



Draft decision

**Victorian electricity distribution
determination 2011-15**

Mr Andrew Reeves

A/g Chairman

17 June 2010

Agenda

- 10:00am Introduction, Mr Chris Pattas
- 10:10am Presentation by Mr Andrew Reeves, A/g Chair AER
- 11:30am Presentation by Mr Roman Domanski, EUAA
- 11:50am Break
- 12:10pm Questions
- 12:50pm Next steps and conference close, Mr Chris Pattas

Key points

- Vic DNSPs' network investment and operational expenditure will increase over 2011-15 compared to 2006-10
- Capex of \$3.4 billion, up 16% (real)
- Opex of \$2.2 billion, up 2% (real)
- Impact on indicative residential retail prices
 - a real reduction of between 0.6% and 7.8% in 2011
 - small real increases of up to 1.0 per cent p.a. from 2012



Victorian distribution draft decision

AER capex and opex allowances

	Capex		Opex	
• SP AusNet	\$953m	+20.3%	\$672m	+14.0%
• Powercor	\$1009m	+6%	\$622m	-4.5%
• Citipower	\$567m	+37.6%	\$185m	+8.0%
• United Energy	\$532m	+17.5%	\$465m	-0.3%
• Jemena	\$315m	+8.9%	\$247m	-6.2%

Key points

- Vic DNSPs are efficient operators of mature and relatively reliable networks
- Stable operating, regulatory environment and cost base in Victoria
- AER has allowed for higher input costs (labour & materials) and increases in the cost of capital
- Victorian Bushfires Royal Commission (VBRC) may give rise to new regulatory obligations and costs in the future – to be dealt with under pass through arrangements

Vic electricity distribution review

- Framework and Approach issued May 2009
- DNSP proposals lodged 30 November 2009
- Review process
 - Public forum in Melbourne (17 December 2009)
 - Submissions received (11 February 2010)
 - Advice from expert consultants (Nuttall Consulting, ACIL Tasman, Impaq Consulting and others)
- Draft decision and consultants' reports published 4 June 2010
- Revised proposals due 21 July 2010
- Submissions due 19 August 2010

Vic electricity distribution review

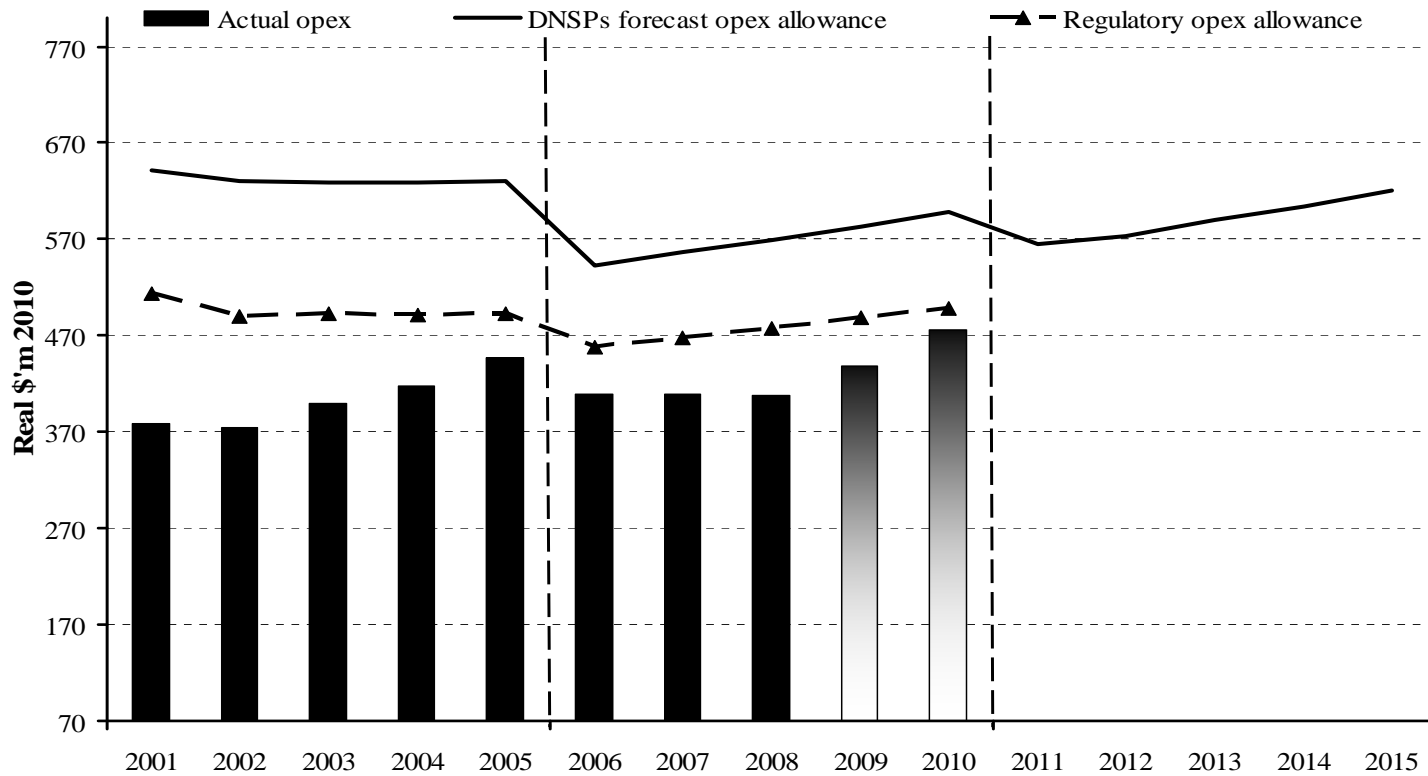
- National Electricity Rules assessment criteria
- Capex and opex objectives of:
 - meeting regulatory obligations
 - meeting expected demand
 - maintaining quality and reliability
- DNSPs' proposals assessed against:
 - efficient costs of achieving the objectives
 - the costs a prudent operator in the circumstances of the DNSP would require to meet the objectives
 - a realistic expectation of demand and cost of inputs required to meet the objectives

Review methodology - overview

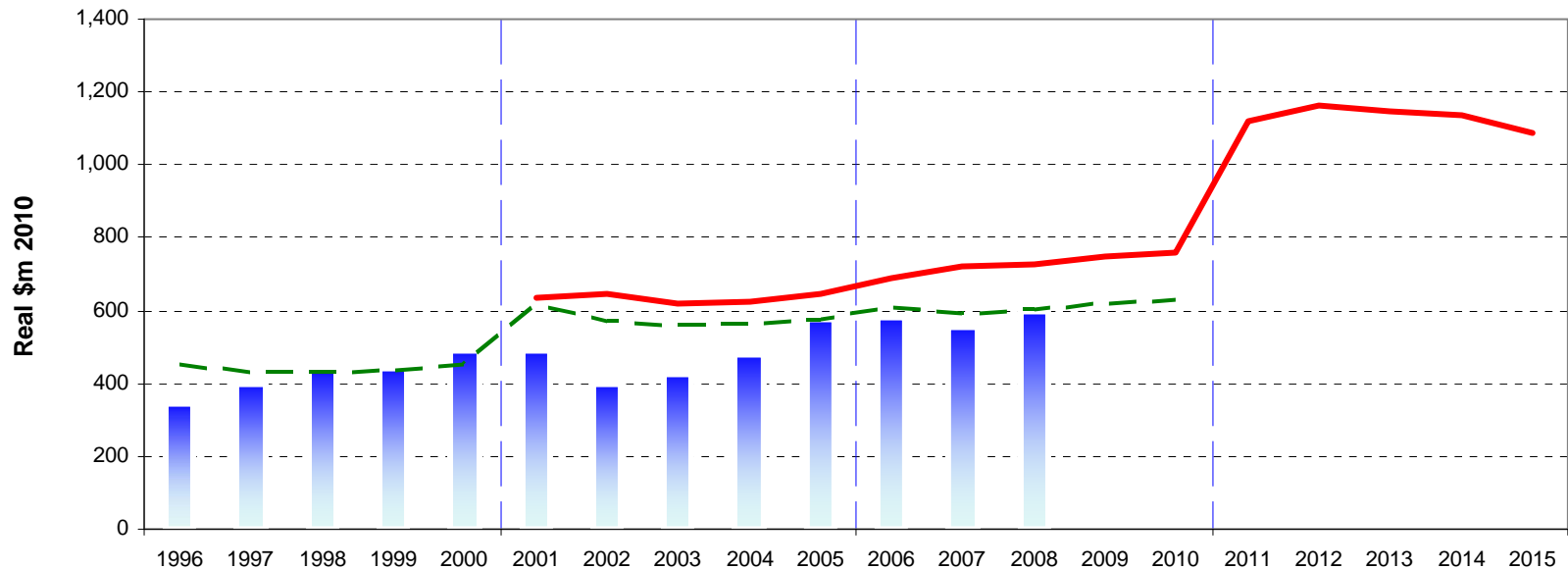
- Consideration given to
 - incentive framework and revealed cost approach
 - historic expenditure compared to ESCV regulatory allowances
- Capex assessment
 - Replacement expenditure (repex) model
 - Customer connections (net)
 - Network age and demand growth
 - Input cost escalation above CPI (labour & materials)
- Opex assessment
 - Base year actual costs and carryovers (s-factor & ECM)
 - Scale cost escalation for network growth
 - Input cost escalation above CPI (labour & materials)
 - Step change costs for changed regulatory and operating environment



DNSP actual and proposed opex



DNSP actual and proposed capex



Years: Actuals 1996-2008, Forecasts 2009-15

— Actual capex — DNSPs forecast capex - - - ESCV allowance!

Summary of DNSP proposals

- Significant increases in network expenditure proposed:
 - Total capex 66%
 - Total opex 38%
- Forecast real network price increases (2011):
 - 10% Citipower
 - 17% UED
 - 22% Powercor
 - 40% Jemena
 - 46% SP AusNet

Summary of DNSP proposals

- Factors leading to proposed increases
 - Significant replacement of ageing assets
 - Forecast extreme weather events due to climate change
 - Step changes in regulatory obligations and related costs
 - Decline in electricity sales
 - Higher cost of capital

Summary of AER assessment

- Actual expenditures less than DNSP forecasts over past 10 years
- Actual expenditures less than ESCV allowances over past 10 years
- Suggests actual expenditure is responding to incentive mechanisms and likely to be reflective of efficient costs
- Comparative benchmarking with businesses in other Australian jurisdictions shows Victorian DNSPs compare favourably in terms of relative cost efficiency and service performance

Summary of AER assessment

- Consideration given to NER capex and opex objectives of:
 - meeting their regulatory obligations
 - meeting expected demand
 - maintaining quality and reliability of services and the network
- AER applied same NER rules criteria and factors to Victoria as applied to recent decisions for South Australia and Queensland
 - Efficient and prudent costs to meet expenditure objectives
- AER's approach was to use revealed costs and consider whether increases in capex and opex were justified

Summary of AER assessment

- Outsourcing / related party transactions used extensively by Victorian DNSPs. Contract charges paid contribute to opex / capex forecasts
- AER accepted contract charges in forecast where transaction passed a 'presumption threshold':
 - Did the DNSP have an incentive to agree to non-arm's length arrangements with the contractor?
 - If yes, was a competitive open tender process conducted?
- AER could not make this presumption in relation to most of the Victorian DNSPs' major arrangements
- Where presumption threshold was not met, the AER began with the contractor's actual direct costs and only allowed a 'margin' above these costs where it reflected legitimate economic reasons
- Similar approach applied to alternative control services
- Under the NER related party margins must be rolled into the RAB, though the AER is concerned about the lack of effective efficiency seeking incentives may create

Citipower proposal

- Capex of \$1.1 billion, 157% increase over actual current period expenditure
- Opex of \$244m, 43% increase over expected current period expenditure
- WACC of 10.86%
- Electricity sales forecast: average annual reduction of 0.5% from 2010
- Network price increases of 10.13% in 2011, 8% p.a. from 2012 to 2015

AER response to Citipower proposal

- AER's draft decision approved:
 - Capex of \$567.4 million, 54% of proposed capex
 - AER allowed 52% of proposed new customer connections capex, 58% of proposed reinforcement capex and 53% of proposed reliability and quality maintained capex.
 - Opex of \$184m, 76% of proposed opex
 - WACC of 9.68%
 - Electricity sales forecast: average annual increase of 1.8% from 2010
 - Network price decrease of 7.27% in 2011, increases of 1% p.a. 2012 to 2015

United Energy proposal

- Capex of \$790 million, 75% increase over actual current period expenditure
- Opex of \$602m, 29% increase over expected current period expenditure
- WACC of 10.86%
- Electricity sales forecast: average annual reduction of 0.8% from 2010
- Network price increases of 16.81% in 2011, 4% p.a. 2012 to 2015

AER response to United Energy proposal

- AER's draft decision approved:
 - Capex of \$531.5 million, 67% of proposed capex
 - AER allowed 63% of proposed reinforcement capex and 51% of proposed reliability and quality maintained capex.
 - Opex of \$465m, 77% of proposed opex
 - WACC of 9.68%
 - Electricity sales forecast: average annual increase of 2.6% from 2010
 - Network price decrease of 19.57% in 2011, increases of 2.5% p.a. 2012 to 2015

Powercor proposal

- Capex of \$1.59 billion, 67% increase over actual current period expenditure.
- Opex of \$902m, 38% increase over expected current period expenditure
- WACC of 10.86%
- Electricity sales forecast: average annual reduction of 0.7% from 2010
- Network price increases of 22.3% in 2011, 5% p.a. 2012 to 2015

AER response to Powercor proposal

- AER's draft decision approved:
 - Capex of \$1.01 billion, 64% of proposed capex
 - AER allowed 60% of proposed net customer connections capex, 62% of proposed reinforcement capex and 70% of proposed reliability and quality maintained capex.
 - Opex of \$622m, 69% of proposed opex
 - WACC of 9.68%
 - Electricity sales forecast: average annual increase of 2.2% from 2010
 - Network price decrease of 8.14% in 2011, constant over 2012 to 2015

Jemena proposal

- Capex of \$600 million, 108% increase over actual current period expenditure.
- Opex of \$319m, 22% increase over expected current period expenditure
- WACC of 10.86%
- Electricity sales forecast: average annual reduction of 1.6% from 2010
- Network price increases of 39.64% in 2011, 3% p.a. 2012 to 2015

AER response to Jemena proposal

- AER's draft decision approved:
 - Capex of \$314.6 million, 52% of proposed capex
 - AER allowed 41% of proposed reinforcement capex and 43% of proposed reliability and quality maintained capex.
 - Opex of \$247m, 77% of proposed opex
 - WACC of 9.68%
 - Electricity sales forecast: average annual increase of 1.5% from 2010
 - Network price decrease of 1.46% in 2011, decreases of 2.25% p.a. 2012 to 2015

SP AusNet proposal

- Capex of \$1.37 billion, 73% increase over actual current period expenditure
- Opex of \$886m, 50% increase over expected current period expenditure
- WACC of 10.86%
- Electricity sales forecast: average annual reduction of 0.4% from 2010
- Network price increases of 46.25% in 2011, 5.5% p.a. 2012 to 2015

AER response to SP AusNet proposal

- AER's draft decision approved:
 - Capex of \$953.3 million, 70% of proposed capex
 - AER allowed 53% of proposed reinforcement capex and 93% of proposed reliability and quality maintained capex.
 - Opex of \$672m, 76% of proposed opex
 - WACC of 9.68%
 - Electricity sales forecast: average annual increase of 2.5% from 2010
 - Network price decrease of 4.46% in 2011, constant over 2012 to 2015

Capex proposals / AER assessment

- AER found DNSPs' forecasts cannot be relied upon to give an accurate estimate of future needs – clear tendency to overestimate future needs
 - Models and estimation techniques employed by each DNSP were tested but were often deficient
- Benchmarking and trend analysis showed that DNSP historical costs were a better guide to overall future capital spending than DNSP forecasts
- Alternate modelling approaches and other tests were applied by the AER and its consultants to test if replacement and augmentation expenditure proposals were prudent and efficient

Capex proposals / AER assessment

- AER analysis based on underlying direct costs (i.e. total costs less margins and overheads). Adjusted allowances added back margins and overheads
- Some DNSP forecasts were accepted. Where rejected the AER adopted reported actual costs (i.e. revealed costs) to estimate future allowances
- For replacement expenditure
 - A repex model was developed to independently assess the replacement capex proposals
 - The AER's decision incorporates what we consider to be a prudent level of repex based on asset lives and condition

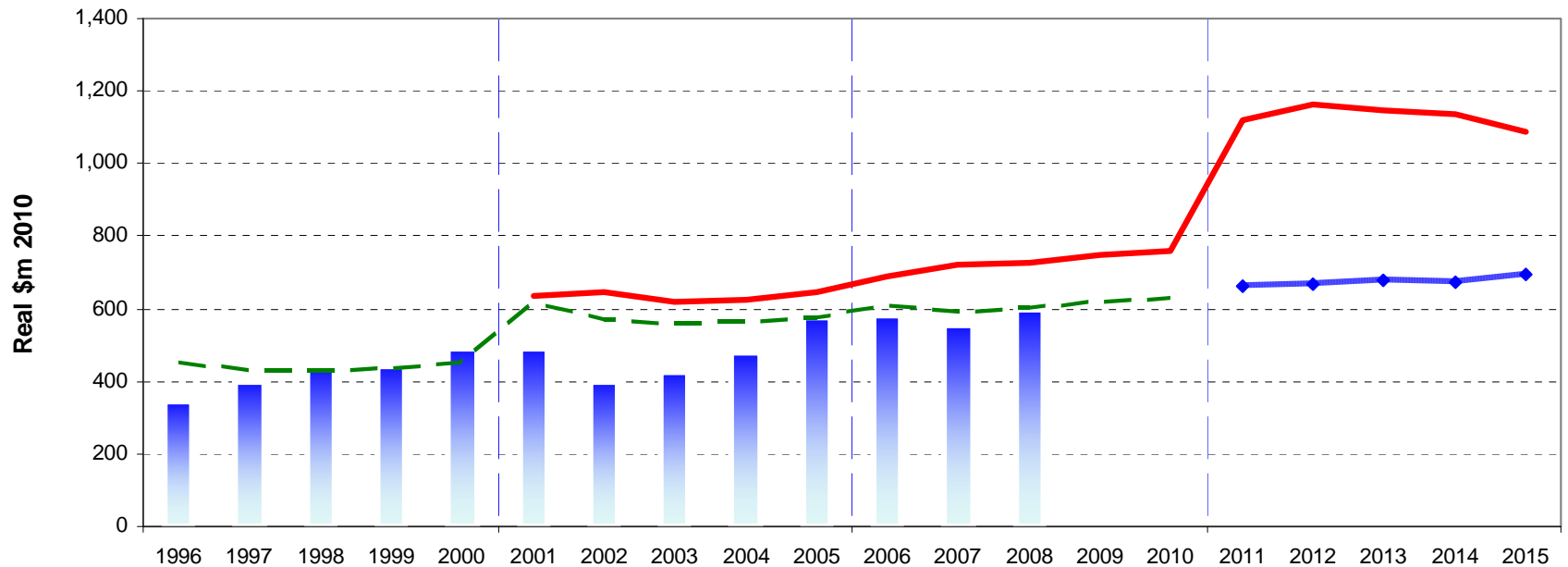
Capex proposals / AER assessment

- For reinforcement expenditure
 - The timing and need for a selected sample of major project proposals was examined
 - AER view reduced allowances significantly
- Gross new customer connection estimates were assessed and generally accepted
 - Forecast customer contributions were incorrectly calculated and were rejected
- Environment/safety/legal & non-network capex
 - No case for a step increase in expenditure

Capex proposals / AER assessment

- DNSPs did not put forward substantive capex proposals on bushfire mitigation due to the VBRC
- VBRC requirements to be looked at separately under pass-through arrangements
- AER did allow a prudent increase in conductor replacement activity for SPAusNet and Powercor in the next regulatory period
- The AER did not consider impact of climate change requires enhanced capex measures

Capex proposals / AER assessment

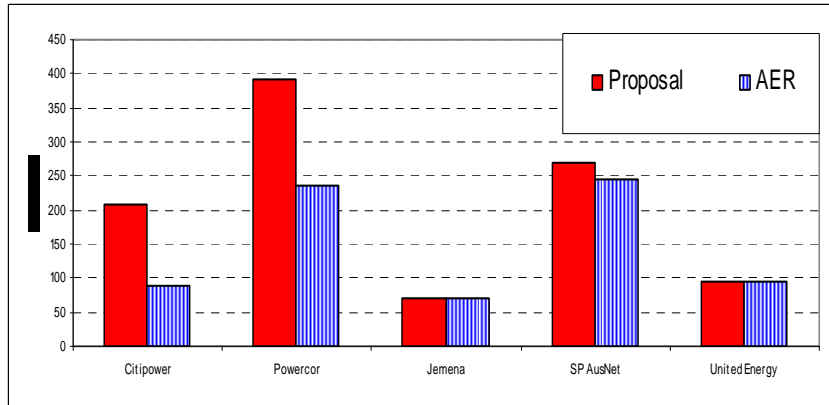


Years: Actuals 1996-2008, Forecasts 2009-15

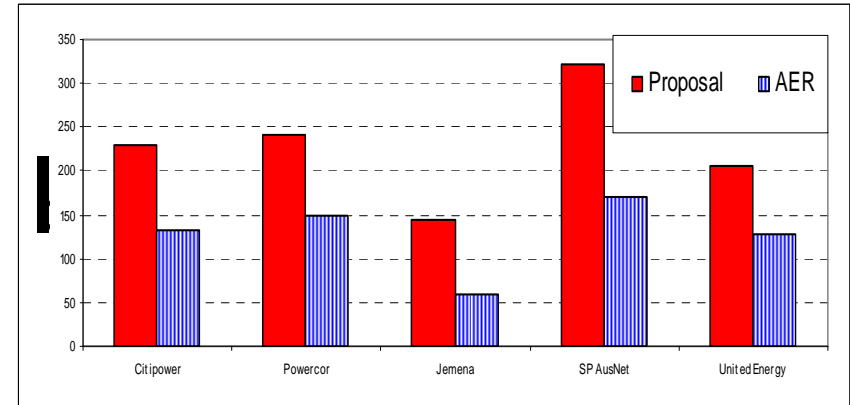
Actual capex DNSPs forecast capex ESCV allowance! AER draft decision allowance

Capex by sub-category

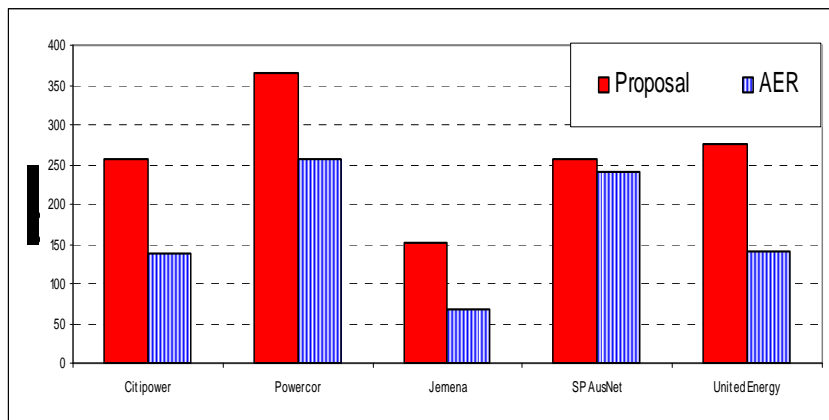
Net Customer Connections



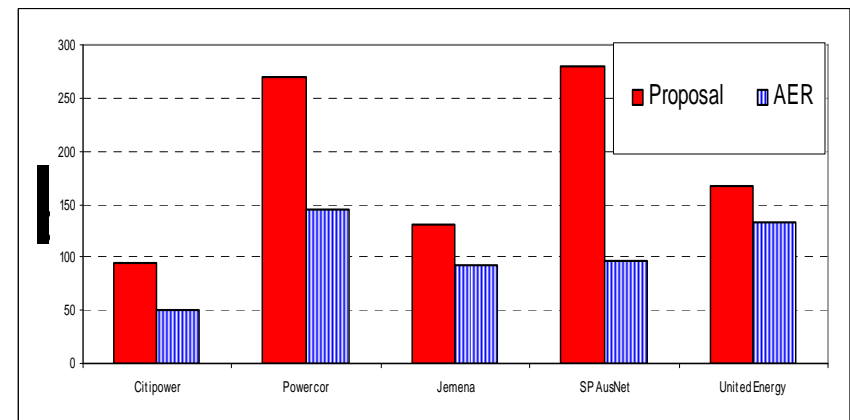
Reinforcement



Reliability and Quality Maintained



Other & Non-network



Opex proposals / AER assessment

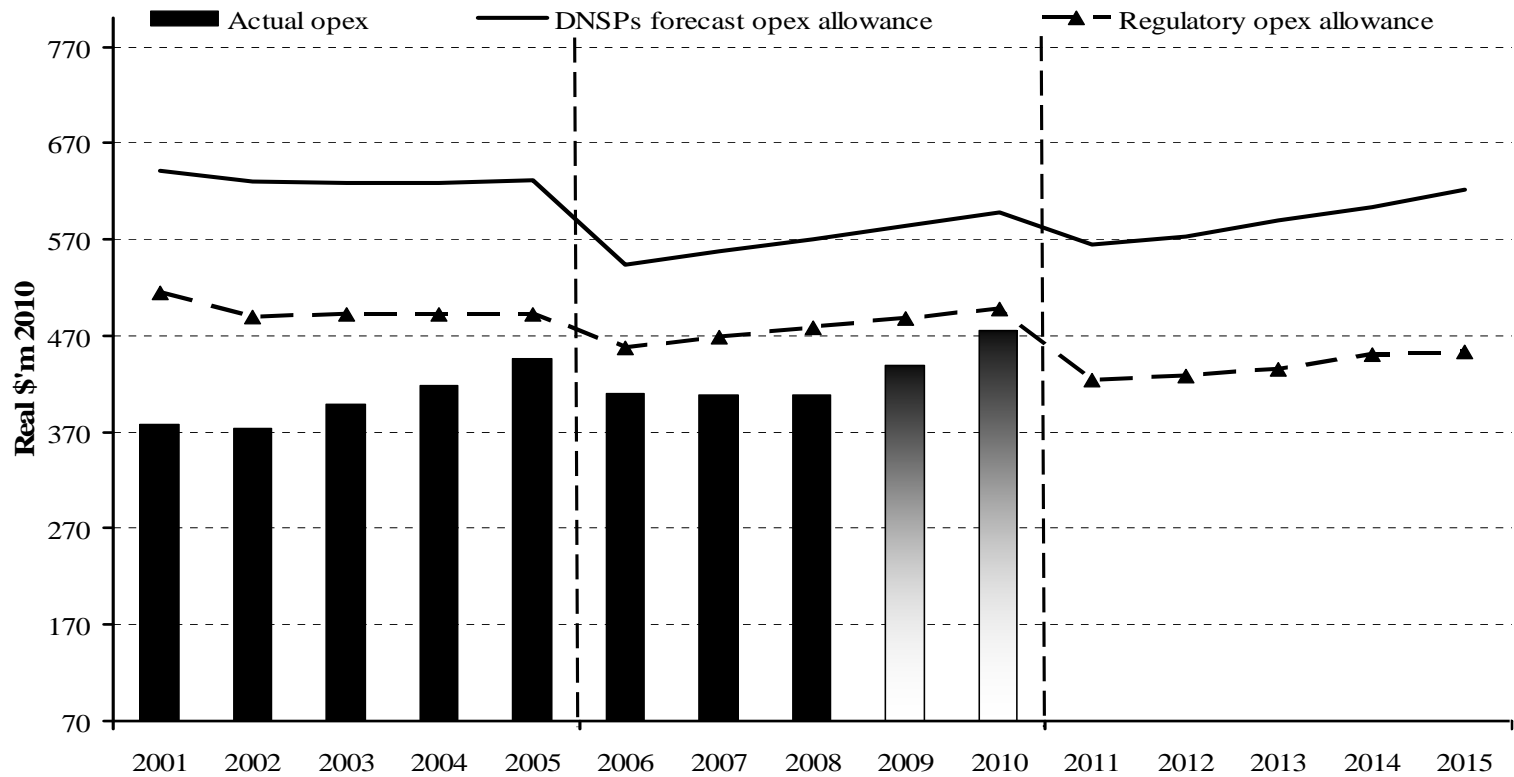
- AER used DNSP costs from 2009 as the efficient starting point (base costs) then escalated this by:
 - step changes (reflecting new requirements)
 - input cost escalation (labour & materials)
 - scale escalation (taking account of scale efficiencies)



Opex proposals / AER assessment

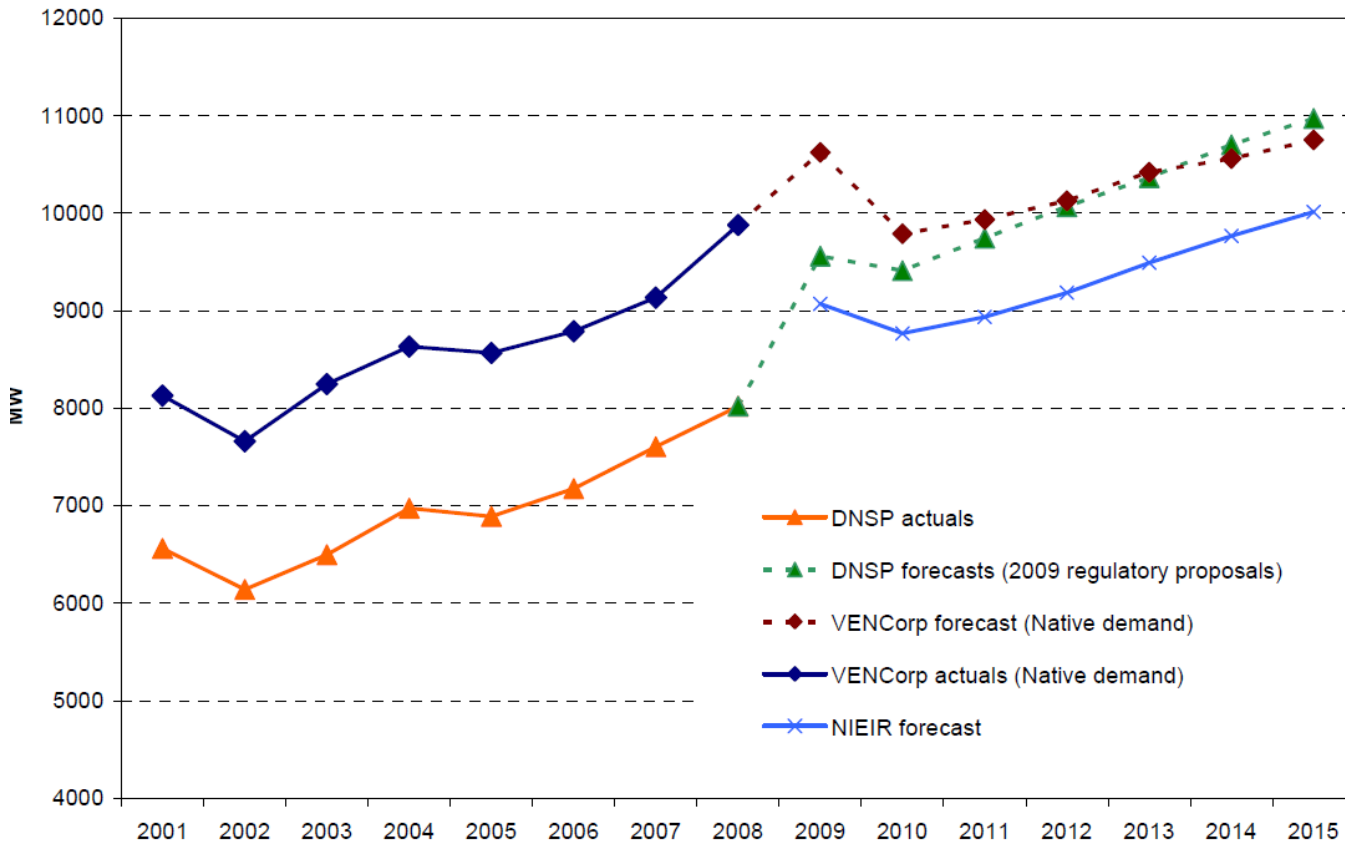
- AER does not consider opex step increase justified by new regulatory requirements or changes to the operating environment
- AER recognised some new compliance costs associated with ESV requirements as well as network planning and customer communications
- Impact of climate change does not require enhanced opex measures
- VBRC requirements to be looked at separately under pass-through arrangements
- Too early to evaluate full efficiency impact of AMI
 - AMI efficiencies will become more evident over time and impacts will be monitored

Opex proposals / AER assessment



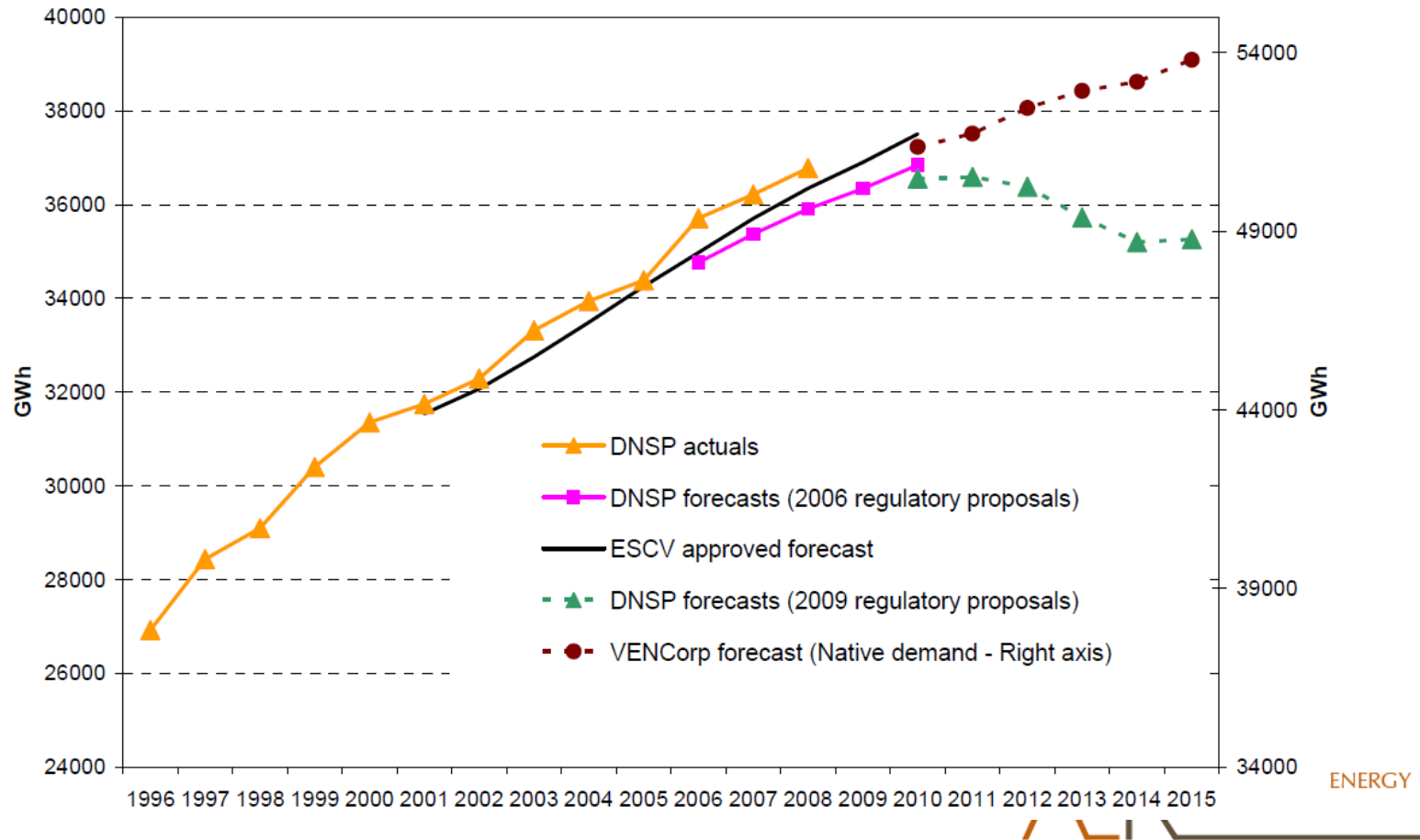
Growth forecasts

DNSP maximum demand forecasts exceed most recent VENC Corp forecasts



Growth forecasts

Energy sales showed significant divergence from history and AEMO forecast



Growth forecasts- AER assessment

- AER considered that NIEIR methodologies likely to be reasonable, however limited data was provided on this
- DNSPs did not properly reconcile to NIEIR's independent "top down" maximum demand forecasts
- Some of NIEIR's input assumptions and "post model" adjustments considered unreasonable or outdated:
 - Victorian population growth assumptions pessimistic
 - impacts of AMI highly uncertain and overstated
 - Impact of standby power measures overstated
 - New gross state product forecasts now available
 - Moratorium on time of use tariffs
 - Home insulation policy abandoned
 - CPRS delayed and uncertain
- Overall AER's decision impact was to maintain energy sales in line with historic trend (approx 2% increase p.a. compared to 1% decline proposed by DNSPs)

WACC proposals / AER assessment

- Proposed WACC of 10.86%, AER decision 9.68%
- Main areas of dispute were market risk premium and debt risk premium
- Proposed MRP of 8% not supported by persuasive evidence
 - Market commentary indicates conditions are more stable than WACC review period (i.e. GCF) which resulted in MRP of 6.5%
 - implied volatility analysis subject to shortcomings as noted in previous AER reviews
- DNSPs proposed testing of Bloomberg data to estimate DRP, using linear extrapolation of BBB yield curve
 - Ignoring CBASpectrum and extrapolation not reasonable
 - AER has a recognised approach of testing CBASpectrum and Bloomberg data
 - In case of Bloomberg, includes use of a proxy extrapolation of AAA fair yields

Factors Influencing Initial Price Change

- ESCV price paths weren't necessarily set to align costs and revenues in 2010
- Need to realign prices/ revenues to actual costs revealed over current period: much lower than ESCV benchmarks (esp. UED)
- AER energy sales forecasts result in higher expected revenues. DNSP proposed price increases were based on declining energy sales
- Forecast building block requirements reflect modest increase in AER expenditure allowances (esp. opex)
- Carryover of S-factor penalties (esp. UED, SPA)
- Higher WACC than approved by the ESCV (mainly reflecting higher cost of debt)

Draft decision - Network charges impacts

- In 2011 network charges will **decline** by the following percentages (**real**):
 - Citipower 7.27%
 - Powercor 8.14%
 - Jemena Electricity 1.46%
 - United Energy 19.57%
 - SP AusNet 4.46%
- Over 2012-15 network charges will in **real** terms:
 - decrease by 2.25% for Jemena
 - remain constant for Powercor and SP AusNet
 - increase by 1% for Citipower and by 2.5% for United Energy

Victorian distribution draft decision

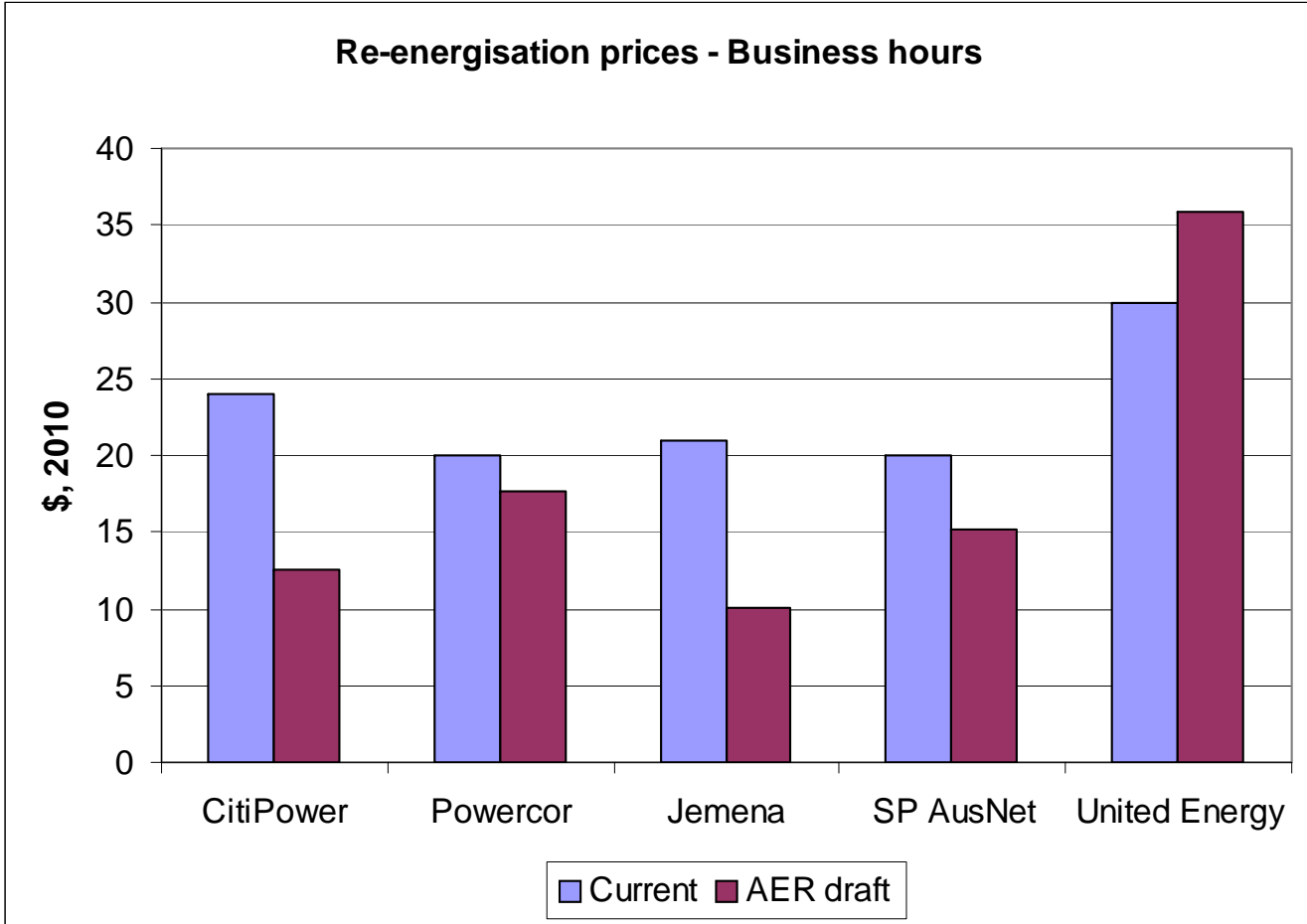
• Nominal distribution prices	Year 1	after this
• SP AusNet	-2.0%	2.6%pa
• Powercor	-5.8%	2.6%pa
• Citipower	-4.9%	3.6%pa
• United	-17.5%	5.1%pa
• Jemena	1.1%	0.3%pa



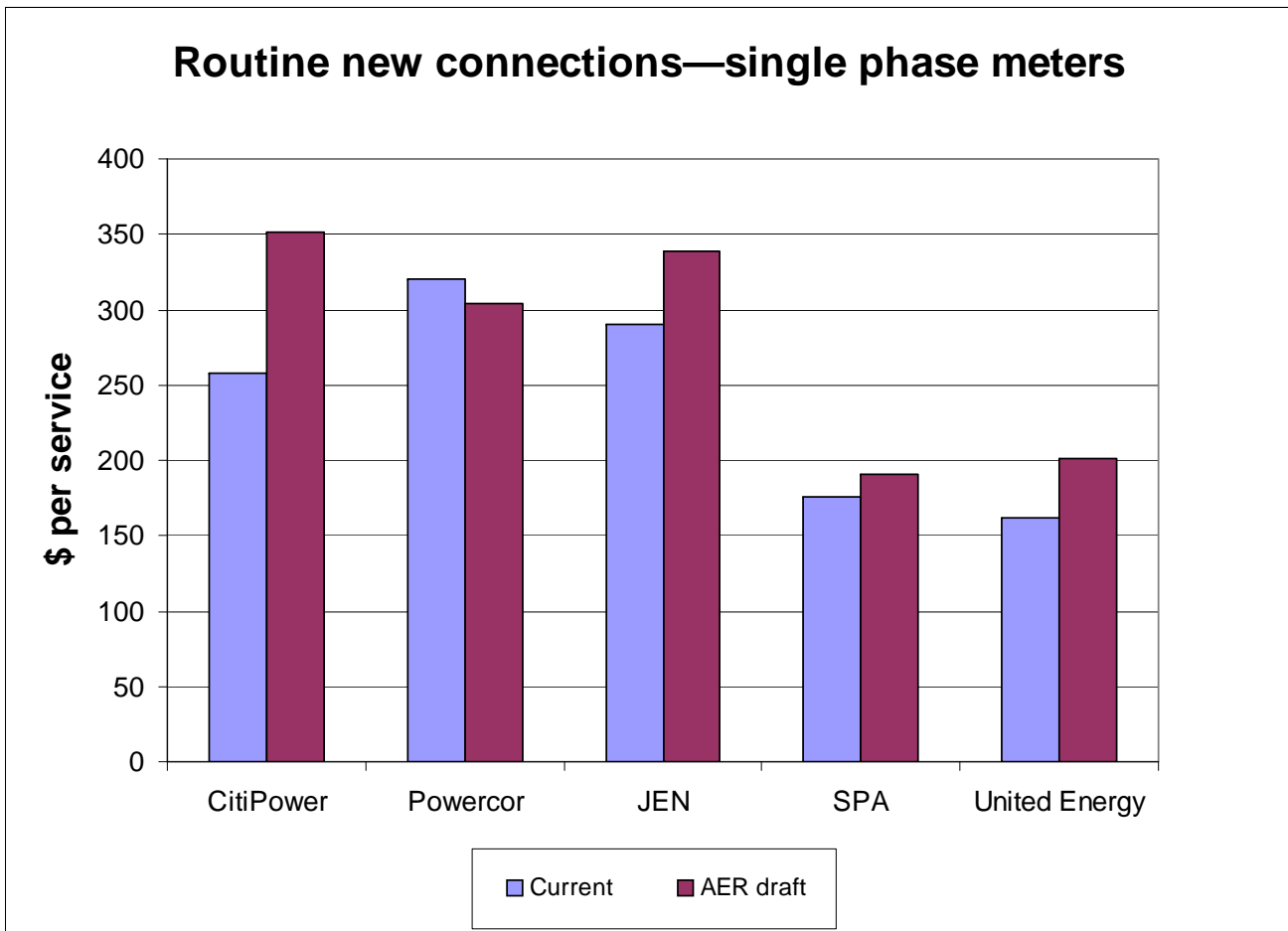
Other issues

- Service classification and price control – approach generally mirrors ESCV classifications and approach
 - Network services: standard control / weighted average price cap
 - Customer requested services & public lighting: alternative control / price cap on service
- Remote metering services facilitated by the AMI rollout not classified - these are to be regulated separately under the AMI Order in Council and ESCV Guideline 14 (applicable to excluded services charges).
- Alternative control service charges not reviewed by the ESCV in previous regulatory determinations. Charges vary across DNSPs due to different underlying cost structures.

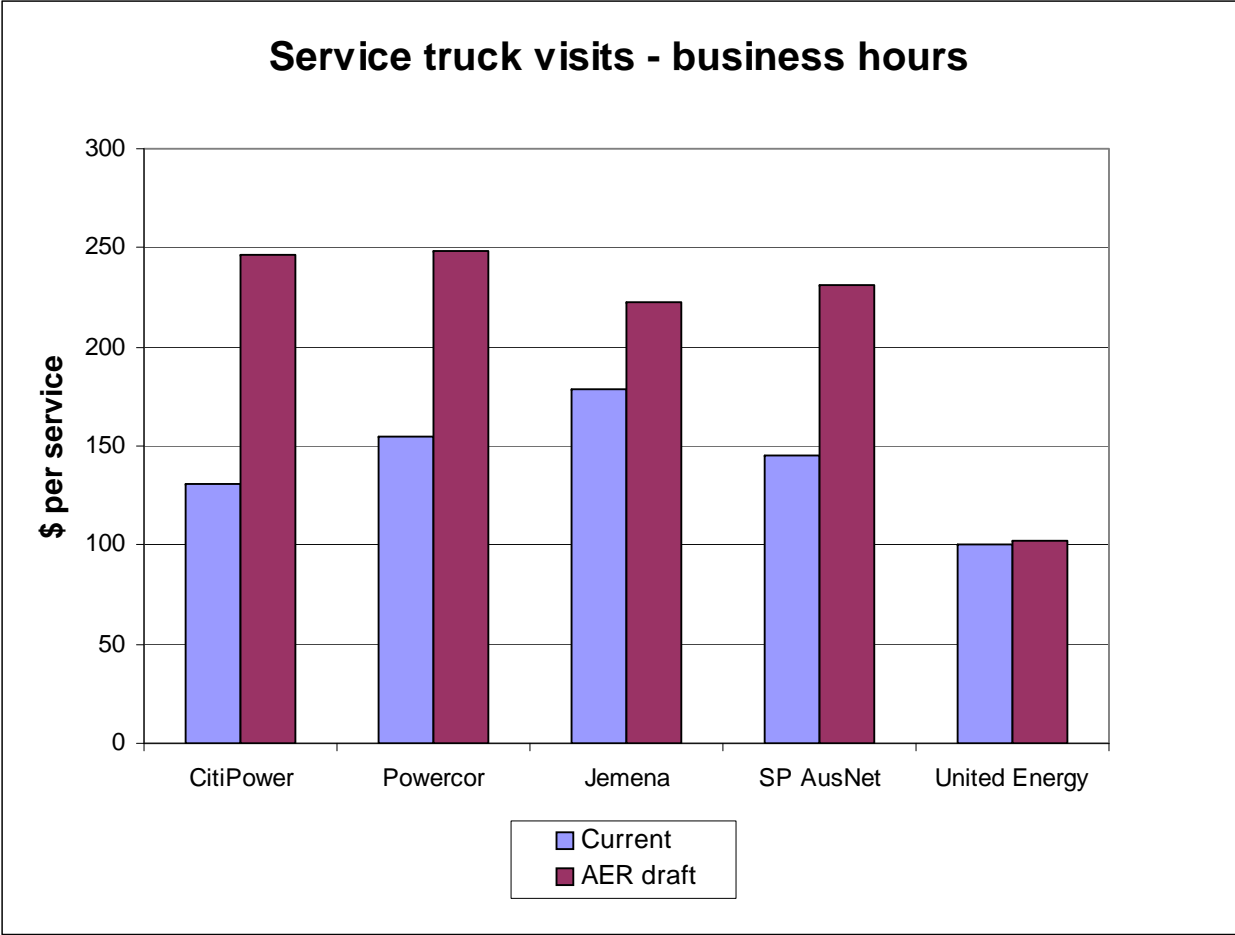
Alternative control service charges



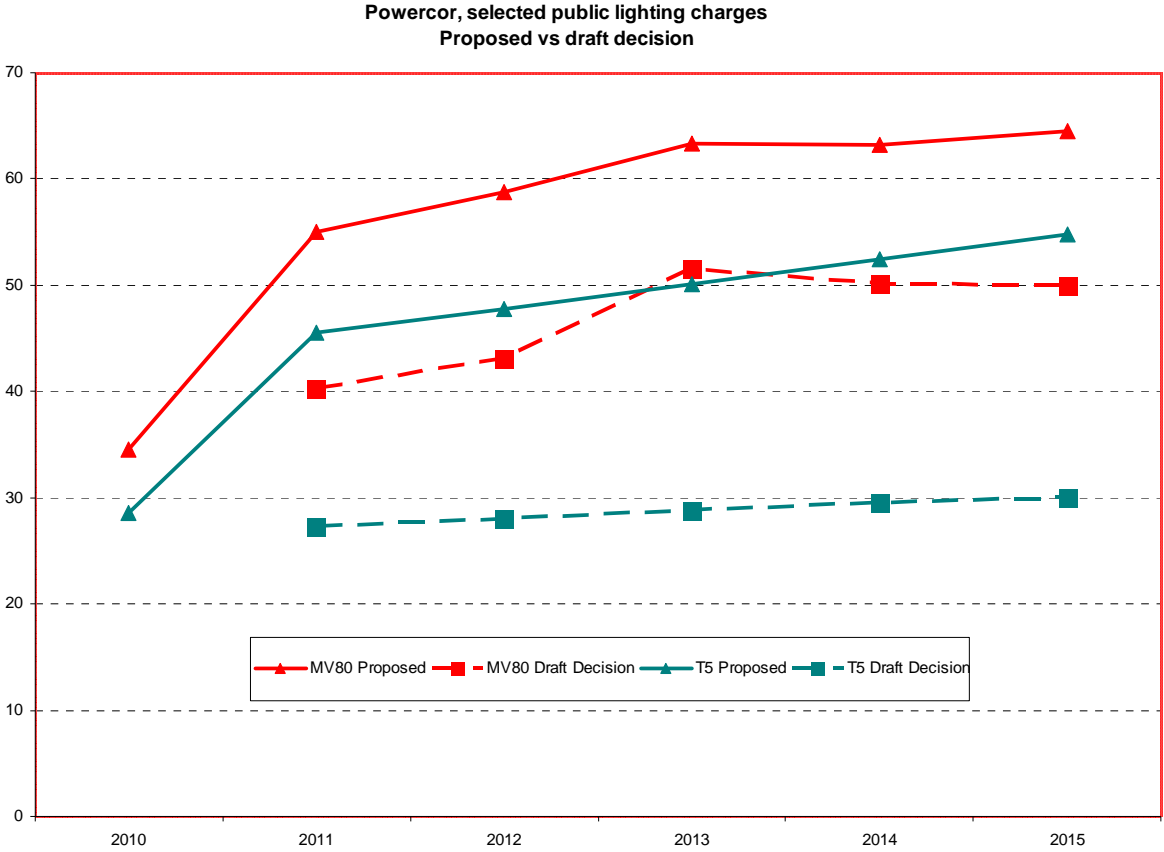
Alternative control service charges



Alternative control service charges



Example of public lighting charges - Powercor



Incentive arrangements

- Incentive arrangements
 - Service target performance incentive scheme
 - Efficiency benefit sharing scheme
 - Demand management incentive scheme
- Designed to maintain and improve service performance, encourage efficient expenditure and demand management programs

Service standards

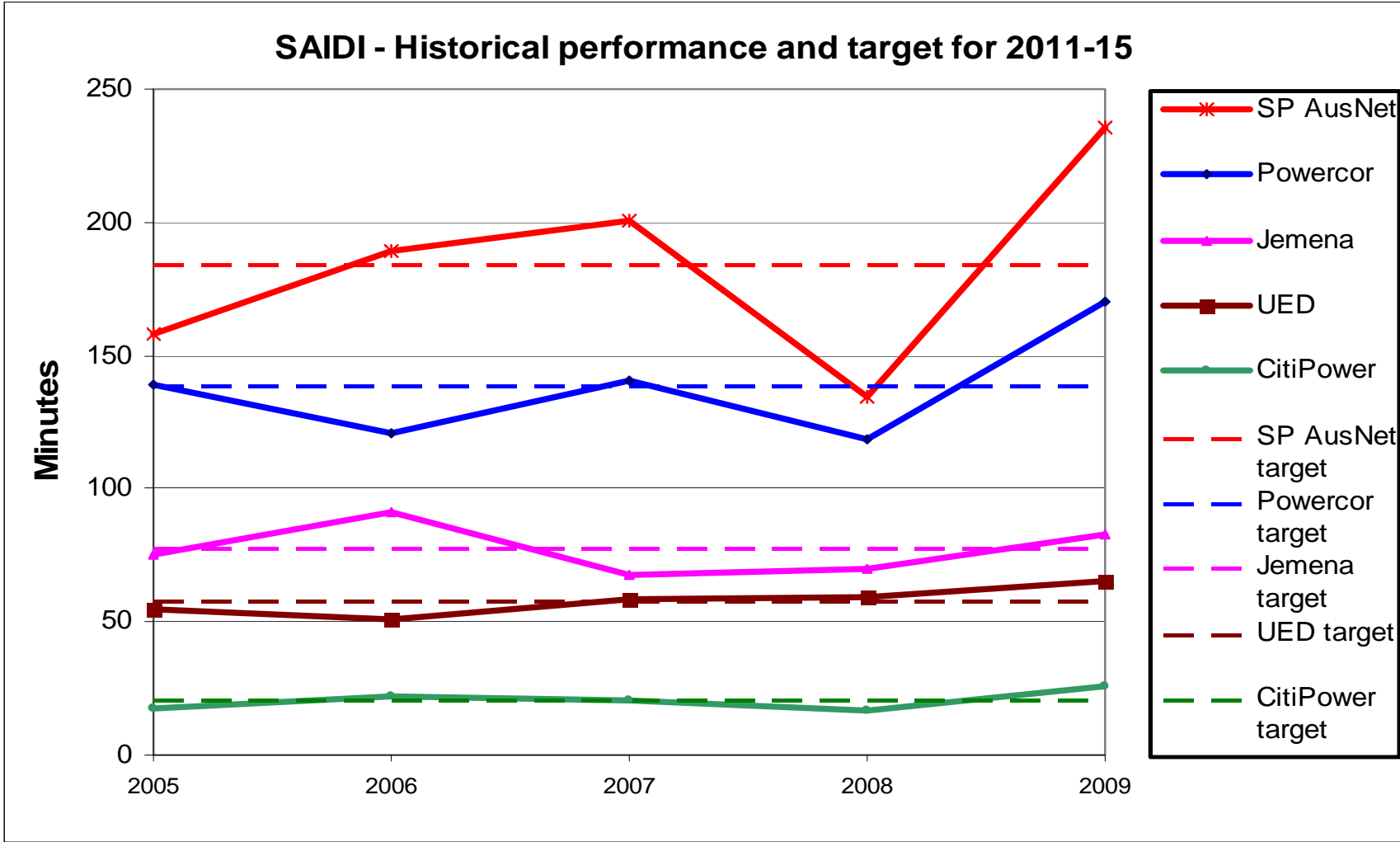
- 3 main categories
 - Reliability measures (SAIDI, SAIFI and MAIFI etc)
 - Quality measures (voltage level, harmonic distortion etc)
 - Customer service measures (telephone answering, new connections, streetlight repair, response to written enquiries etc).

Service incentive scheme (S-factor)

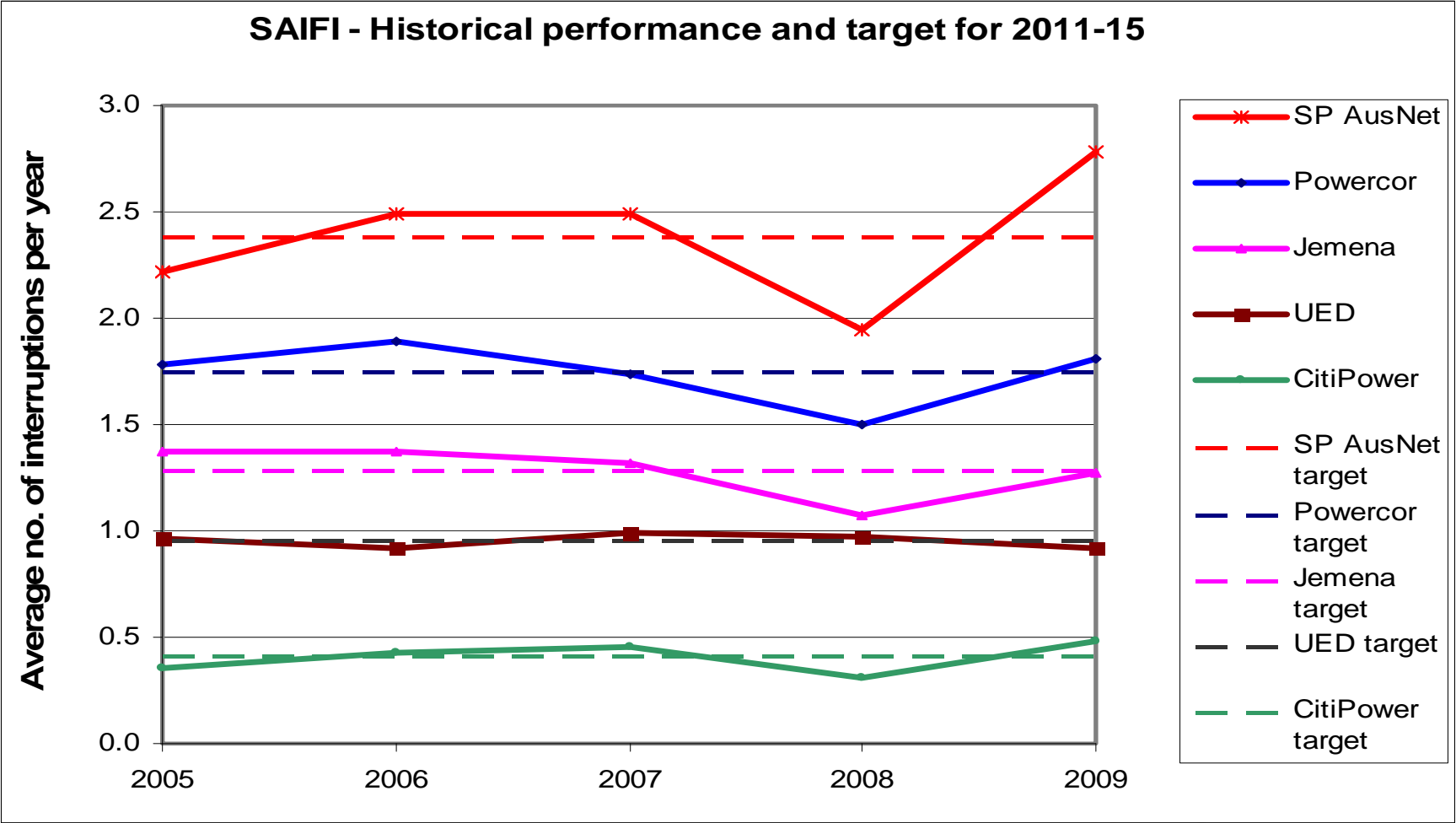
- The scheme, similar to the existing one, adjusts DNSPs' revenue up (reward), or down (penalise), based on actual performance in:
 - SAIDI
 - SAIFI
 - MAIFI
 - Fault call centre performance
- Performance targets set at the average of the previous 5 years
- The penalty reward rates are based on current VCR (value of customer reliability, \$96k/MWh for CBD, \$48k for urban and rural networks). These rates are about 2500 times the distribution tariff for CBD residential customers, and 1000 times the network residential tariff for urban and rural customers.

Note: Current rates are (\$60k/MWh for CBD, and \$30k/MWh for urban and rural networks)

Draft decision – SAIDI -- Average minutes without supply per customer per year, excluding transmission outages and exceptional events



Draft decision – SAIFI -- Average number of supply interruptions per customer per year, excluding transmission outages and exceptional events



Non-financial incentives

- Public comparative performance reporting on the distributors (naming and shaming of poor performance)
- The AER will continue to report on DNSPs' performance, including service level to the worst served customers.

Monitoring of service outcomes

The AER proposes to monitor:

- Network average, as well as worst service, KPIs
- Network performance during major event days
- Actual expenditures Vs benchmarks
- Reinforcement and asset replacement expenditures and outcomes
- Network failure statistics.

The purpose is to inform stakeholders and to enable the AER to make a more accurate determinations for future resets.

Guaranteed Service Levels (GSL) Payment

GSL parameter	GSL Payment
• Distributor more than 15 minutes late for an appointment	\$20
• Connections not made on agreed date	\$50 per day (up to \$250)
• More than 20 hours of interruptions	\$100
• More than 30 hours of interruptions	\$150
• More than 60 hours of interruptions	\$300
• More than 10 interruptions	\$100
• More than 15 interruptions	\$150
• More than 30 interruptions	\$300
• More than 24 momentary interruptions	\$25
• More than 36 momentary interruptions	\$35
• Streetlights not repaired within 2 business days	\$10

Closing comments

- AER's overall approach not materially different from that adopted in other jurisdictions
- Outcomes reflective of a business as usual environment in Victoria influenced by:
 - Victoria's mature and comparatively reliable network
 - Stable operating and regulatory environment
 - No material change to service requirements and regulatory obligations (VBRC impacts aside)
 - DNSP accrued efficiencies in providing services
 - Other factors



Questions and comments?