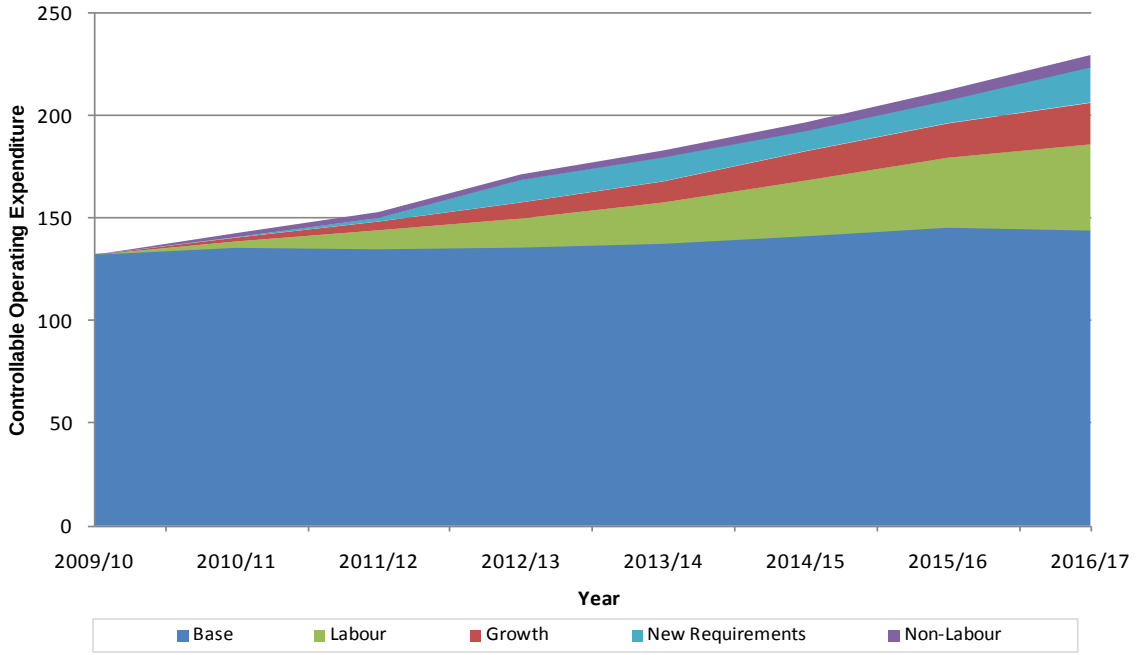
Current and forecast capital expenditure comparison (2011/12)



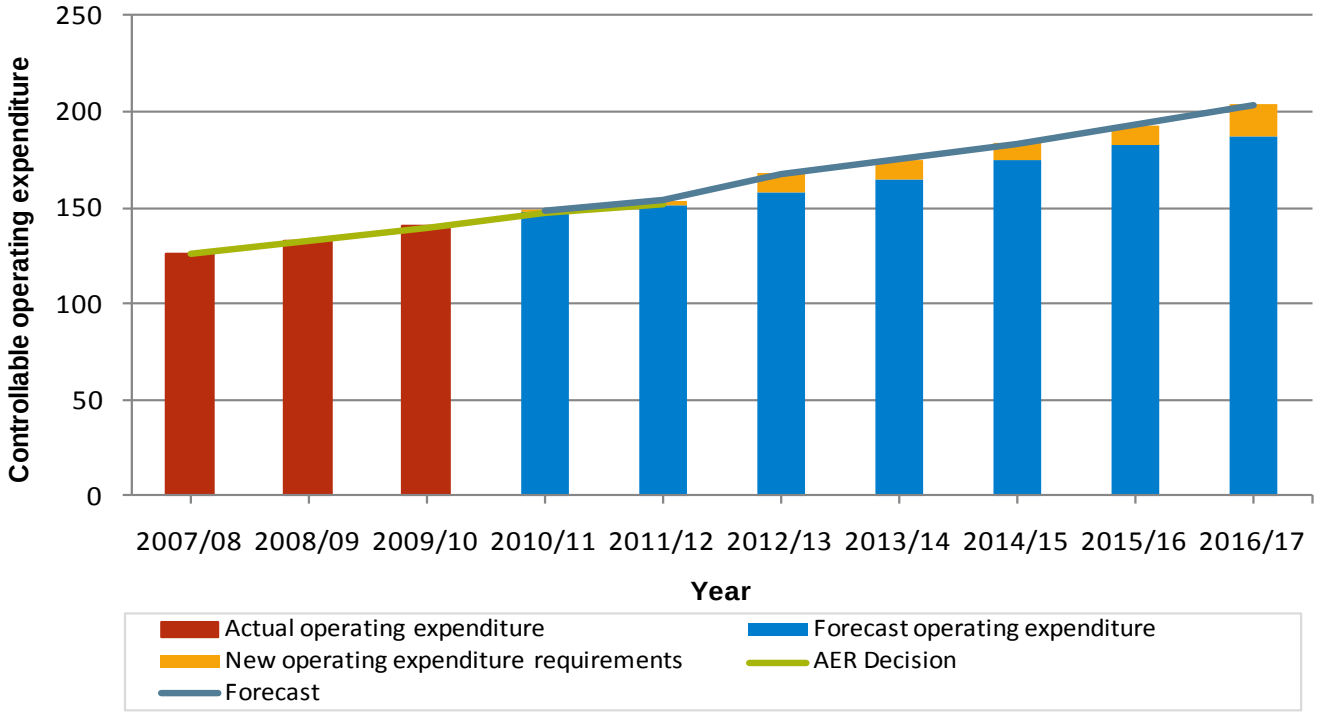
Revenue Proposal
- Forecast operating expenditure

Forecast controllable opex (nominal)

- Labour, network growth and new requirements contributing to increases

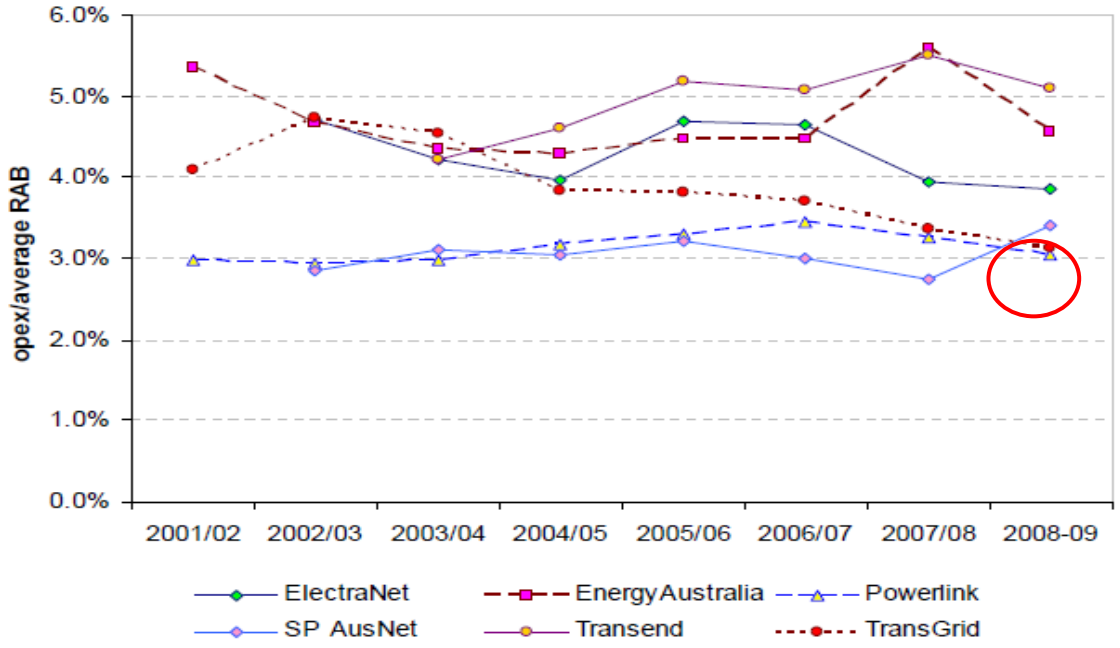


Current and forecast operating expenditure comparison (2011/12)



World-class transmission network operation

- Powerlink has lowest opex / RAB in the National Electricity Market



SOURCE: TRANSMISSION NETWORK SERVICE PROVIDERS ELECTRICITY PERFORMANCE REPORT FOR 2008-09, P.51, AER, FEBRUARY 2011.

Revenue Proposal
- Revenue requirements

Weighted Average Cost of Capital (WACC)

- Unlike gas and distributions networks most WACC parameters set
- WACC increased post global financial crisis
- Debt margin of 4.34% compared to current 1.41%

- Derived WACC of 10.3% compared to current 8.76%

Revenue requirements

- Revenue calculated using the building block approach
- Maximum Allowable Revenue

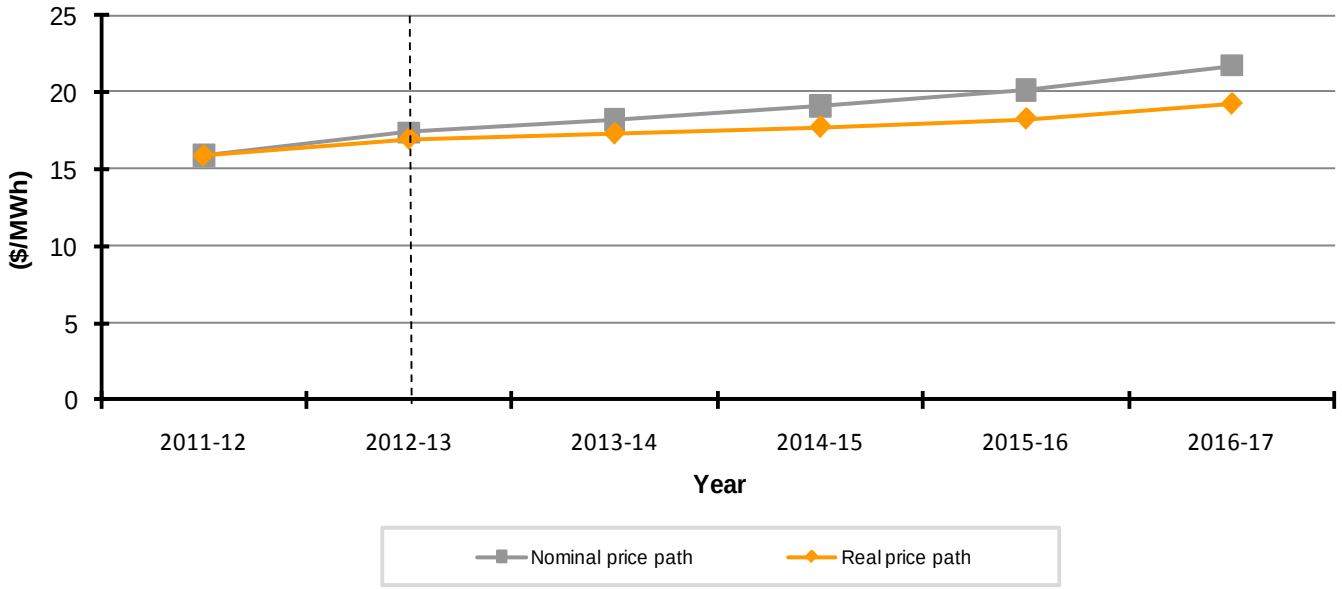
  = return on capital + return of capital + opex + tax

  = (WACC * RAB) + depreciation + opex + tax

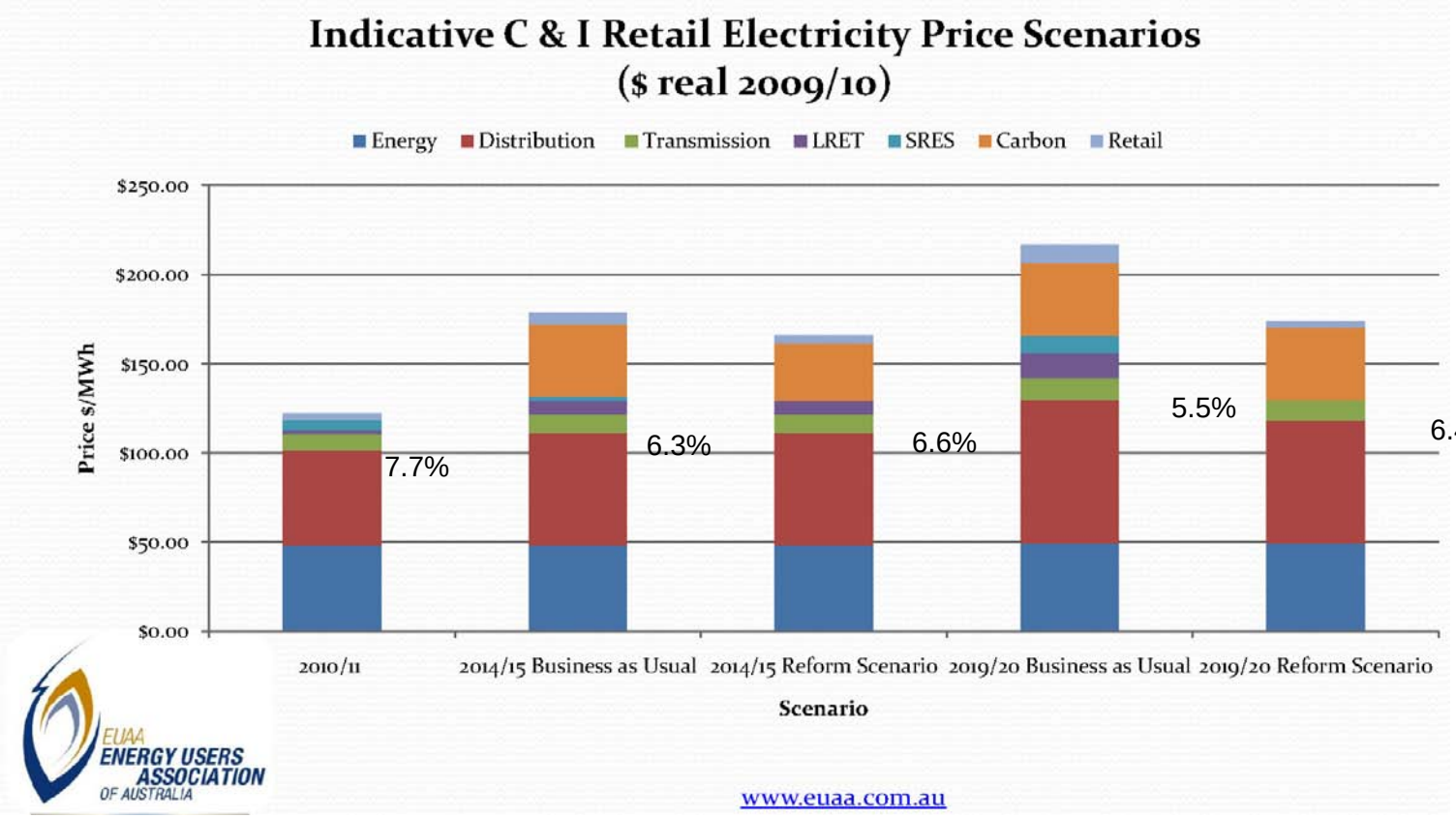
	2012/13	2013/14	2014/15	2015/16	2016/17	Total
Smoothed revenue requirement	960.6	1,064.0	1,178.5	1,305.3	1,445.7	5,954.0
X factor		**-8.06%**	**-8.06%**	**-8.06%**	**-8.06%**	

Impact on electricity consumers

Average transmission price path from 2011/12 to 2016/17 ($/MWh)



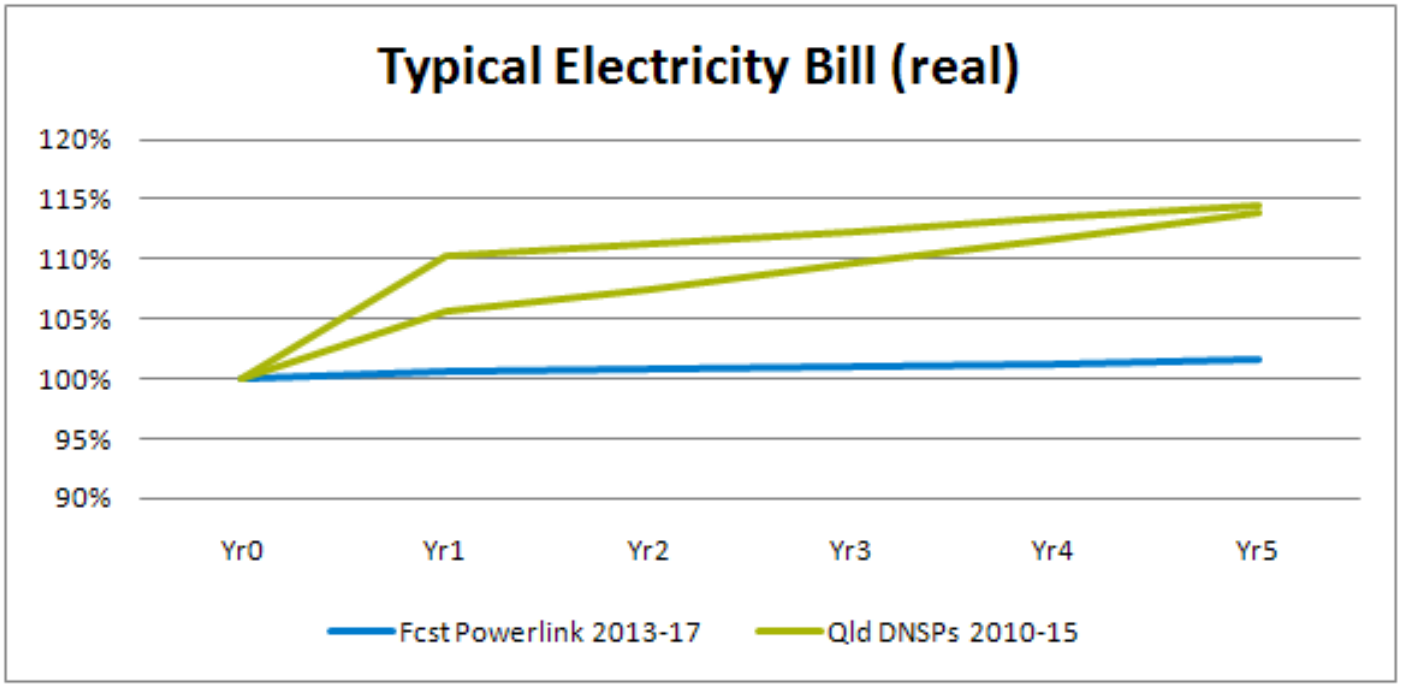
Transmission is only 8% of electricity costs and forecast to be an even smaller proportion



Very low impact on delivered electricity price

- Transmission price % increase year-on-year much lower than distribution networks, and….
- Transmission makes up only about 8% of delivered electricity price (vs. about 40% for distribution)
- Bottom line…….only about **0.6% per annum** increase in typical electricity bill

Impact on typical electricity bill



‘Reliably supporting Queensland’s economic growth and a lower emissions NEM’