

AER Public Forum - 10th July 2014

**Consumers' Perspectives on
TransGrid's Revenue Proposal**

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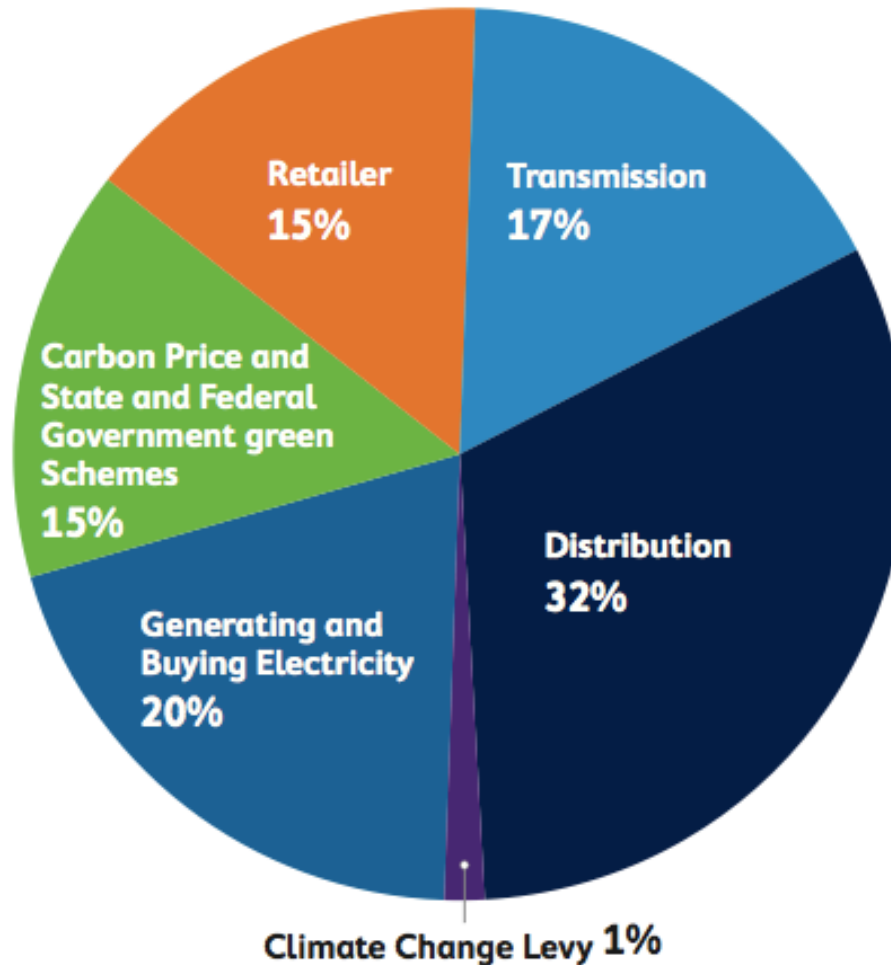
RECENT ELECTRICITY PRICE INCREASES

Recent Electricity Price Increases

- Australia's electricity prices have risen rapidly in recent years, and are of major concern to consumers
- It is now well understood that a major driver of the price increases has been increasing network charges from the monopoly electricity networks
- Numerous reviews have concluded that a large proportion of the price increases were unnecessary and arose from deficiencies in the regulatory framework
- These deficiencies resulted in the Australian Energy Regulator (AER) approving excessive rates of return, over-investment and inefficient expenditure on electricity network infrastructure

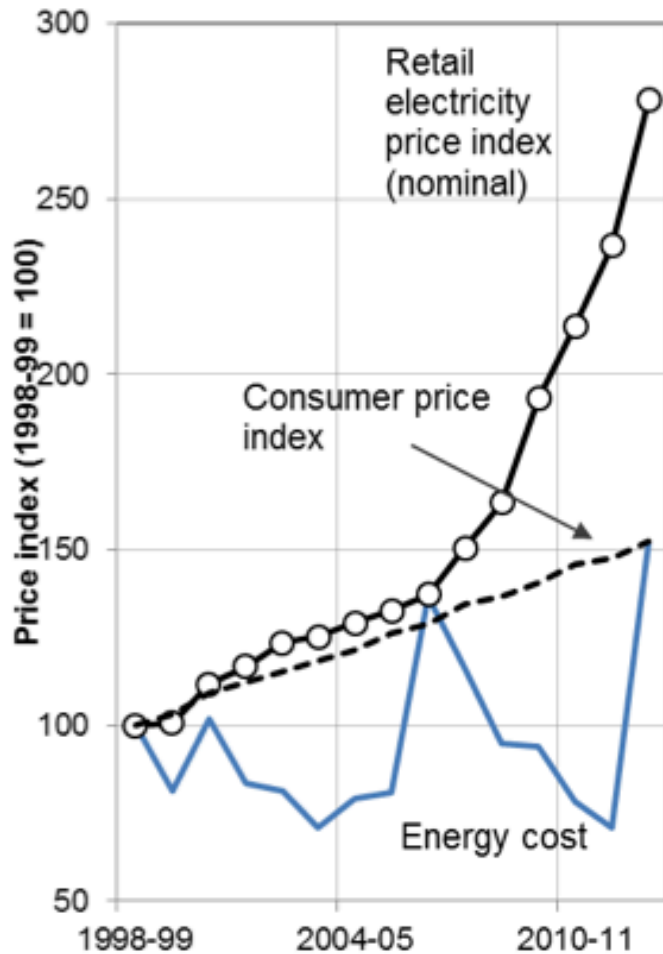
Electricity Prices – Key Components

Figure 1 – Components of your electricity charges¹

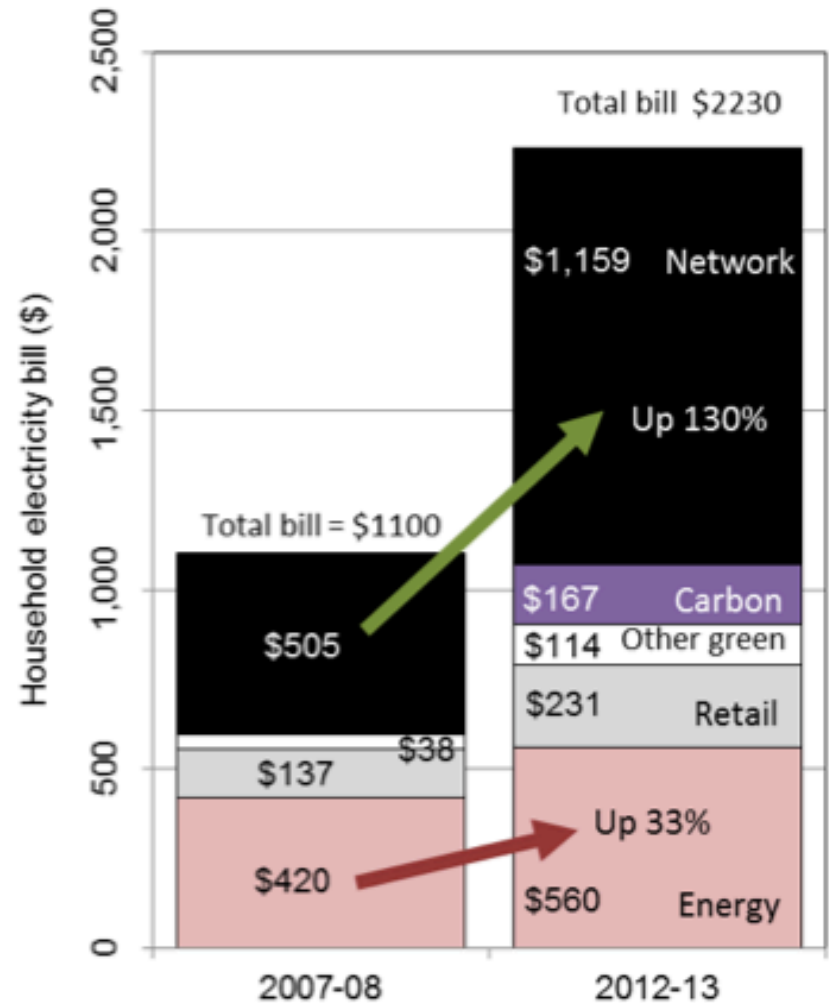


Electricity Price Increases

Capital city prices 1998-99 to 2012-13
(forecast)

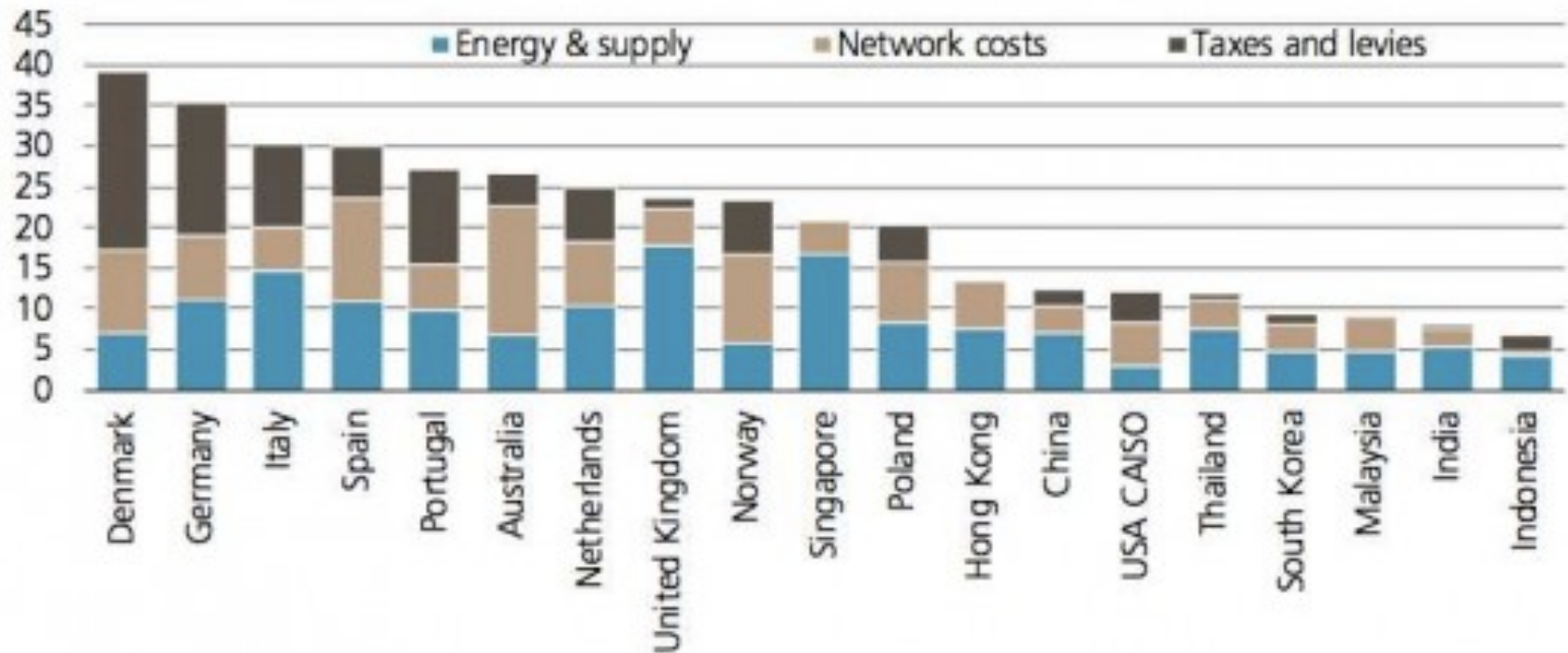


New South Wales household electricity bill
2007-08 and 2012-13



International Electricity Prices

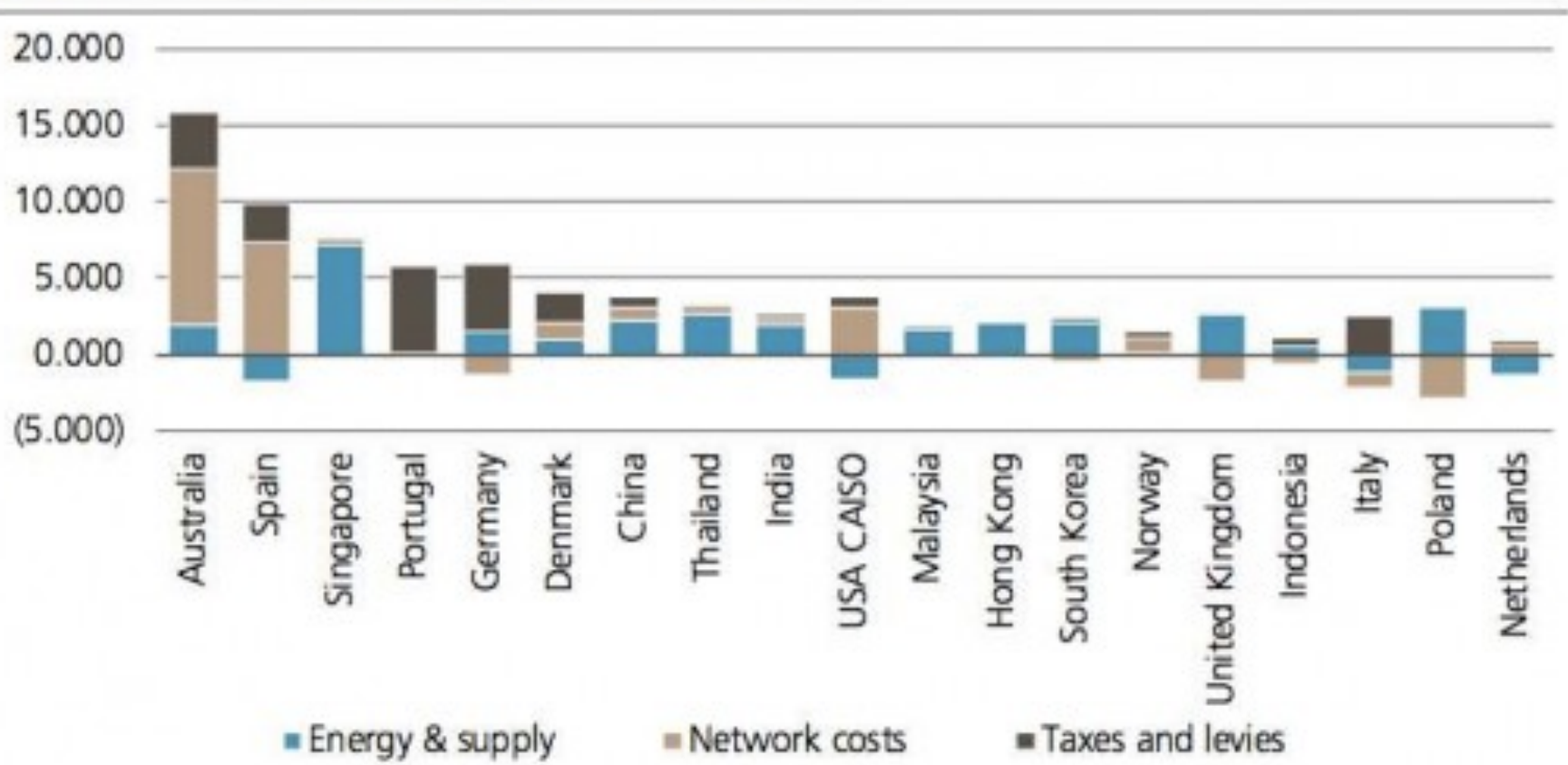
Figure 1: 2013 tariffs (US cents per kWh)



Note: Residential tariffs for Australia, Europe and the US; national average for Asian markets.
Source: Power utility companies, government databases, UBS estimates

Recent Growth in International Electricity Prices

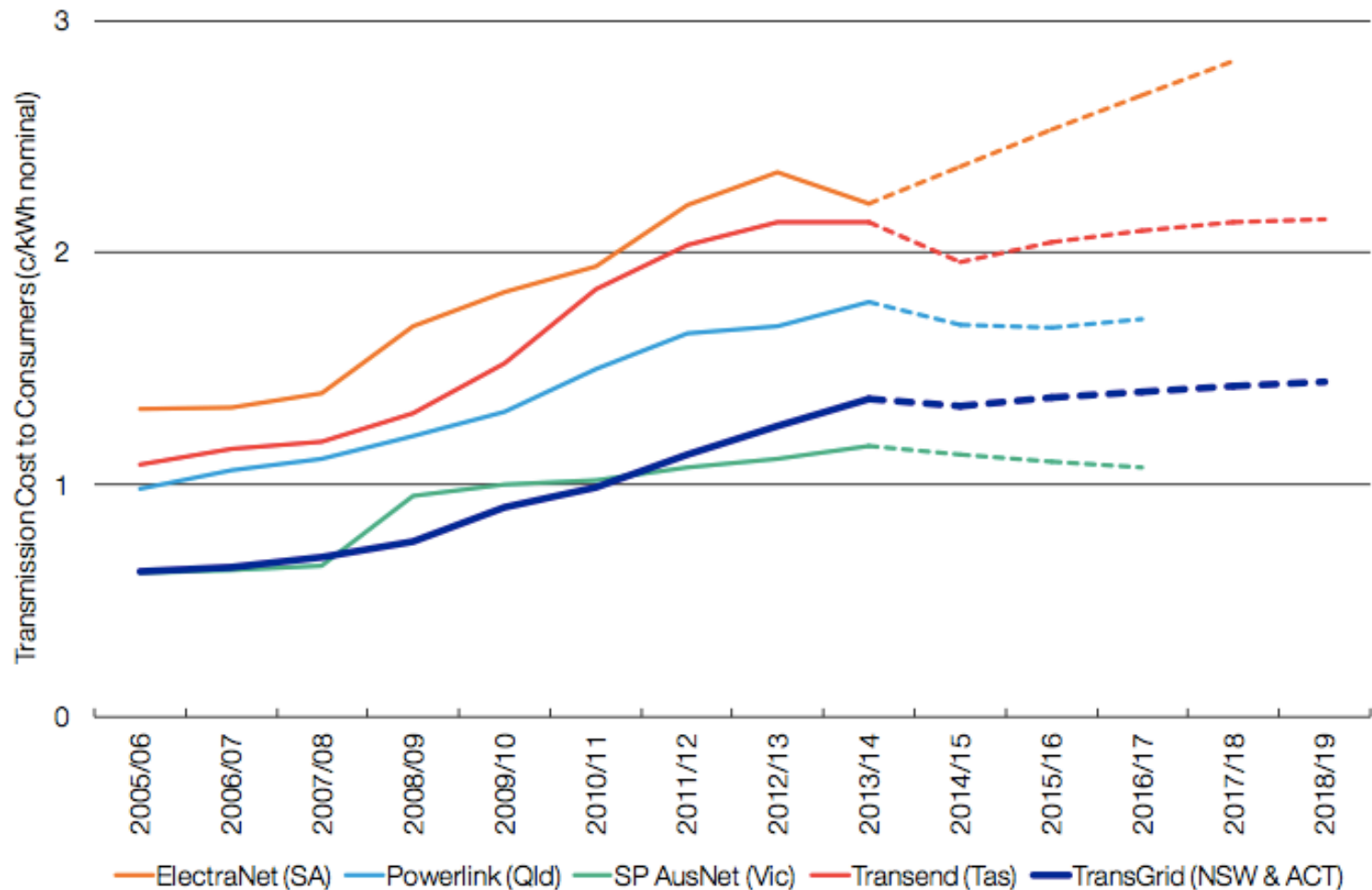
Figure 5: US cents per kWh change in power prices 2007-13



Source: Power utility companies, government databases, UBS estimates

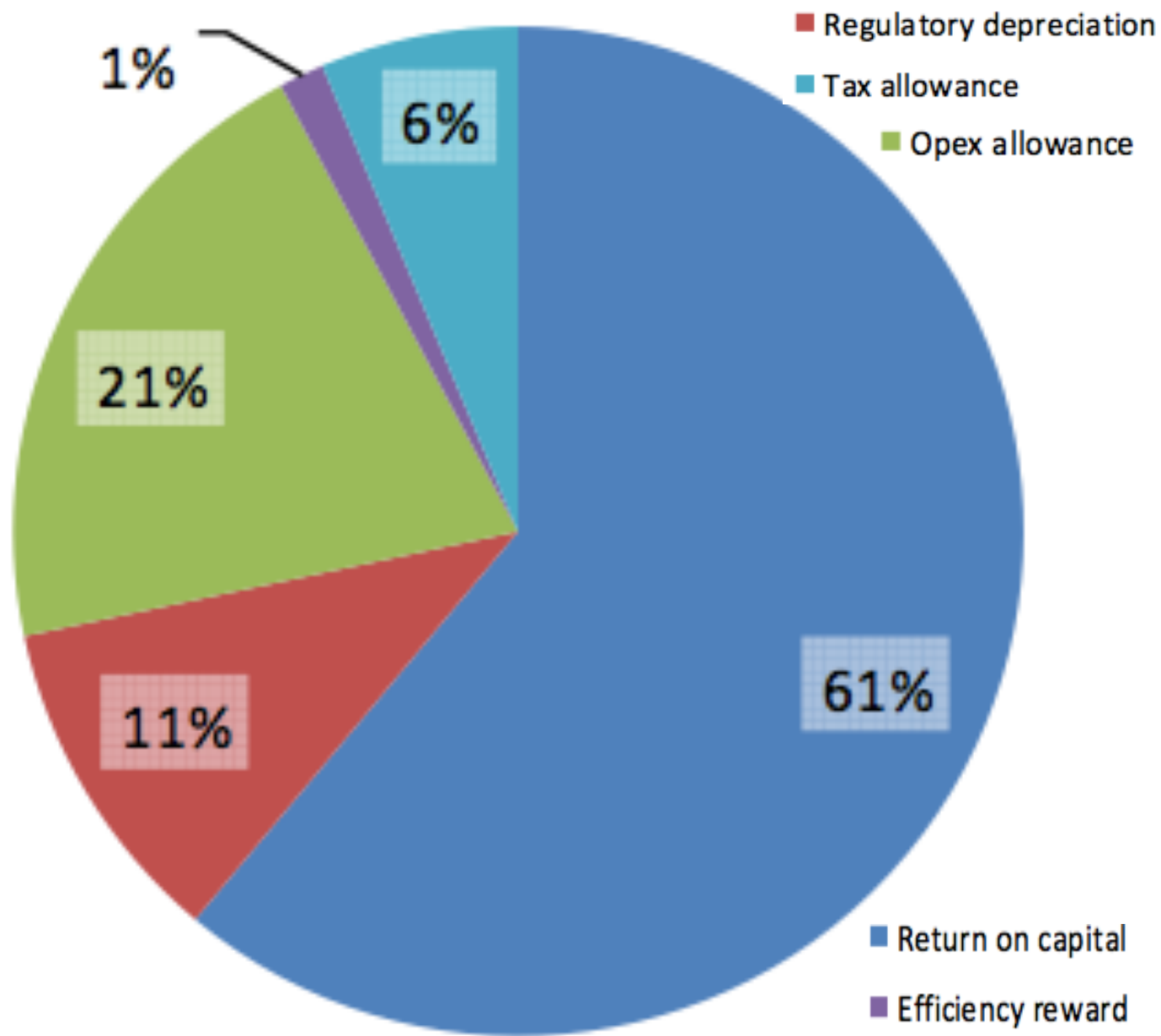
Trend in Australian Transmission Prices (c/kWhr)

Transmission Cost to Consumers



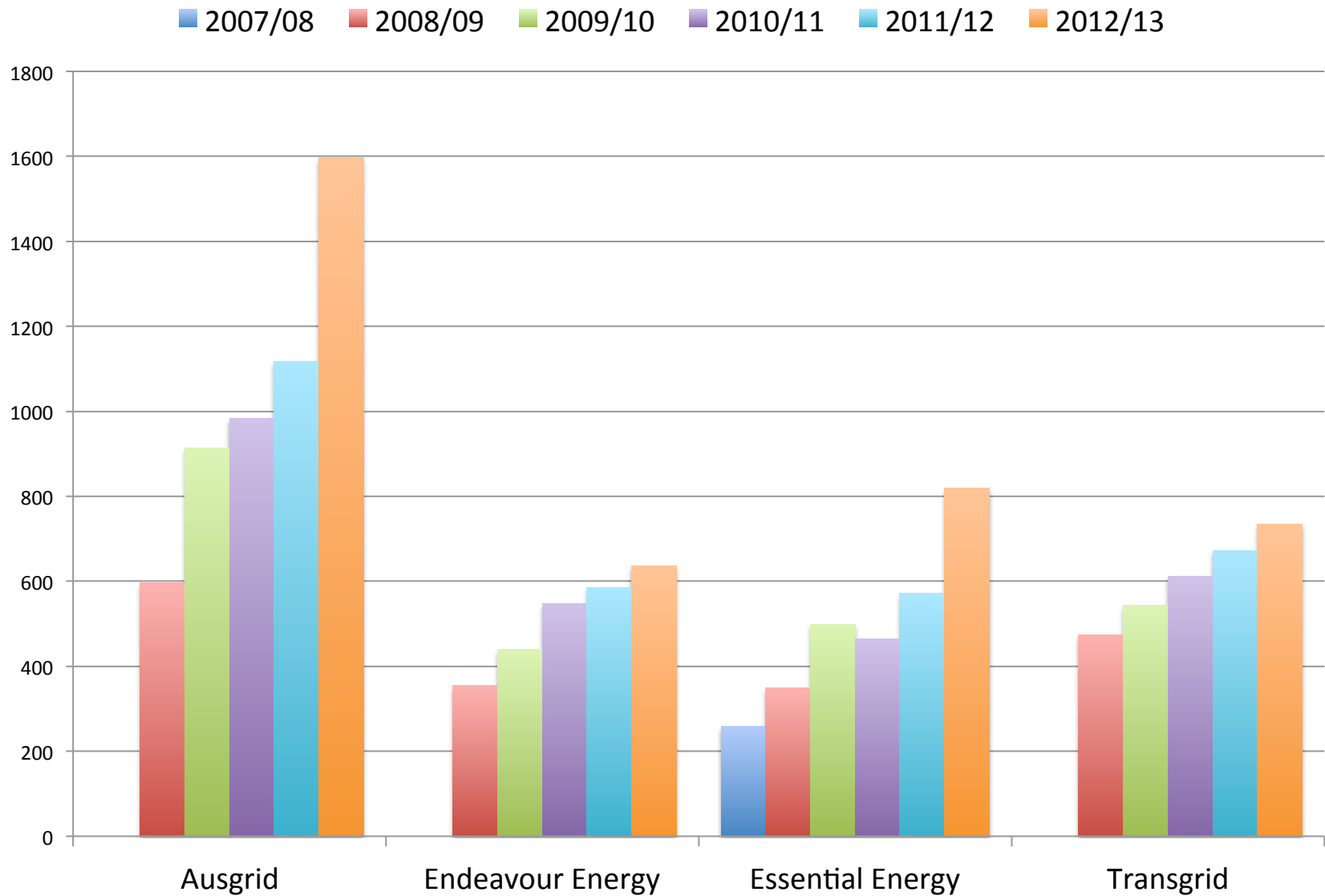
Source: AER performance reports, transmission revenue determinations, transitional transmission determination for Transend and National Electricity Forecasting Report.

TransGrid - Revenue Components



RECENT PROFITABILITY GROWTH

NSW Networks - Recent Profitability Growth

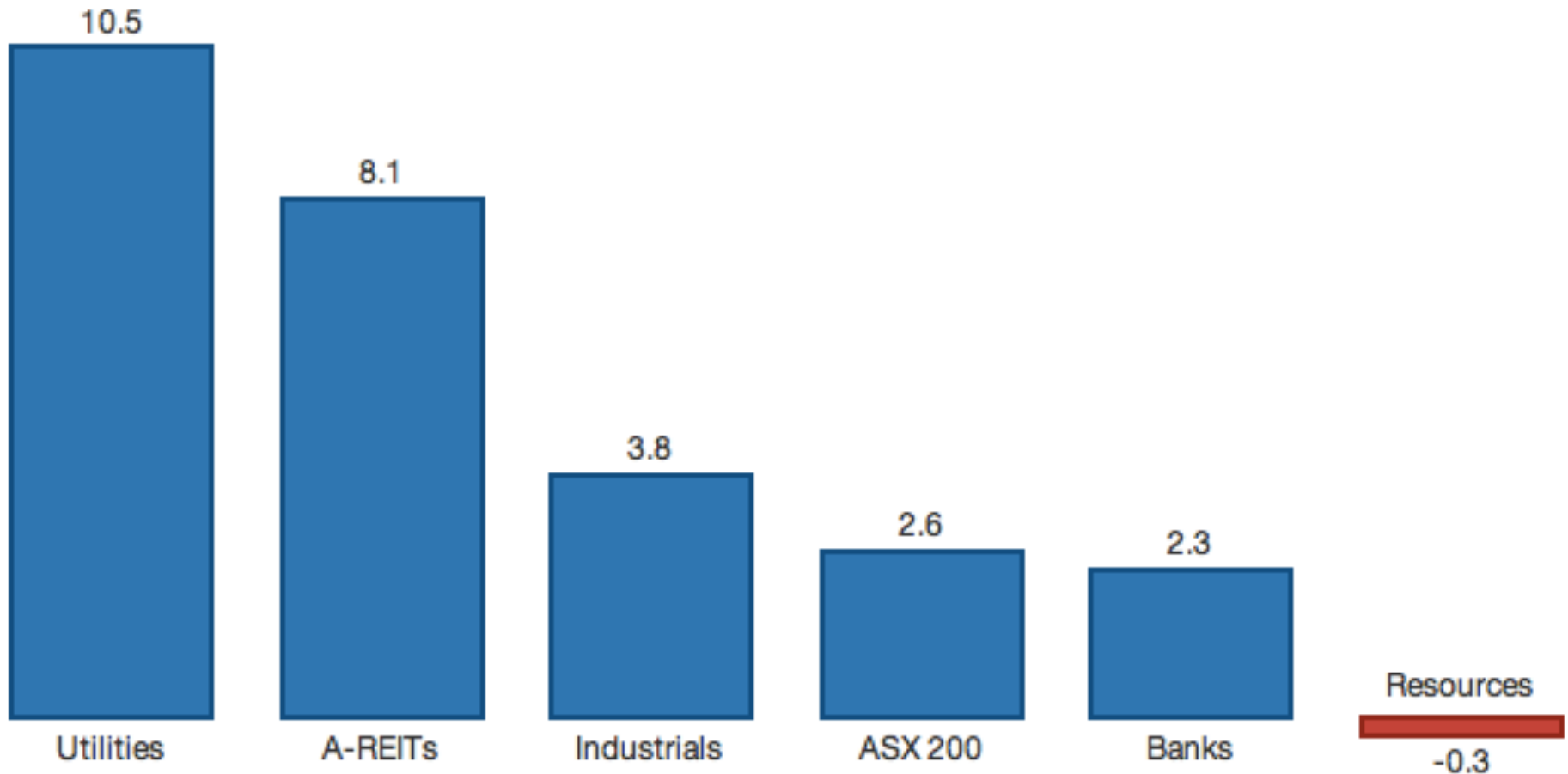


Source: NSPs' Annual Reports (EBIT for DNSPs, EBITDA for TransGrid)

Utilities - Best Performing Sector in the ASX 200

Boring is the new black

ASX 200 performance by sector in 2014 (%)



RECENT REGULATORY REFORMS

Regulatory Rule Changes - November 2012

- In response to proposals by the AER and the Energy Users' Rule Change Committee (EURCC), the AEMC undertook an investigation into the effectiveness of the regulatory framework
- The review involved extensive stakeholder consultation and resulted in amendments to the National Electricity Rules in November 2012
- The changes were aimed at **“strengthening the capacity of the regulator to determine network prices so that consumers don’t pay any more than necessary for the reliable supply of electricity and gas”**
- The rule changes were informed by numerous submissions from stakeholders, including public forums, workshops, and expert reviews

Regulatory Rules - Key Changes

➤ New 'Rate of Return' Framework

- Aimed at improving the ability of regulator to make the best possible estimate of the rate of return at the time a regulatory determination is made
- Requiring the regulator to undertake an open and consultative process at least every three years to develop its approach to setting the rate of return

➤ New Capital Expenditure Incentives

- New regulatory tools, such as capital expenditure sharing schemes and efficiency reviews, enabling the regulator to incentivise the networks to invest capital efficiently

➤ New Capex and Opex Review Powers

- Rules that improve the clarity and remove ambiguities regarding the powers of the regulator to interrogate, review and amend capital and operating expenditure proposals
- Rules that require the regulator to publish annual benchmarking reports to assess the relative efficiencies of network businesses

➤ Extended Regulatory Determination Process

- Lengthened by four months to enhance stakeholder involvement - particularly by consumer representatives

The AER's *Better Regulation* Program

- The AER conducted a 12-month program – the *Better Regulation Program*, to determine how the rule changes should be implemented
- This involved the development of a suite of guidelines and methodologies to provide a new framework for the AER's regulatory decisions, e.g.:
 - Rate of Return Guideline
 - Consumer Engagement Guideline
 - Expenditure Assessment Guidelines
 - Capital Expenditure Incentives Guideline
 - Consumer Engagement Guideline

Strengthened Consumer Involvement

- A key objective of the regulatory reforms was to provide consumers with a greater voice in regulatory determinations
- The new rules require the AER to take into account the quality of the network businesses' consultation with consumers in developing their regulatory proposals
- The revenue determination process has been lengthened by 4 months to provide more time for consumers to prepare submissions and to put their views forward
- The AER is planning consumer meetings and public forums during each key phase of the revenue determination process

APPLICATION OF THE NEW RULES

CURRENT STATUS

The AER's Implementation of the New Rules

- The AER will be applying the new rules to 17 network revenue determinations over the next 2 years
- The TransGrid determination is one of the “first cabs off the rank” in the application of the new rules
- The recent rule changes delayed the commencement of the TransGrid determination
- Transitional Rules have been implemented to allow an expedited transition to the new rules, involving:
 - A ‘streamlined’ review (Jan-April 2014), to enable the regulator to determine Transend’s ‘transitional revenue’ for 2014/15
 - A full review (May 2014 - April 2015) for the regulator to determine Transend’s 5 year revenues
- The 2014/15 placeholder revenue will be subjected to a “true-up” when the final determination is completed in April 2015

TransGrid Determination – Key Dates

KEY PHASES AND STEPS	TIMEFRAMES
Transitional Proposal Phase	
DNSPs to submit Transitional Proposals	31 January 2014
AER to publish the Transitional Proposals	February 2014
AER meeting with NSW consumer groups to run through the Transitional Proposals	February 2014
Submissions on the Transitional Proposals close	Feb/March 2014
AER to finalise the 2014/15 Placeholder Determination	30 April 2014
Revenue Proposal Phase	
DNSPs to submit Revenue Proposals	31 May 2014
AER to publish the DNSP Revenue Proposals	June 2014
AER to publish "Issues Papers" to guide public submissions on the revenue proposals	June 2014
AER Meeting with NSW consumer groups to run through the revenue proposals	July 2014
AER Public Forum on the revenue proposals	July 2014
Submissions on revenue proposals close	August 2014
Draft Determination Phase	
AER Draft Determinations published	30 November 2014
AER Public forum on the draft determinations	December 2014
Submissions on the draft determinations close	January 2015
Revised Revenue Proposal Phase	
DNSPs to submit Revised Revenue Proposals	January 2015
AER to publish the DNSPs' Revised Revenue Proposals	January 2015
AER Public forum on the Revised Revenue Proposals	February 2015
Submissions on the Revised Revenue Proposals close	February 2015
Final Determination Phase	
AER Final Determinations published	30 April 2015

APPLICATION OF THE NEW RULES

WHAT ARE WE SEEING SO FAR?

Revenue Determinations - Current Status

- The NSW/ACT DNSPs and NSW/Tasmanian TNSPs submitted their Transitional Proposals on 31st January, and submitted their full (5 year) revenue proposals on the 31st May
- The AER made its *Transitional Decision* on the 30th April
- Due to time and information constraints, the AER restricted its assessment of the Transitional Proposals to 'Return on Capital' (WACC) issues
- The AER did **not** assess the other key elements of the Transitional Proposals (capex, opex, etc.) - simply treating them as 'inputs' for the purpose of determining the 'placeholder revenues' for 2014/15

What should consumers expect from the new rules?

- Revenue Proposals driven by:
 - Consumers' long term interest
 - Consumers preferences and willingness to pay for those preferences
- Significant price reductions, due to:
 - Major reductions in the cost of capital (WACC)
 - Minimal capex
 - Lower opex
 - Equitable performance incentive schemes
- Networks adhering to the new AER regulatory guidelines
- A stronger, more proactive regulator

What should consumers expect?

What are we seeing so far?

Revenue proposals driven by

- Consumers' long term interest
- Consumers preferences and willingness to pay for those preferences

- Proposals predominantly driven by the networks' interests
- Tokenistic, "push poll" driven consumer engagement
- Non-credible claims regarding consumers preferences and willingness to pay

Significant price reductions, due to:

- Major reductions in WACC
- Minimal capex
- Lower opex
- Equitable performance incentive schemes

- Excessive WACCs proposed
- Excessive, unjustified capex
- Significant, unjustified opex increases
- Incentive schemes heavily biased to networks' interests

Networks adhering to the new regulatory guidelines

Networks challenging the legality of the new regulatory guidelines

A stronger, more proactive regulator

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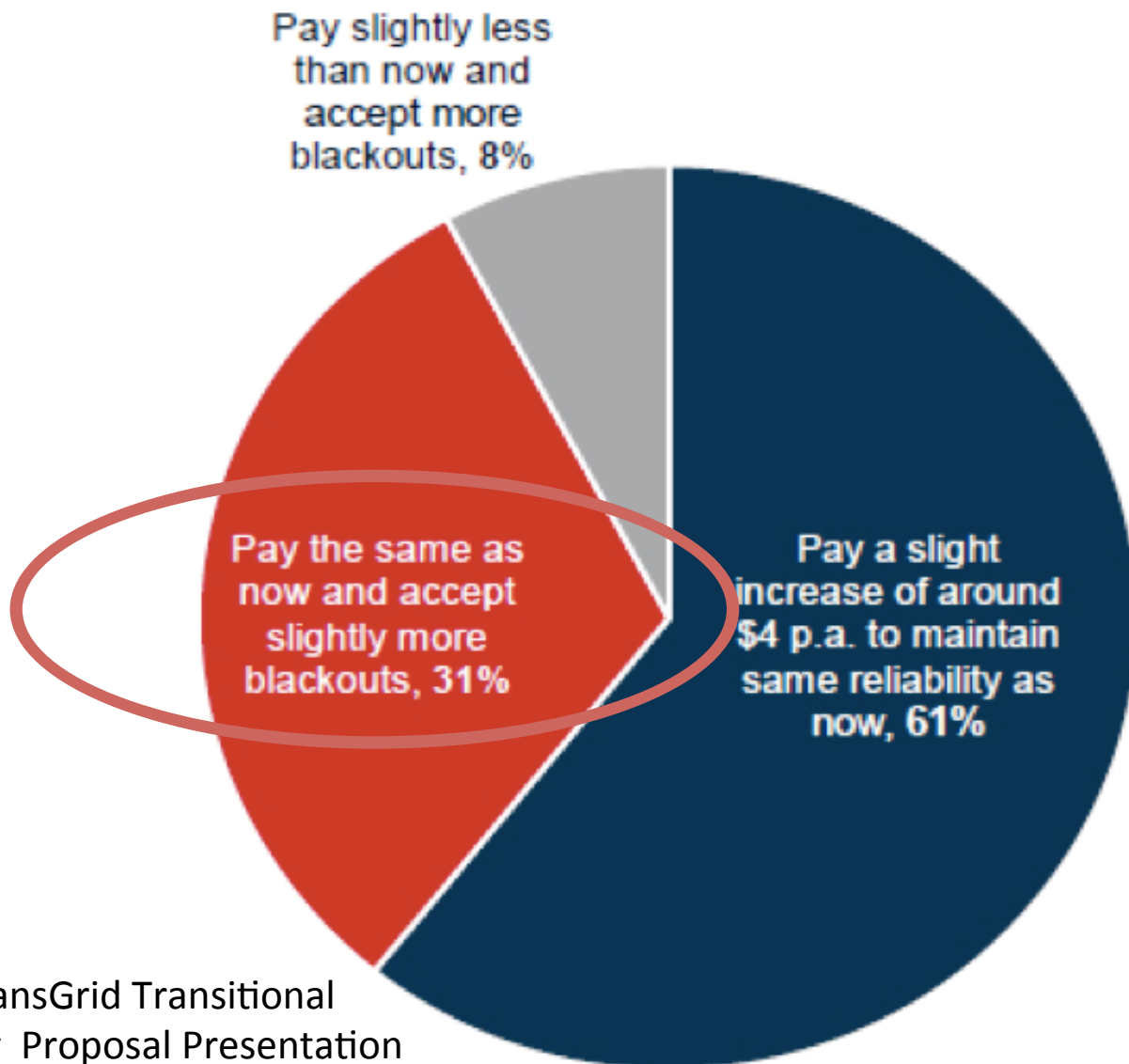
CONSUMER ENGAGEMENT

Consumer Engagement

- Consumers seriously question the validity of the key conclusions that TransGrid is claiming from its consumer engagement program
- TransGrid's consumer engagement program to date has been "push poll" driven, and has not transparently communicated the cost and price implications of the "consumer preferences" being claimed
- Consumers expect the AER to seriously challenge TransGrid to provide clear evidence of all of its claims regarding consumer preferences - **including evidence of consumers' willingness to pay for those preferences**
- Consumers also expect the AER to assess the value for money of TransGrid's consumer engagement program, and to outline their expectations regarding the needed improvements

TransGrid - Survey Question on Price/Reliability Trade-Off

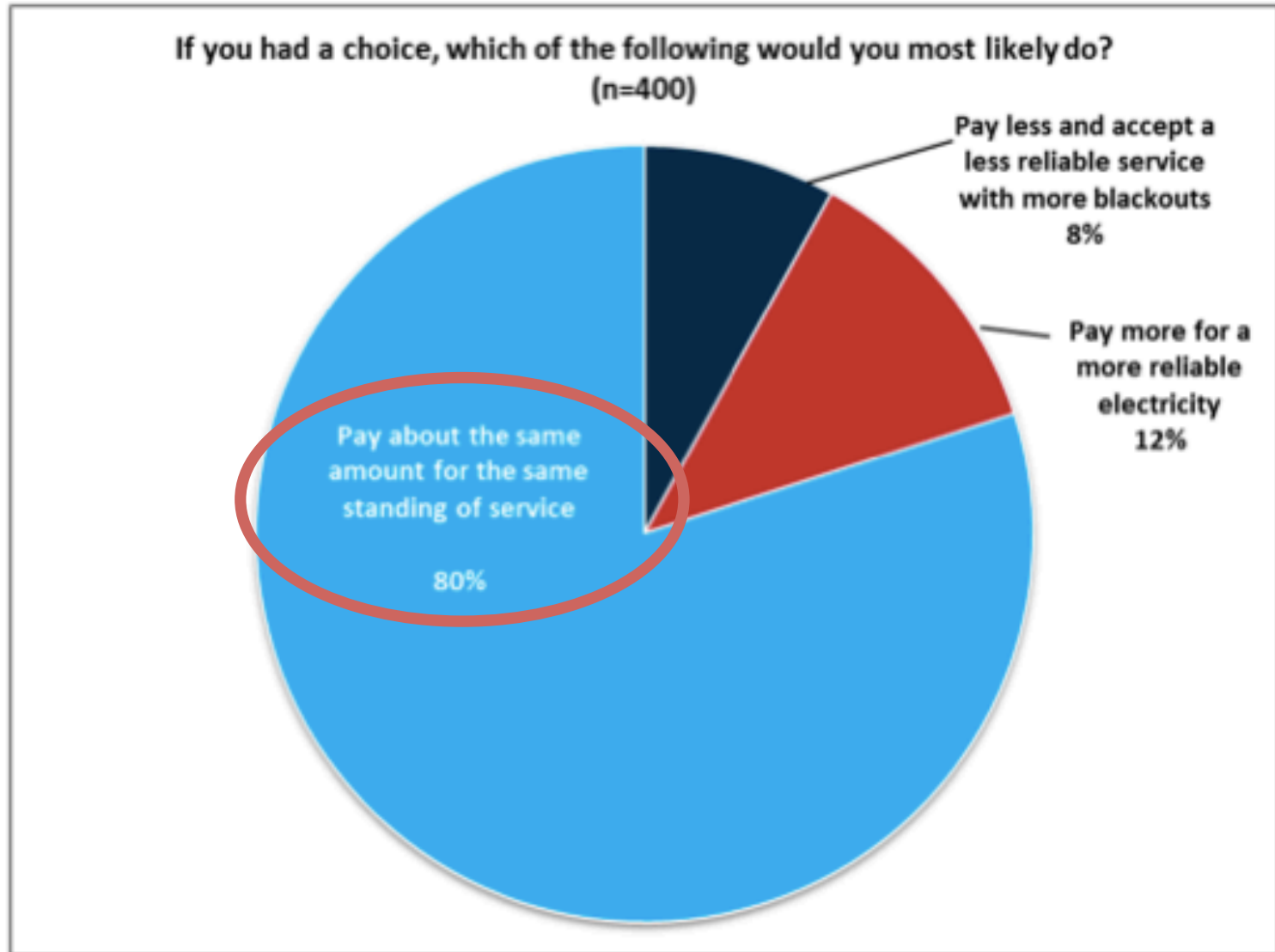
Price versus reliability trade-off



Source: TransGrid Transitional
Regulatory Proposal Presentation

Transend - Survey Question on Price/Reliability Trade-Off

Figure 3.1 Price and reliability trade-off



Statement from Transgrid's "Revenue Proposal Overview"



Expenditure to meet security and compliance requirements has increased by about 70% from that of the last five years, mainly due to projects to remediate transmission line spans that have been found by a new accurate measurement technology not to meet statutory clearances from the ground.

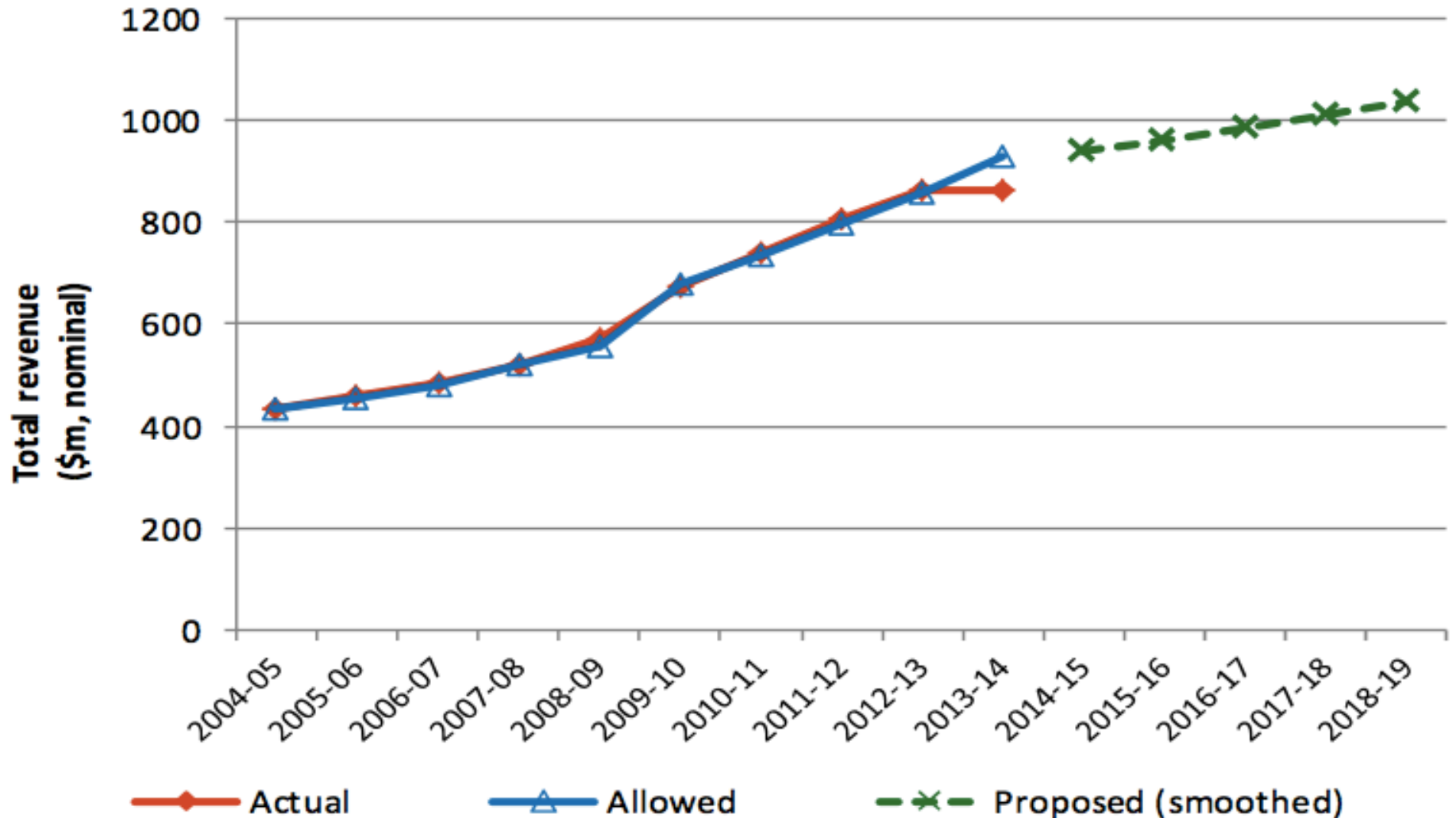
Actual Changes

	2009/10 - 2013/14	2014/15 - 2018/19	Change
Augmentation*	\$653 M	\$77M	88% decrease
Replacement	\$703 M	\$1,174 M	67% increase
Security Compliance	\$49 M	\$164 M	3.3 times previous period
Support the Business	\$346.7 M	\$310 M	10% decrease
Total	\$1.752 BILLION	\$1.725 BILLION	1.5% increase

TRANSGRID REVENUE PROPOSAL

Proposed Revenue

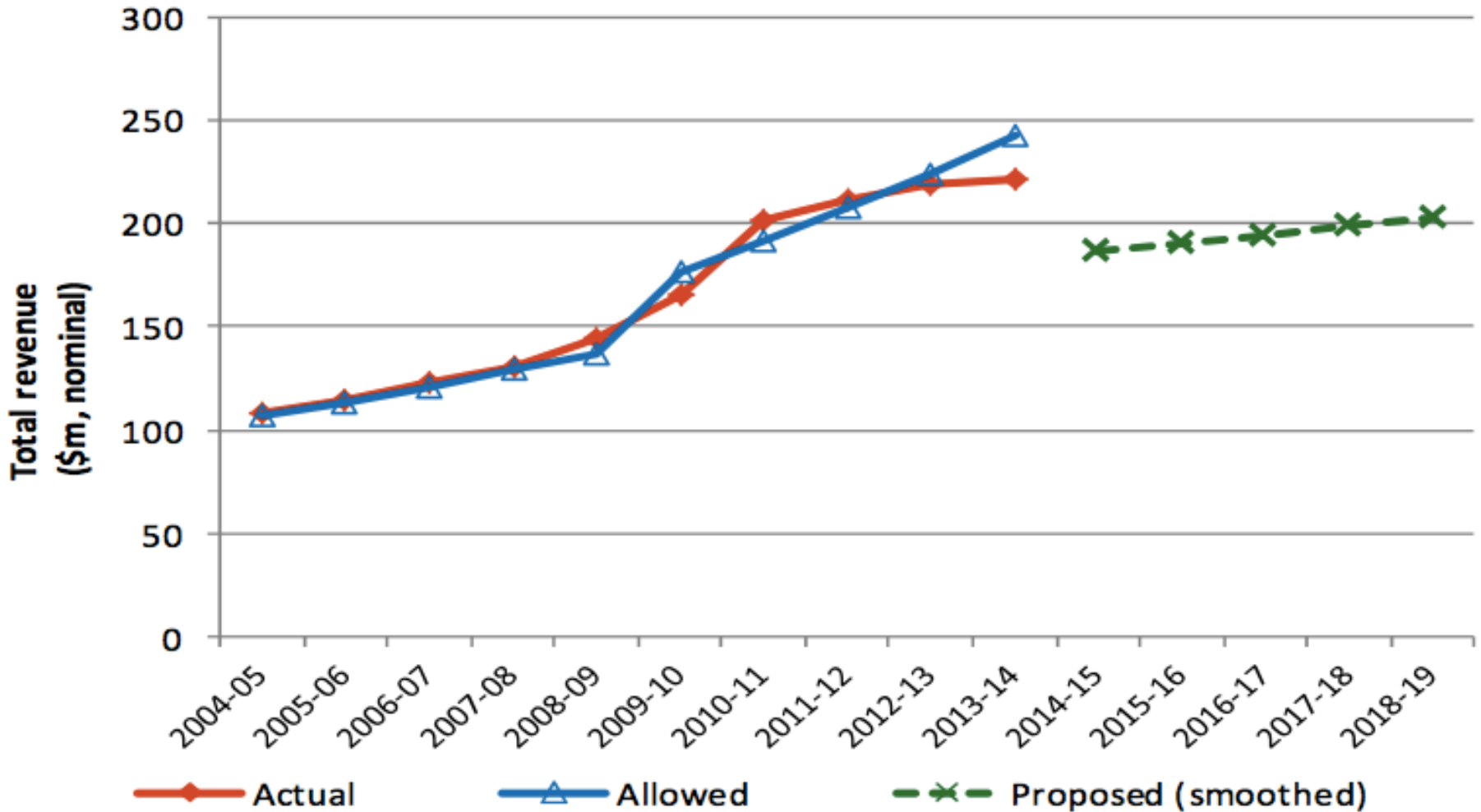
Figure 7 TransGrid regulated transmission revenue (\$m, nominal)



Comparison – Transend's Proposed Revenue

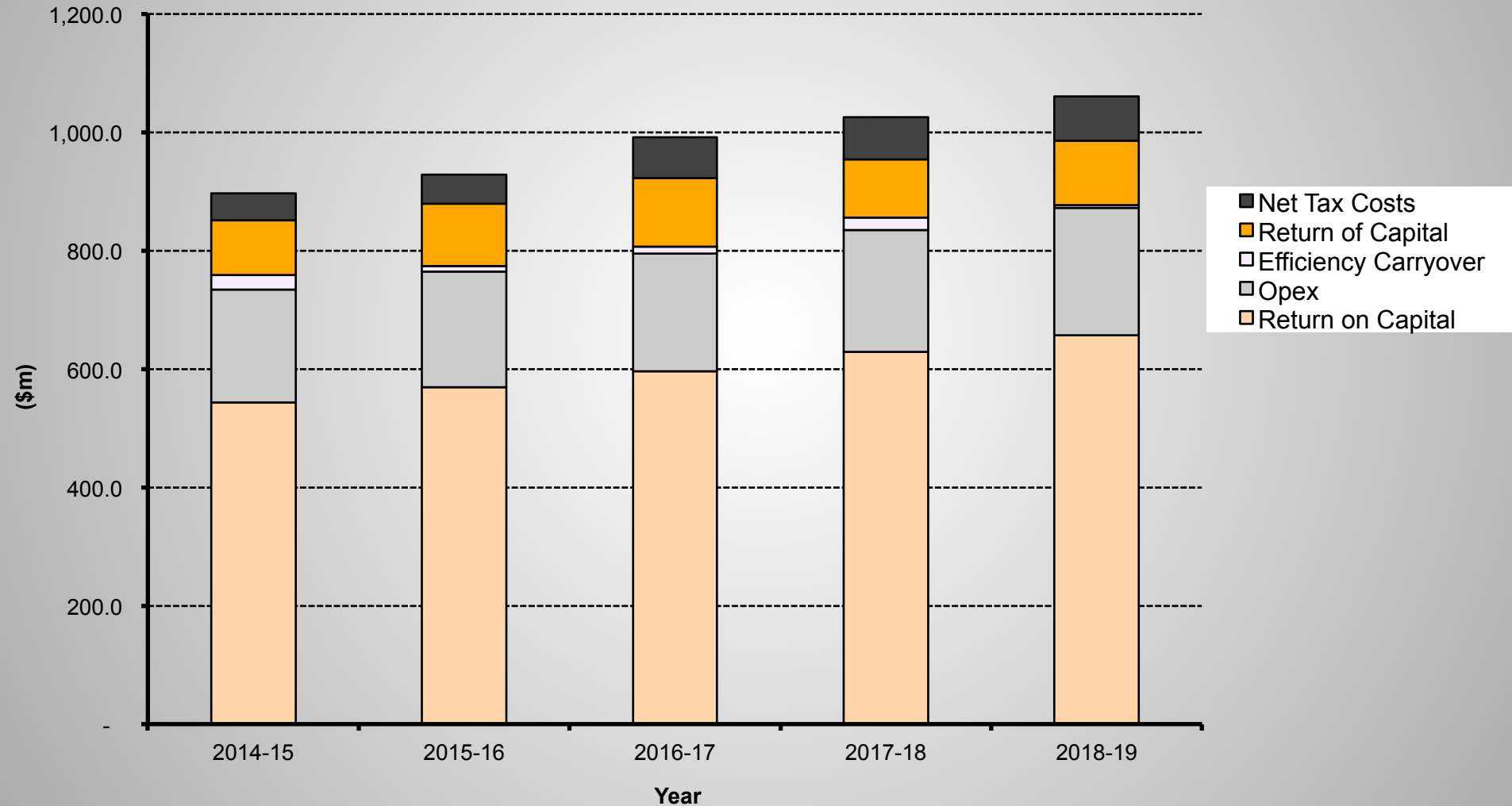
Figure 8

TasNetworks regulated transmission revenue (\$m, nominal)



TransGrid - Proposed Annual Revenue Breakdown

Chart 3 - Annual Building Block Revenue Requirement Components



Source: TransGrid Transitional Regulatory Proposal

TransGrid - Proposed Annual Revenue Breakdown

Table 1.3

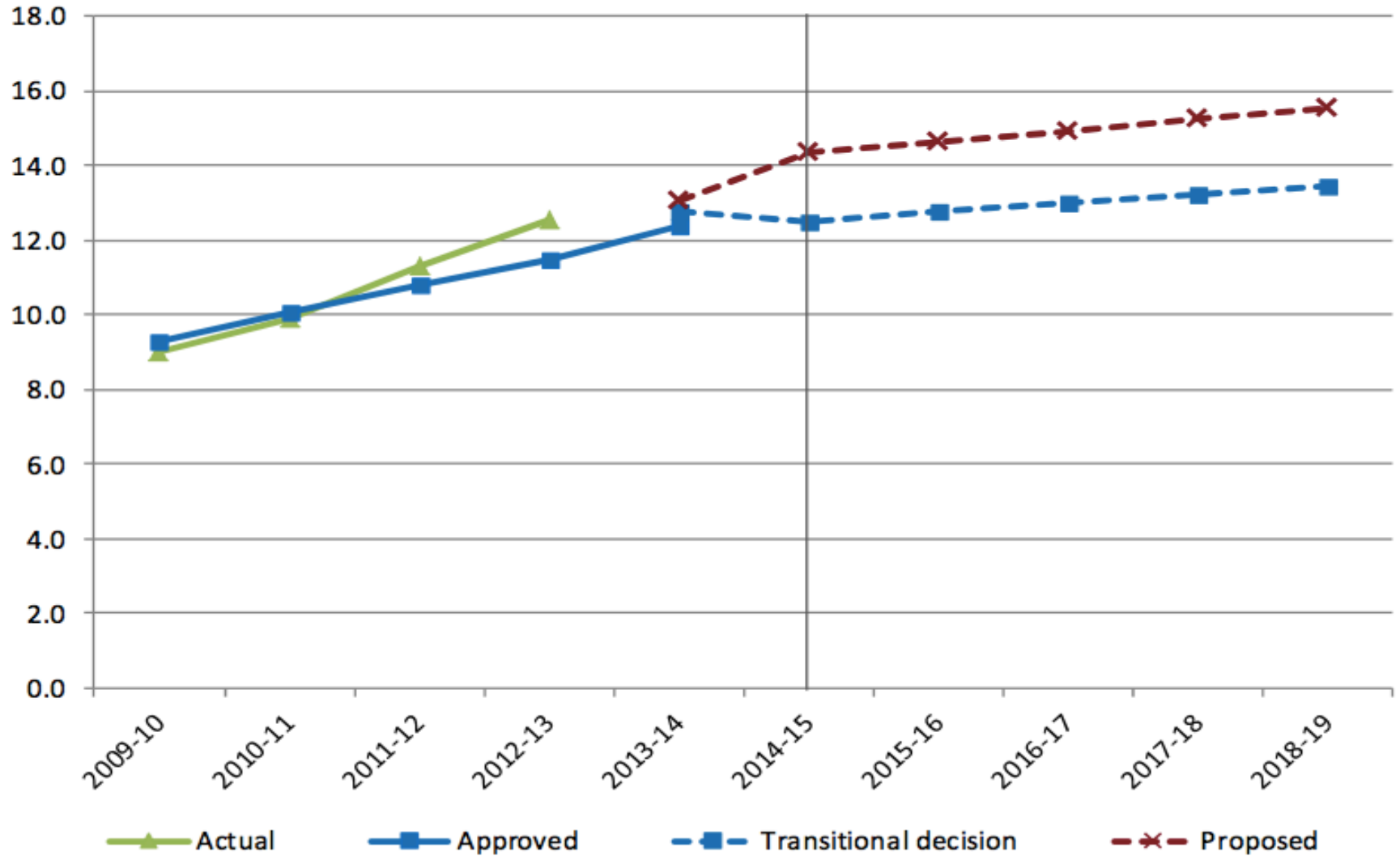
Proposed Maximum Allowed Revenue (\$m nominal)

	2014/15	2015/16	2016/17	2017/18	2018/19
Return on Capital	542.8	567.4	596.1	615.6	638.2
Return of Capital (Regulatory Depreciation)	91.7	106.7	121.6	107.5	120.9
Operating Expenditure	192.2	206.3	218.7	218.5	226.7
Efficiency Carryover	21.0	12.1	14.5	23.5	0.0
Tax Allowance	44.6	48.1	68.0	69.6	72.9
Unsmoothed Revenue	892.4	940.7	1,018.9	1,034.8	1,058.7

PRICE IMPACTS OF TRANSGRID'S PROPOSAL

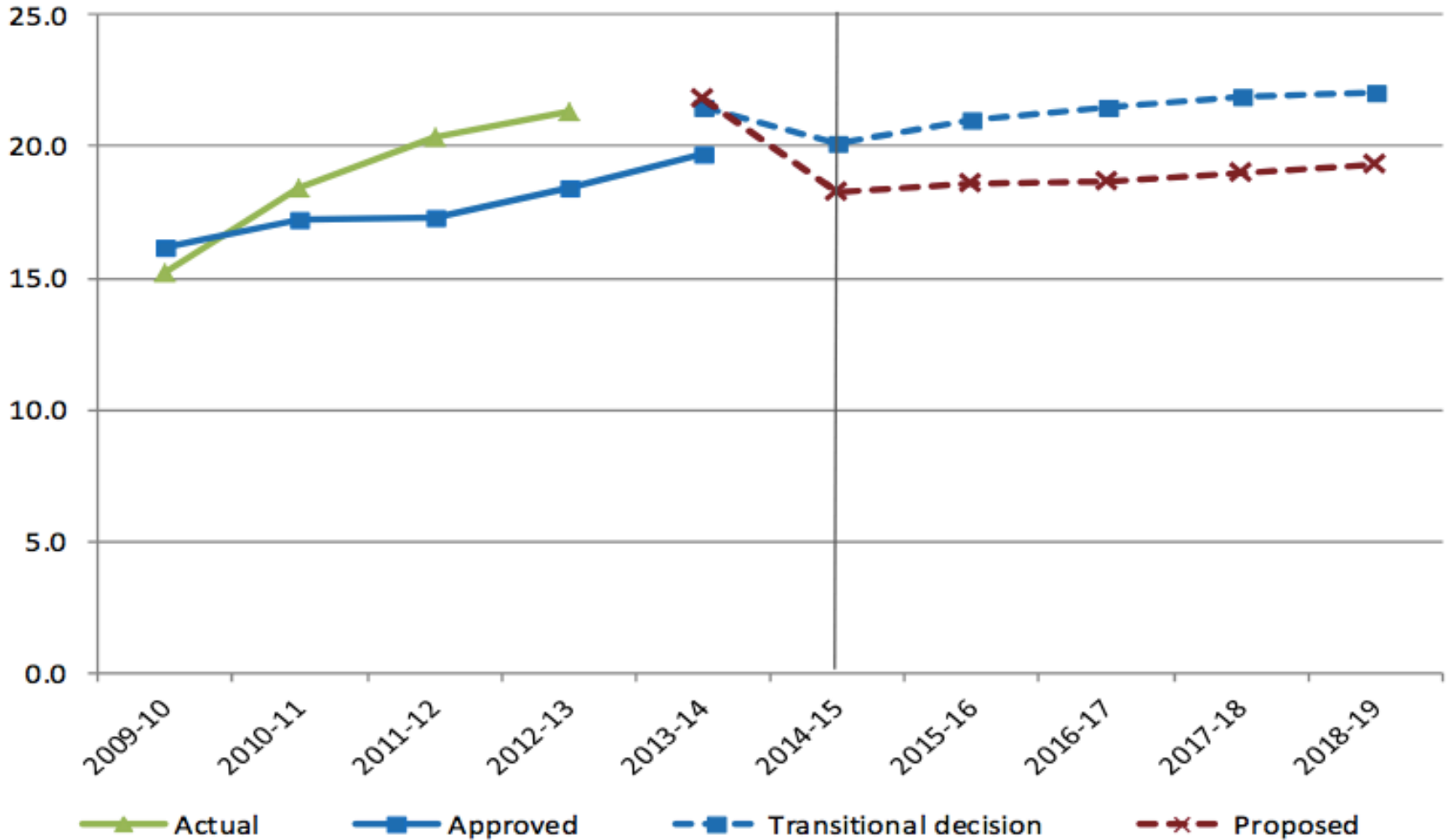
TransGrid Proposal - Price Impacts

Figure 1 TransGrid—Indicative transmission price path from 2009–10 to 2018–19 (\$/MWh, nominal)⁷



Comparison - Transend Proposal Price Impacts

Figure 2 TasNetworks—Indicative transmission price path from 2009–10 to 2018–19 (\$/MWh, nominal)



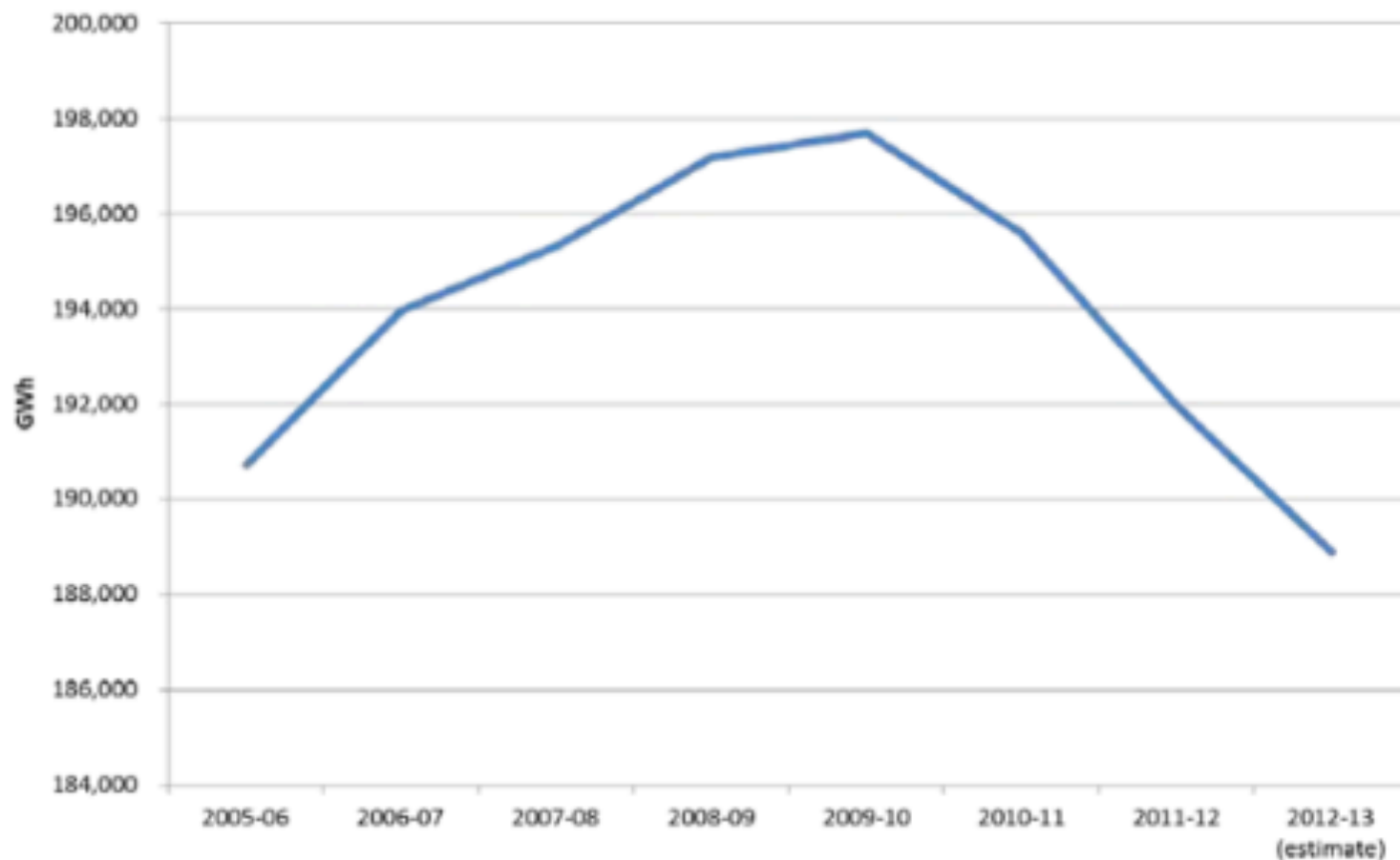
PRICE IMPACTS

SENSITIVITY TO ENERGY

CONSUMPTION

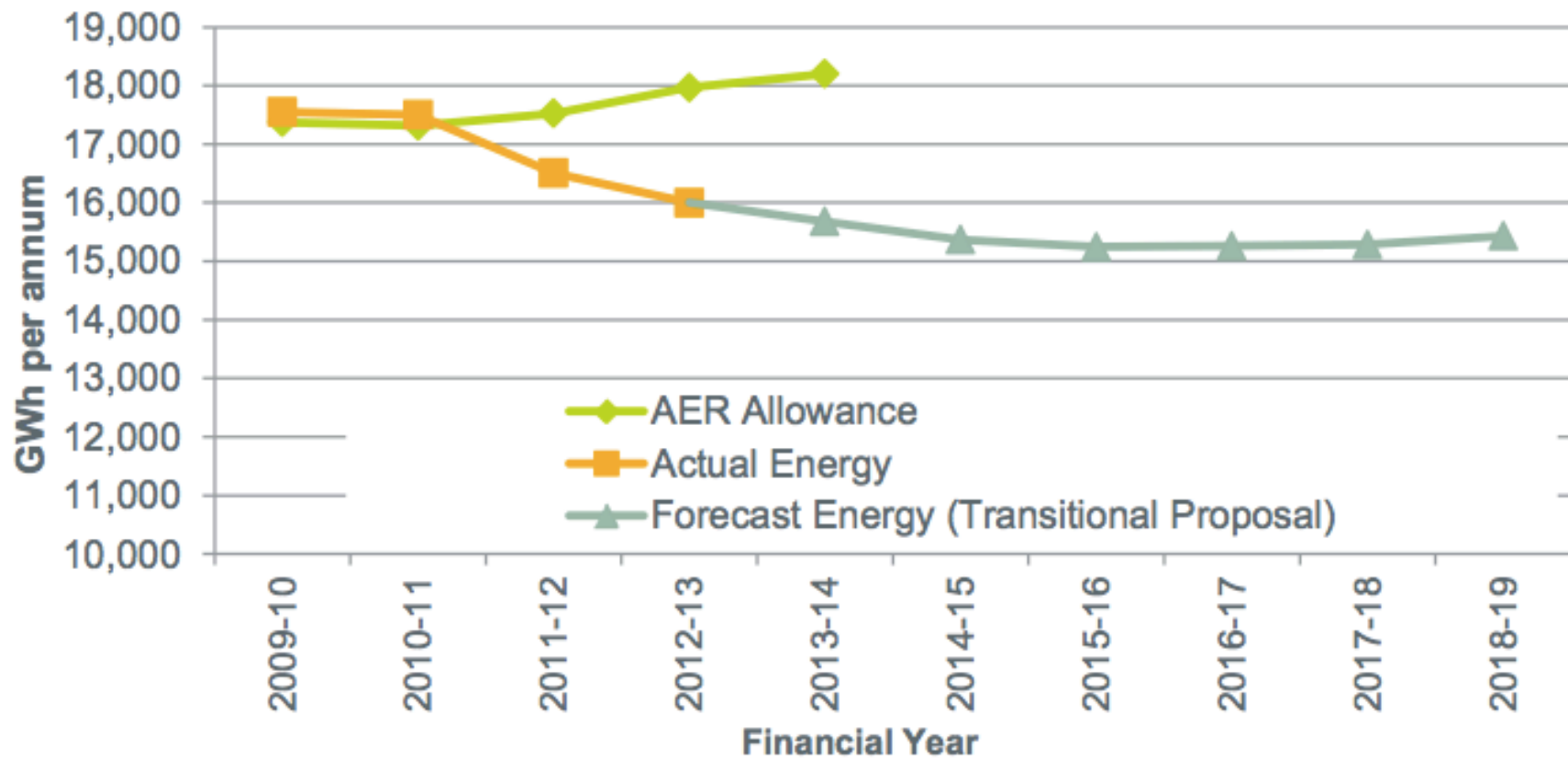
Consumption Trend – National Electricity Market

Figure 2.2 Historic average demand in the NEM



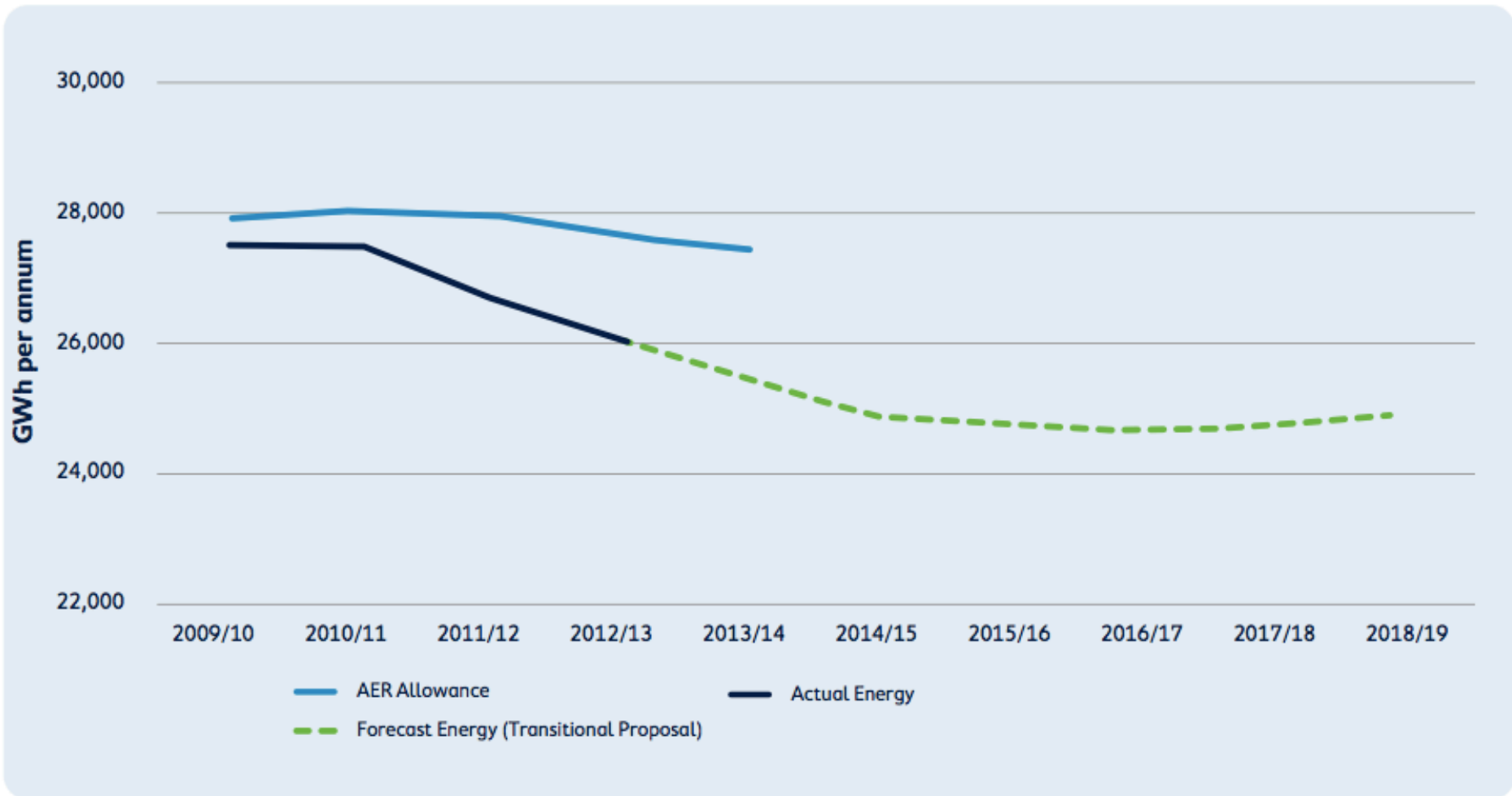
Consumption Trend Graph – Endeavour Energy

Figure 6: Energy Volume Forecast

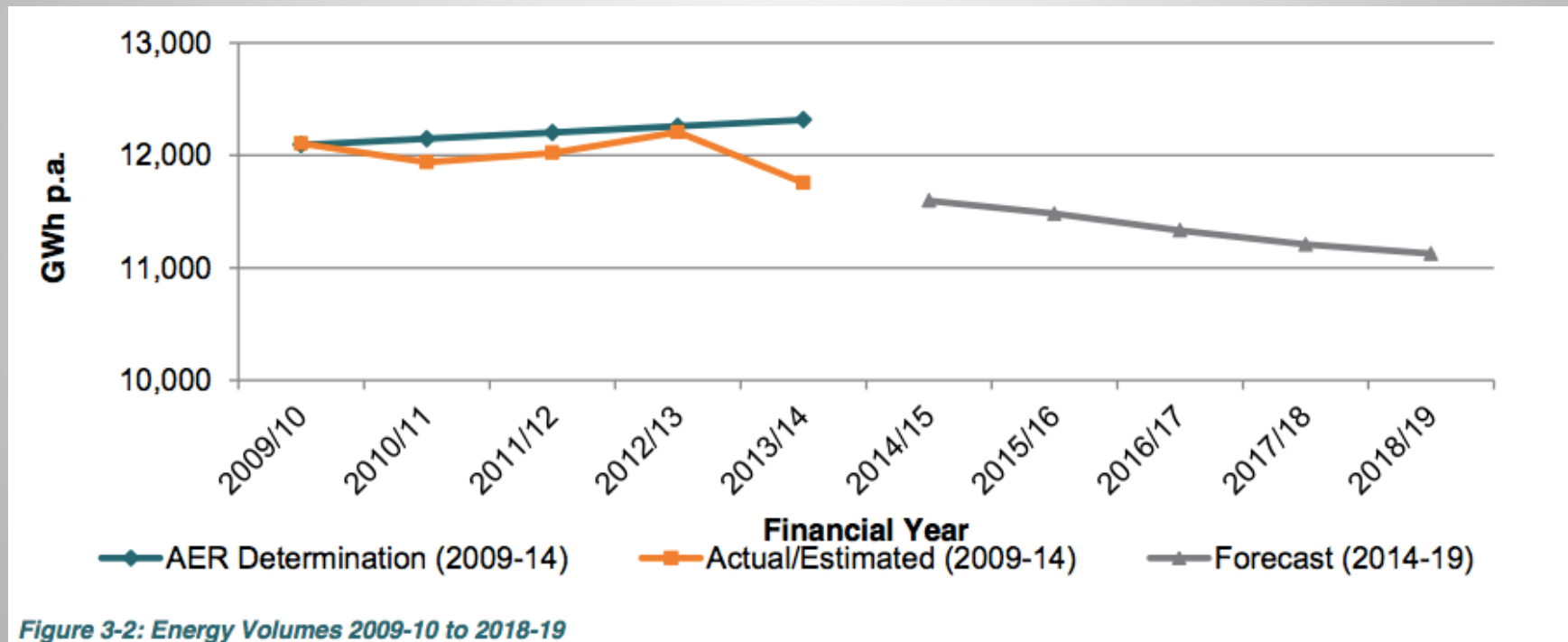


Consumption Trend Graph – Ausgrid

Figure 11 – Forecast energy consumption



Consumption Trend Graph – Essential Energy



Source: Essential Energy Transitional Revenue Proposal

Sensitivity of Price Impacts to Energy Delivered

- Under a *revenue cap*, TransGrid's revenues are fixed, irrespective of the actual energy delivered
- TransGrid's prices (cents/kWhr) are inversely proportional to the energy delivered, yet its revenue proposals do not provide details of the sensitivity of its prices to different energy delivered assumptions
- In recent regulatory determinations, the networks (and the AER) have significantly understated the price impacts due to incorrect 'energy delivered' assumptions
- Consumers expect the AER to provide a sensitivity analysis that outlines the sensitivity of the TransGrid's prices to credible 'energy delivered' scenarios
- This should include the price impacts for different consumer groups, e.g. residential, small - medium businesses, and large consumers

PRICE IMPACTS

INEQUITABLE PRICE INCREASES
FOR LARGE CONSUMERS?

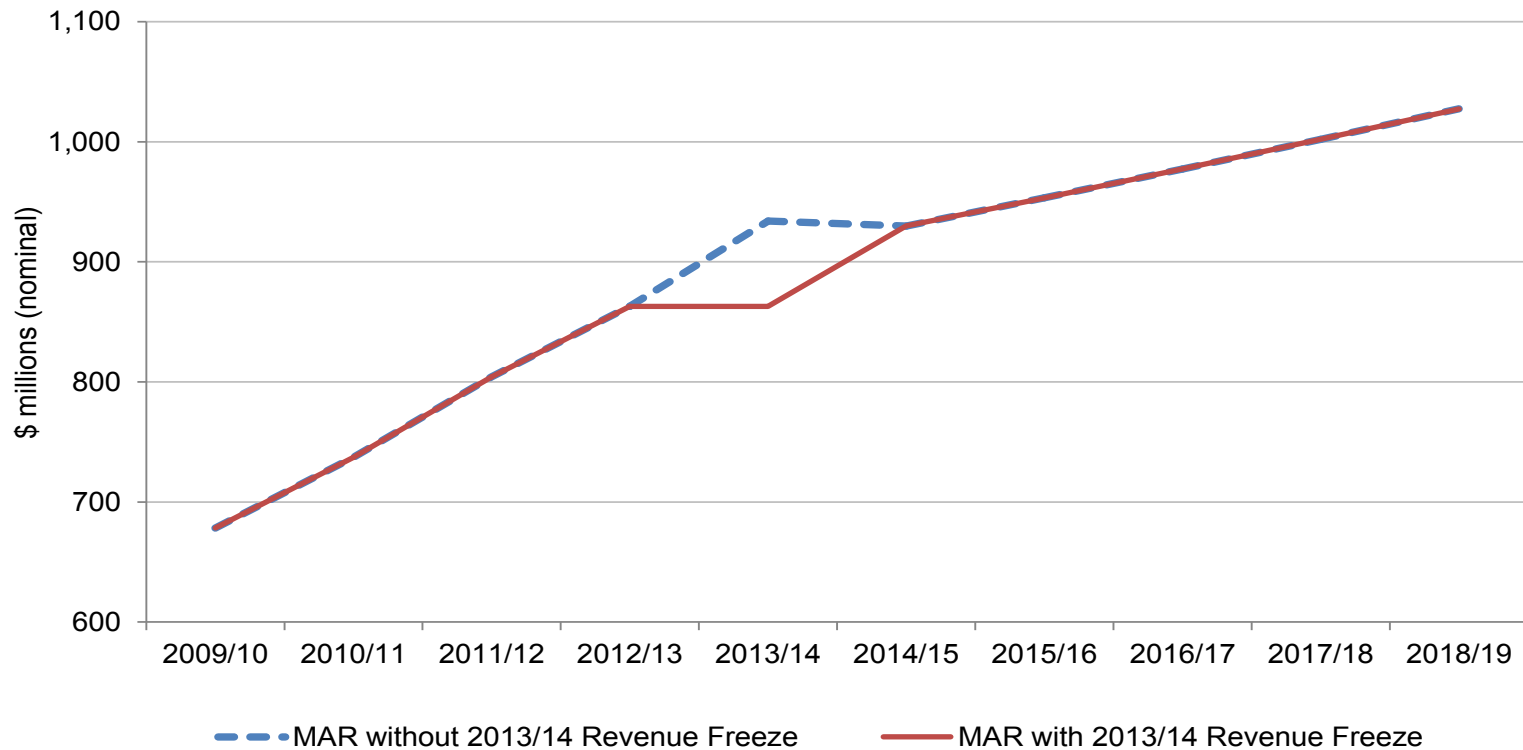
Inequitable Price Increases for Large Energy Users?

- Feedback from large consumers suggests that TransGrid's approach to revenue recovery is resulting in disproportionately higher price rises for large energy consumers
- It appears that large consumers may have been allocated a disproportionately higher share of TransGrid's recent revenue increases
- These price increases appear to have been passed on with minimal consultation or explanations - making it very difficult for the businesses to plan or budget for the impacts
- Large consumers expect the networks' costs to be allocated to all tariffs on a cost reflective and equitable basis

PRICE IMPACTS

TRANSGRID'S INTENTION TO
CLAW BACK ITS 2013/14
"REVENUE FREEZE" REVENUE

Maximum Allowed Revenue (MAR)



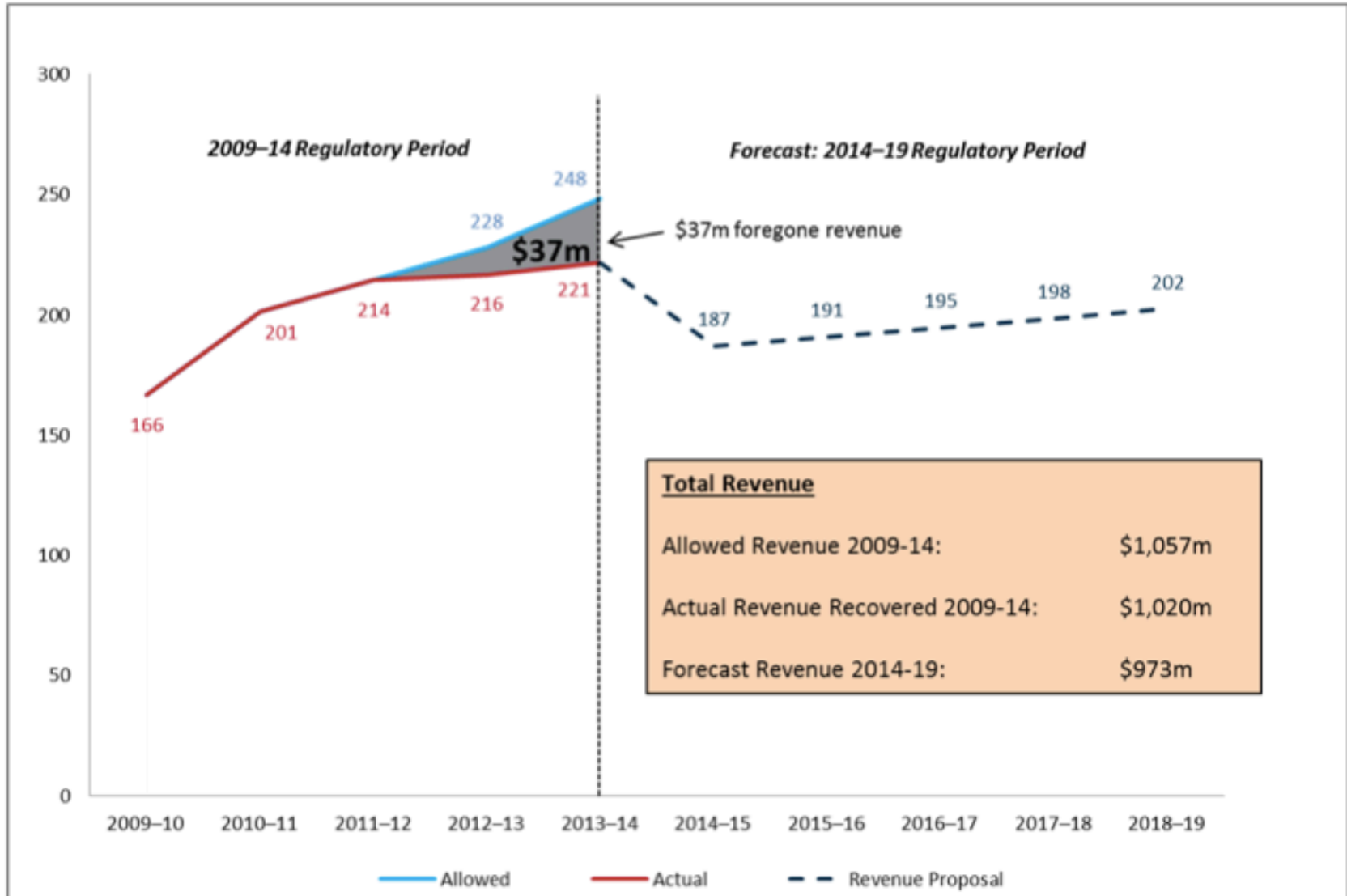
MAR forecasts for 2014/15 to 2018/19 are based on the Transitional Revenue Proposal and exclude recovery of any revenue shortfall from the freeze applied in 2013/14.

TransGrid's Claw Back of its "Revenue Freeze" revenue

- TransGrid has confirmed that it intends to recover the revenue associated with its 2013/14 "revenue freeze" (over \$70 million)
- TransGrid has not transparently disclosed this intention in its Revenue Proposals, or in its communications with consumers on the "revenue freeze"
- Consequently, consumers are likely to feel misled by TransGrid's previous communications on the "revenue freeze"
- To protect the integrity of the revenue determination process, the AER needs to ensure much more transparency on this issue

Comparison - Transend Historical/Proposed Revenue

Figure 11.1 Revenue requirements for the current and forthcoming regulatory period (\$m nominal)



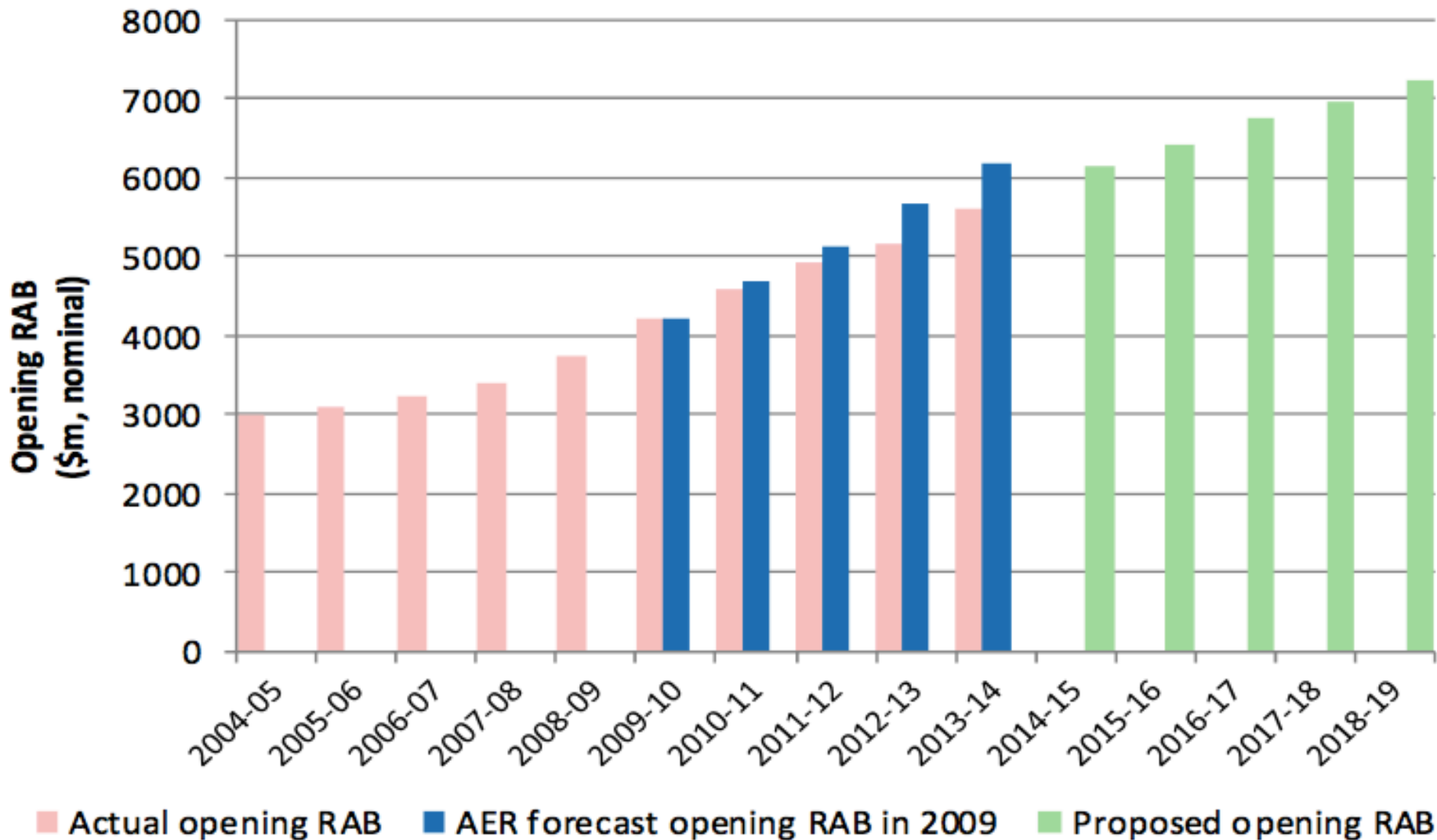
RETURN ON CAPITAL

Return on Capital

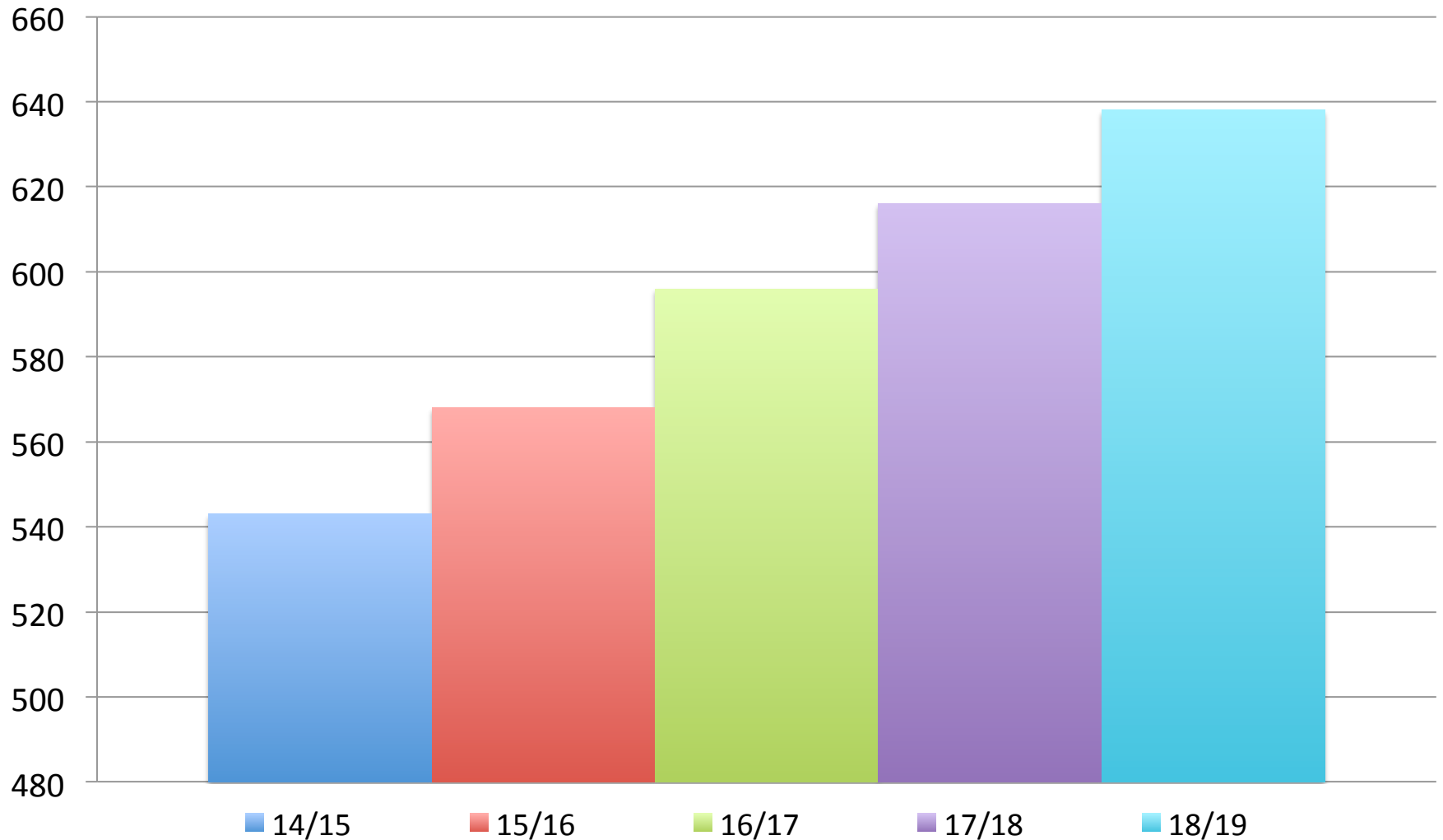
- The allowed '*return on capital*' is the return a network business requires to attract investment in the network
- Return on Capital = *Regulatory Asset Base (RAB)* x '*Rate of Return*'
- The *Regulatory Asset Base (RAB)* is the total value of all the capital investments the business makes

TransGrid – Historical and Proposed RAB Growth

Figure 3 TransGrid - Regulatory Asset Base values (\$ nominal)



TransGrid - Proposed Growth in 'Return on Capital'



Source: TransGrid Transitional Revenue Proposal

The AER's *Rate of Return* Guideline

- The AER's *Rate of Return* guideline outlines how the AER will estimate the returns on equity and debt for the network businesses:
 - **Return on Equity** – the return shareholders require to continue to invest in the business
 - **Return on Debt** - the interest the network businesses pay when borrowing money to invest
- The AER assumes that efficient network businesses fund their investments by borrowing 60 per cent of the required funds, and raising the remaining 40 per cent from equity
- The AER's new approach to determining the Rate of Return was developed through significant consultation with a diverse range of stakeholders

AER Rate of Return Guideline - Return on Equity

- The AER's *Rate of Return Guideline* uses a range of models, methods, and information to inform its *return on equity* estimate
- Key parameters include:
 - Returns on a risk-free asset - the **Risk Free Rate**
 - Returns to the broader market – the **Market Risk Premium (MRP)**
 - The extent to which returns on equity for network businesses vary with market conditions in general - the **Equity Beta**
- The AER determines a point estimate within a range of estimates

AER Rate of Return Guideline - Return on Debt

- The AER's new approach is to apply the average interest rate that a network business would face if it raised debt annually in ten equal parcels - the **trailing average portfolio approach**
- It assumes that every year, one-tenth of the debt of a network business is re-financed
- The previous approach assumed that current interest rates were the best measure of the interest rates that are likely in the future
- To implement new approach, the AER guideline incorporates transitional arrangements to transition the businesses from the old to the new approach over 10 years

RETURN ON CAPITAL

**TRANSGRID'S RESPONSE TO
THE NEW RULES**

TransGrid's Proposal - Rate of Return

- The Networks are required to propose an indicative rate of return range that:
 - takes into account available market information
 - takes into account expected market trends
 - **has regard to the rate of return guidelines published by the AER**
- TransGrid is proposing significant departures from the AER's rate of return guideline
- In essence, TransGrid has combined estimates from the old and new approaches in ways that result in a significantly increased WACC

Transgrid's Proposal - Key Departures from the ROR Guideline

➤ Cost of Equity

- Significant regard to alternative models/ approaches to the guideline models/approaches

➤ Cost of Debt

- Proposed to immediately apply a trailing average portfolio rather than applying the 10 year transition period

Consumers' Responses to TransGrid's Proposed Departures

- Consumers have strongly objected to the TransGrid's' proposed departures from the *Rate of Return Guideline*
- The *Rate of Return Guideline* was developed through extensive consultation over a 12 month period with a broad range of stakeholders
- By contrast, TransGrid's proposed departures have not been submitted to any rigorous analysis or stakeholder consultation
- Most of the information TransGrid is using to support its proposed departures was already considered by the AER during the development of the ROR guideline

RATE OF RETURN

THE AER'S INITIAL APPLICATION
OF THE NEW RULES

WACC Determinations - The AER's obligations Under the New Rules

- The new rule require the AER to:
 - Consider a range of factors when determining the allowed rate of return, **including relevant estimation methods, financial models, market data and other evidence**
 - Exercise its discretion in estimating the rate of return, by **adopting the approach it considers most appropriate** to achieve WACC outcomes in the long-term interests of consumers

*“The amendments made **will provide the Australian Energy Regulator (AER) with additional strength and flexibility** in setting revenues and prices for electricity and gas network service providers”*

*“The Commission has provided high-level principles to guide the estimation **and left the judgement as to the best approach to the regulator to make, consistent with achieving the overall allowed rate of return objective”***

WACC - NSW Transitional Decisions

WACC Component	NSW DNSPs' Proposals	TransGrid's Proposal	AER'S Transitional Decisions
Cost of Equity			
Risk Free Rate	4.78%	-	4.3%
Market Risk Premium	6.5%	-	6.5%
Equity Beta	0.8	-	0.7
Total Cost of Equity	9.98%	10.7%	8.9%
Cost of Debt	7.55%	7.4%	7.5%
Total WACC	8.52%	8.9%	8.1%

Source: AER Transitional Decisions

WACC - New Rules compared to old Rules

WACC Component	AER Decision on SP AusNet (Jan 2014)	AER Transitional Decisions	Difference
Cost of Equity			
Risk Free Rate	4.31%	4.3%	- 0.01%
Market Risk Premium	6.5%	6.5%	-
Equity Beta	0.8	0.7	- 0.1
Total Cost of Equity	9.51%	8.9%	- 0.61%
Cost of Debt	6.79%	7.5%	+ 0.71%
Total WACC	7.87%	8.1%	+ 0.23%

Sources: AER Regulatory Determination for SP AusNet, AER Transitional Decisions

The AER's Initial Application of the new Rules

- Consumers are concerned that the AER has inappropriately applied its discretion by selecting the highest value in the WACC range
- This is in addition to a number of the input parameters in the *AER Rate of Return Guideline* having already been selected at the top of the possible ranges e.g:
 - For the 'equity beta' range of 0.4 to 0.7 - the AER has adopted 0.7
- Consumers expect the AER to exercise its discretion in a more balanced manner

Comparisons with WACC Decisions of Other Regulators

- Over the past decade, consumers have repeatedly expressed concerns regarding the AER's WACC determinations being higher than the determinations of other regulators in Australia and overseas
- Comparisons with Australian Regulators
 - The AER has consistently set higher WACCs compared to the determinations of the ACCC and state regulators
- Comparisons with International Regulators
 - The AER has consistently set higher WACCs compared to equivalent international regulators
 - For example, The UK regulator (Ofgem) recently outlined a 2015/16 WACC of 3.8% for five UK distribution entities, with further falls in the WACC projected in subsequent years

Rate of Return - Relevant Market Information

- The new rules require the AER to consider “market data and other evidence” when making its ‘rate of return’ determinations
- There is growing evidence that investors are paying substantial premiums above the Regulated Asset Base (RAB) when investing in Australian energy networks, e.g:
 - CKI’s recent purchase of a stake in DUET has an implied RAB multiple of 128%
 - The current offer by CKI for Envestra has an implied RAB multiple of over 150%
- The networks’ profitability growth trends indicate that the industry is significantly more profitable than the regulatory framework assumes
- Consumers expect the AER to take account of this ‘market information’ when making its WACC determinations

WACC – TransGrid’s Transitional and Full Revenue Proposals

WACC Component	TransGrid Transitional Proposal	AER Transitional Decisions	TransGrid Full Revenue Proposal
Cost of Equity			
Risk Free Rate	-	4.3%	-
Market Risk Premium	-	6.5%	-
Equity Beta	-	0.7	-
Total Cost of Equity	10.7%	8.9%	10.5%
Cost of Debt	7.4%	7.5%	7.72%
Total WACC	8.9%	8.1%	8.83%

Sources: Transend and TransGrid Revenue Proposals and AER Transitional Decisions

WACC – TransGrid and Transend Proposals

Table 8 **Businesses proposed rates of return (per cent)**

	TransGrid	TasNetworks
Overall WACC	8.83	7.58
Return on equity	10.50	8.70
Return on debt	7.72	6.84
Gearing	60	60
Imputation credits	25%	50%

Source: AER - TransGrid, TasNetworks and Directlink - electricity transmission determination Issues Paper

CAPEX

TransGrid - Proposed Capital Expenditure

	2009/10 - 2013/14	2014/15 - 2018/19	Change
Augmentation*	\$653 M	\$77M	88% decrease
Replacement	\$703 M	\$1,174 M	67% increase
Security Compliance	\$49 M	\$164 M	3.3 times previous period
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Total	\$1.752 BILLION	\$1.725 BILLION	1.5% increase

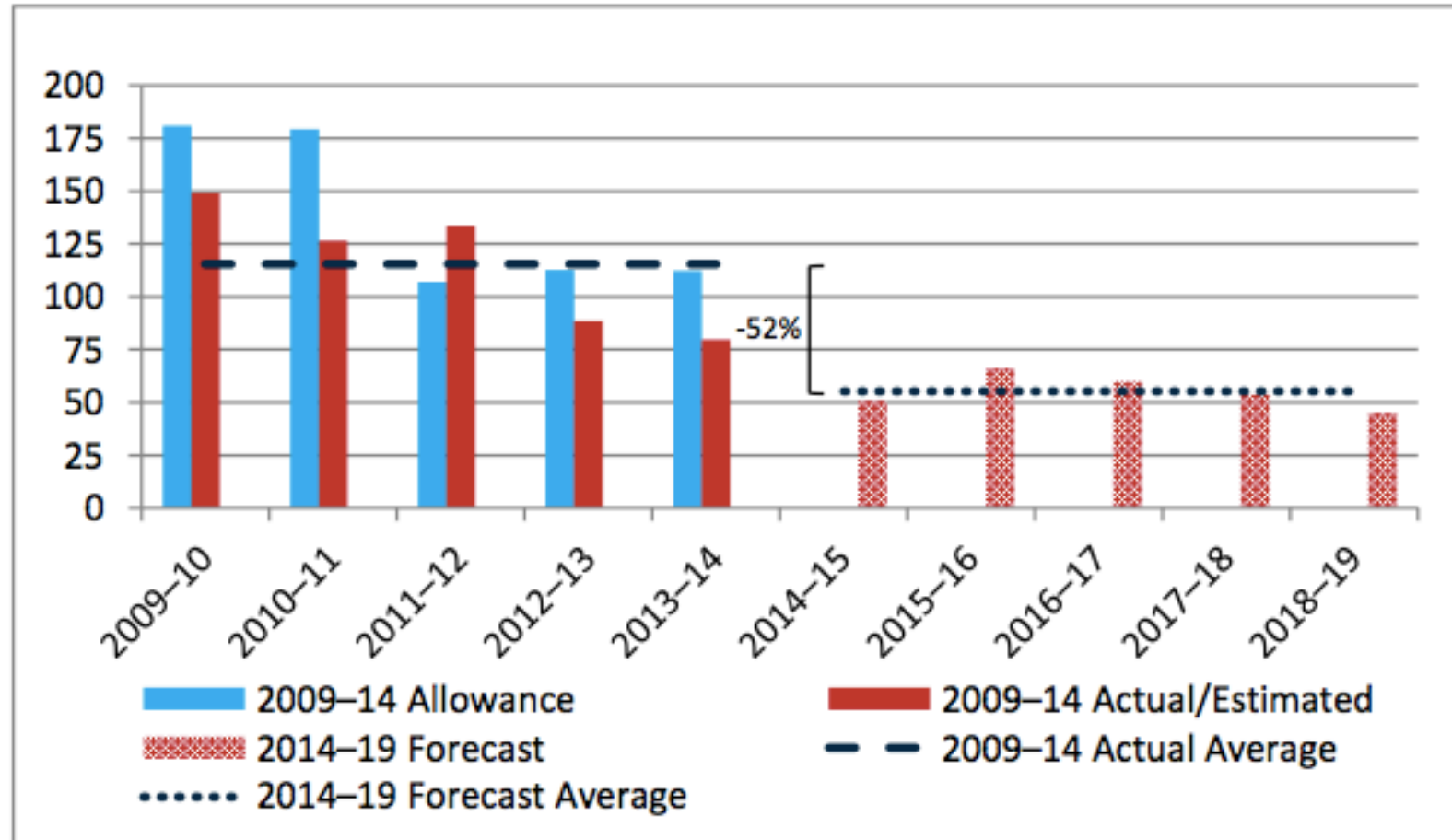
*Excluding the Western Sydney DNSP Project (\$407M spent during previous period , as stated in TransGrid's Transitional Proposal)

Note – TransGrid's 'Historical' figures changed significantly between the Transitional and Full Proposals

Source: TransGrid Revenue Proposals

Comparison – Transend's Proposed Capex

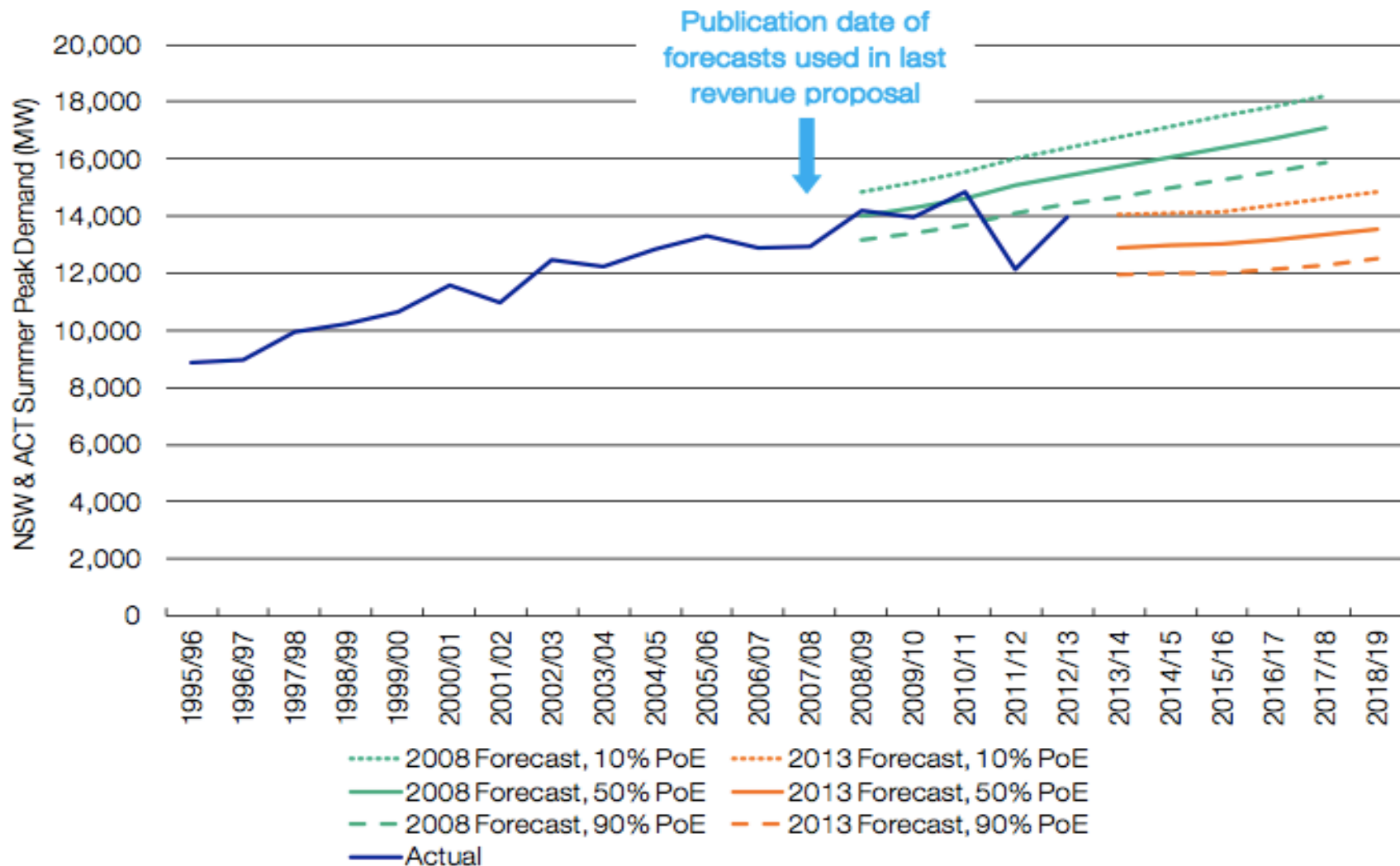
Figure 5.4 Overview of forecast and actual capital expenditure (\$m 2013–14)



Peak Demand Forecasts

Figure 3.1

Comparison of Peak Demand Forecasts in 2008 and 2013



Proposed Augmentation CapEx

- The load forecasts for the next regulatory period are significantly lower than the forecasts used to justify augmentation capex during the current period
- Consequently, minimal augmentation capex should be anticipated for the next regulatory period
- TransGrid's Transitional Proposal proposed \$377M of augmentation capex for the next regulatory period
- This was reduced to \$77M in the Full Proposal, although it appears that some of the augmentation projects have now been moved to other capex categories

Replacement CapEx During Previous Period

- TransGrid overspent its replacement capex allowance by over \$140 million during the previous regulatory period, significantly offsetting its reductions in augmentation capex
- In doing so, TransGrid has effectively 'pre-installed' a good deal of replacement capex for the next regulatory period

Proposed Replacement CapEx

- The level of the TransGrid's proposed replacement capex is clearly an ambit claim
- TransGrid is proposing to increase its replacement capex by around 70%, with no substantial justification, other than suggesting that its asset base is ageing
- Premature replacement of assets is a key driver of unnecessary network expenditure and unnecessary price increases

Standard Asset Lives?

Table 9.1 Standard asset lives

Asset class	Standard life (years)
Transmission line assets—long life (60)	60
Transmission line assets—medium life (45)	45
Transmission line assets—short life (10)	10
Substation assets—long life (60)	60
Substation assets—medium life (45)	45
Substation assets—short life (15)	15
Protection and control—short life (15)	15
Protection and control—very short life (4)	4
Transmission operations—short life (10)	10
Transmission operations—very short life (4)	4
Communication assets—medium life (45)	45
Communication assets—short life (10)	10
Communication assets—very short life (5)	5
Other—medium life (40)	40
Other—short life (9)	9
Other—very short life (4)	4
Land	N/A

Source: Transend Revenue Proposal

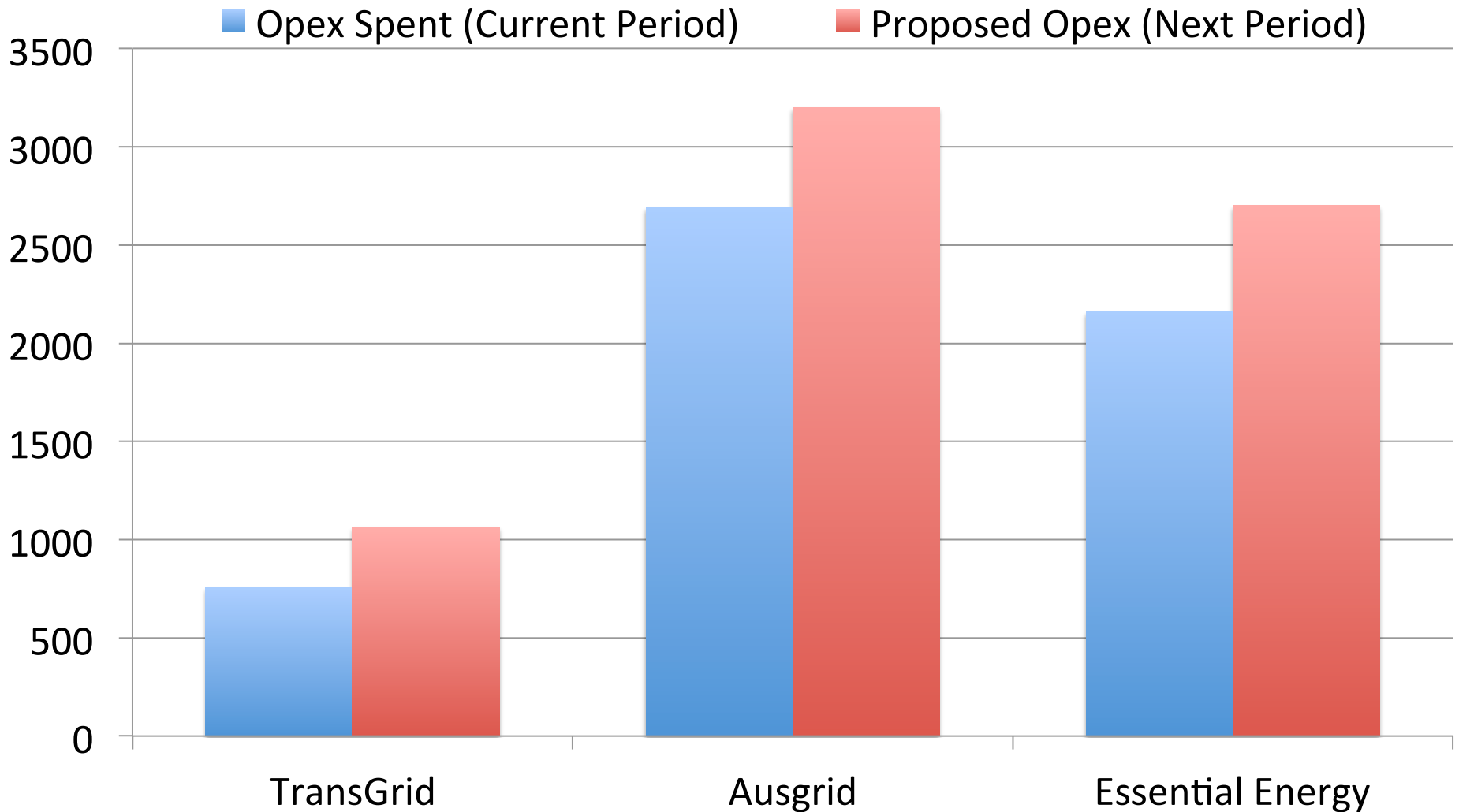
Asset Categories and Standard Lives

No	Asset Class	Asset Life (Years)
1	Transmission Lines (2014-18)	50
2	Underground Cables (2014-18)	45
3	Substations (2014-18)	40
4	Secondary Systems (2014-18)	15
5	Communications (2014-18)	10
6	Business IT (2014-18)	4
7	Minor Plant, Motor Vehicles and Mobile Plant (2014-18)	8
8	Transmission Line Life Extension (2014-18)	25
9	Land and Easements	N/A

Source: TransGrid Revenue Proposal

OPEX

Proposed Opex Increases



Source: Derived from NSPs' Regulatory Information Notice (RIN) Responses

Proposed Opex

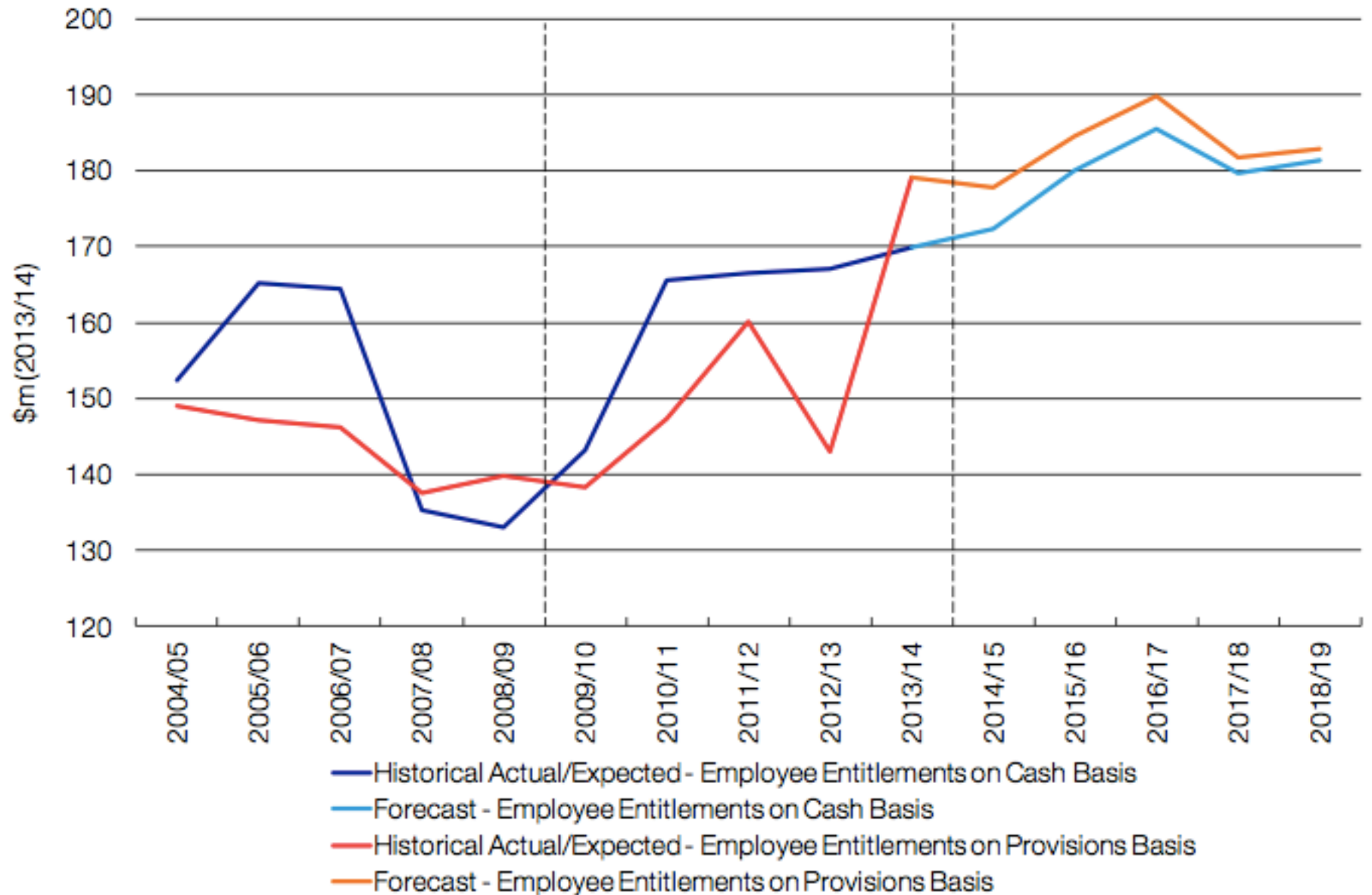
- Most NSW networks under-spent their opex allowances during the previous regulatory period, but are proposing significant opex increases during the next period
- TransGrid underspent its total opex allowance by around 10% during the previous period
- However, TransGrid is claiming significant opex increases in the latter part of the current period, and is using those increases as the basis for significant opex increases in the next period
- TransGrid is also proposing significant “new obligations” for the new regulatory period

TransGrid – Proposed Opex Increases

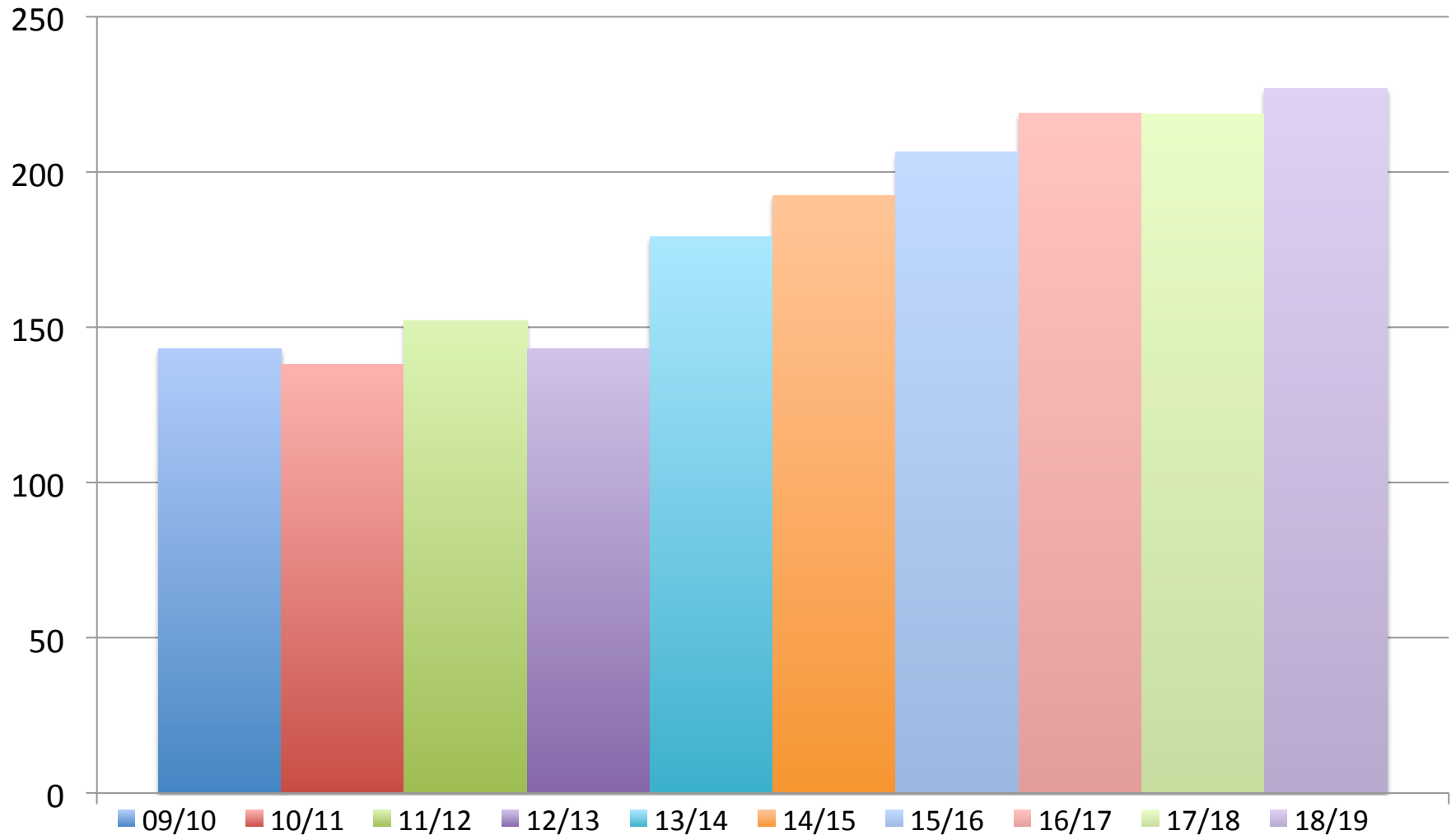
	2009/10 - 2013/14	2014/15 - 2018/19	% Change
Controllable Opex	\$691 M	\$945 M	37% increase
Debt Raising Costs	?	\$41 M	?
Insurance	\$33 M	\$39 M	15% increase
Self Insurance	\$8 M	-	-
Network Support	\$22 M	\$38M	71% increase
Total	\$755 Million	\$1,062 Million	41% increase

Source: TransGrid Revenue Proposal

Historical and Forecast Operating Expenditure Trend (\$m 2013/14)



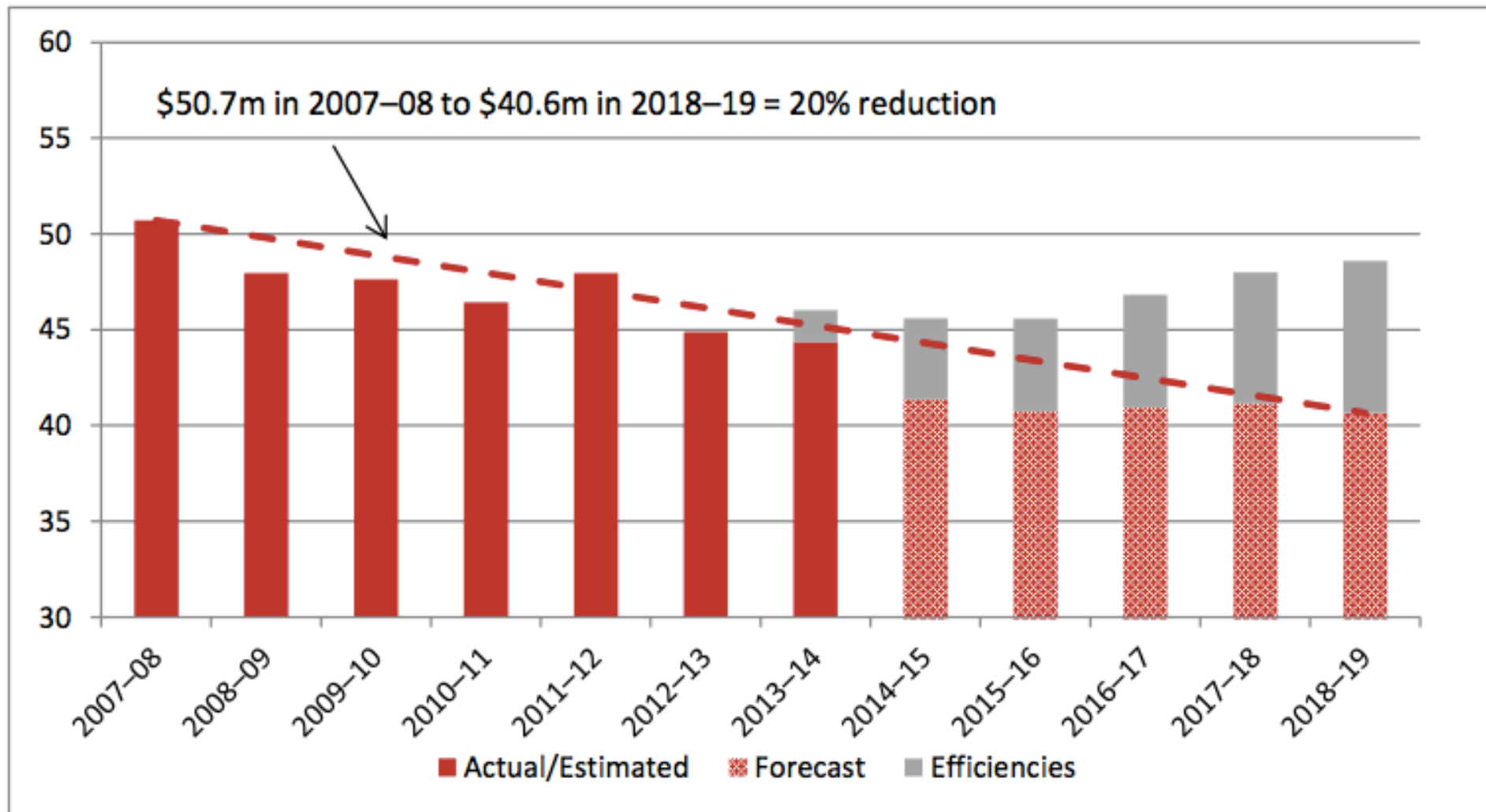
TransGrid's Opex Trend and Proposed Increases



Source: TransGrid Revenue Proposal

Comparison – Transend Controllable Opex Trend

Figure 6.5 Controllable operating expenditure 2007-08 to 2018-19 (\$m 2013-14)



Proposed Step Changes - TransGrid

- TransGrid has managed to identify “step changes” that will increase its opex costs by up to \$8.8M per annum in future years - equating to around 6.5% of its base year controllable opex

TransGrid - Proposed 'Opex Step Changes'

New Obligations and Social Responsibilities (\$m 2013/14)

Step Change and Driver	2014/15	2015/16	2016/17	2017/18	2018/19
Rental fees for communication towers on crown lands (IPART review of rental arrangements and fee schedules)	0.1	0.1	0.1	0.2	0.2
Ongoing requirements arising from the AER's new regulatory guidelines (New regulatory obligations)	0.6	0.6	0.6	0.6	0.6
Transfer of AEMO system operator functions (New regulatory obligations)	0.9	0.9	0.9	0.9	0.9
Easement maintenance (Catch up after response to safety obligations and cost escalation)	2.9	2.2	0.6	0.7	0.3
Consumer engagement program (New regulatory obligations and to meet changing consumer expectations)	2.3	2.2	2.1	2.2	2.2
Increase in demand management innovation allowance (Proactive approach to encouraging demand management)	1.1	2.3	3.3	3.6	2.6
Revenue reset (Regulatory obligation)	-0.1	0.5	0.9	0.1	-0.1

Source: TransGrid Revenue Proposal

Labour Cost Escalation

- TransGrid is claiming its labour costs will increase at rates above CPI:

Table 6.12
Labour Rate Escalation (Nominal)

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Internal labour (TransGrid employee agreement until 1 December 2016, then BIS Shrapnel EGWWS WPI)	2.5%	2.9%	3.6%	4.1%	4.5%	4.7%
External labour (BIS Shrapnel EGWWS WPI)	3.8%	4.0%	4.1%	4.1%	4.5%	4.7%

Source: TransGrid and BIS Shrapnel.

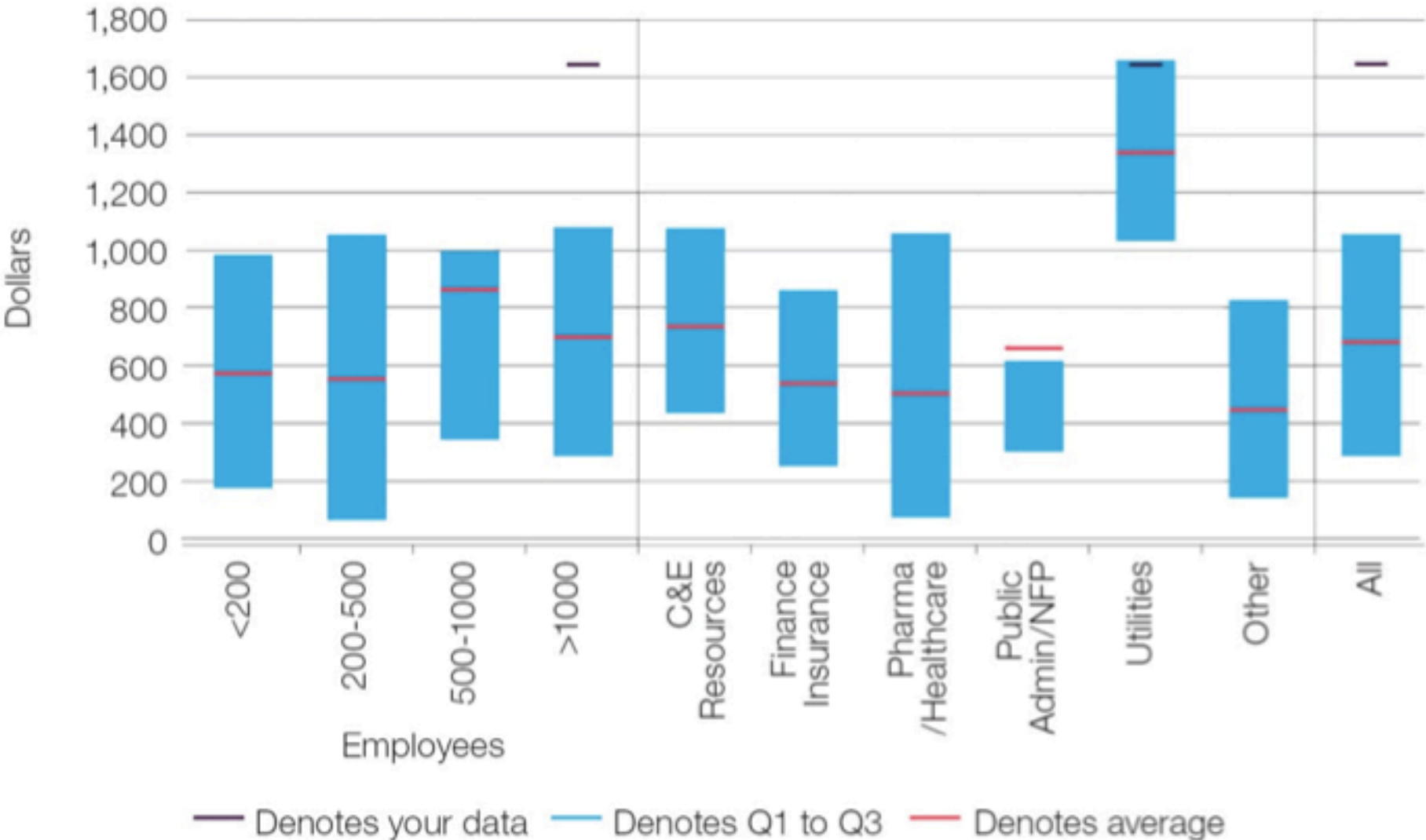
Source: TransGrid Revenue Proposal (2014/15-18/19)

- How can an industry that is in contraction due to declining demand for its product, credibly claim labour cost pressures in excess of CPI?

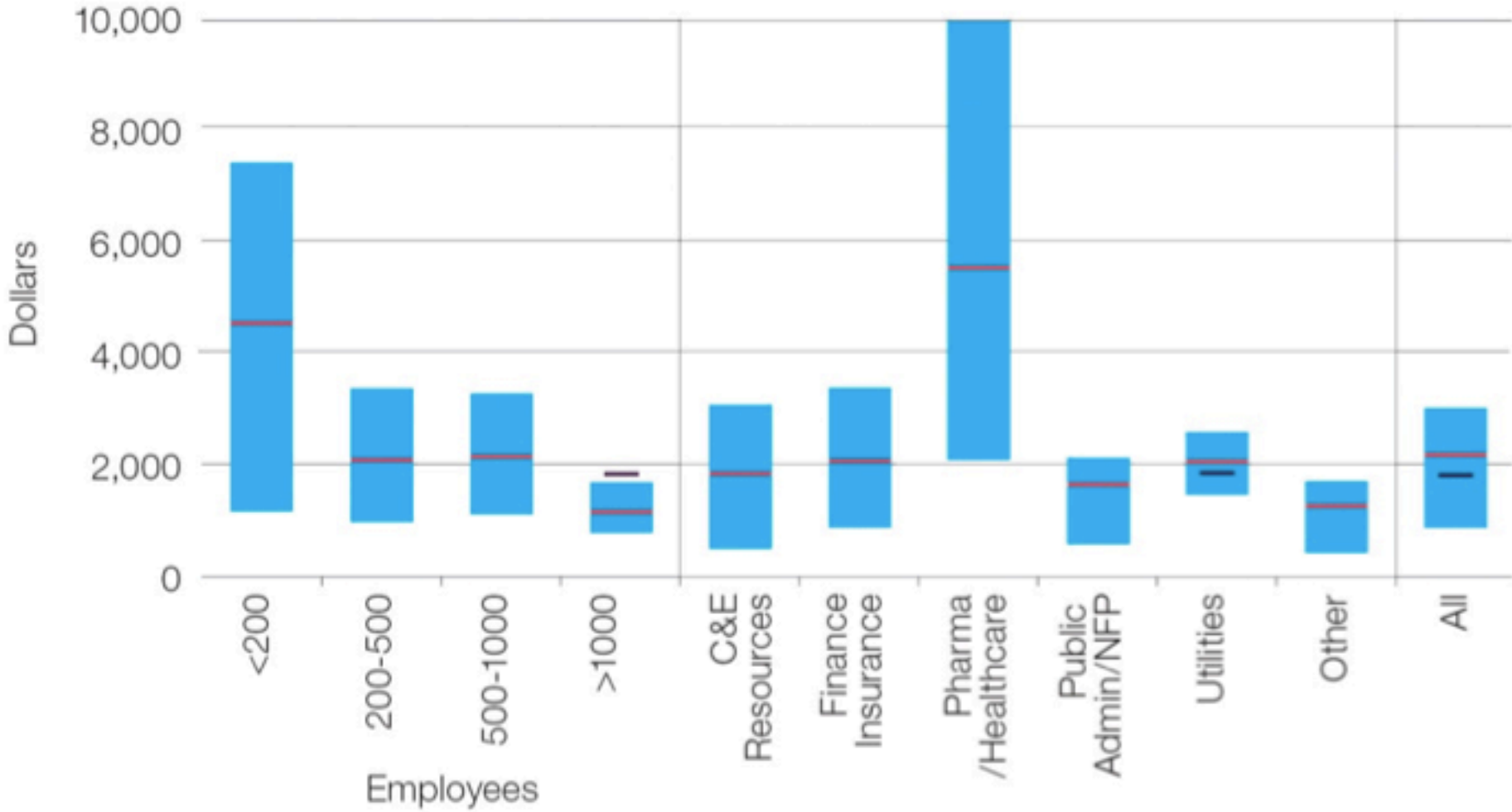
Benchmarking Outcomes for Operating Expenditure

Category	Studies Undertaken	Outcome
Maintenance	ITOMS	Lower than average cost
Asset Management	ITAMS	Average effort
IT	Mercer, UMS	Lower than average cost
Human Resources	Mercer, UMS	Average cost
Payroll Administration	Mercer, UMS	Higher than average cost (addressed by efficiency initiative)
Training	Mercer	Slightly lower than average cost
Work Health and Safety	Mercer	Higher than average cost
Finance and Management Support	UMS	Average cost
Property Management	UMS	Lower than average cost
Fleet Management	UMS	Average cost
Corporate Support	UMS	Higher than average cost (addressed by accommodation strategy)

OHS Cost Per Full Time Employee

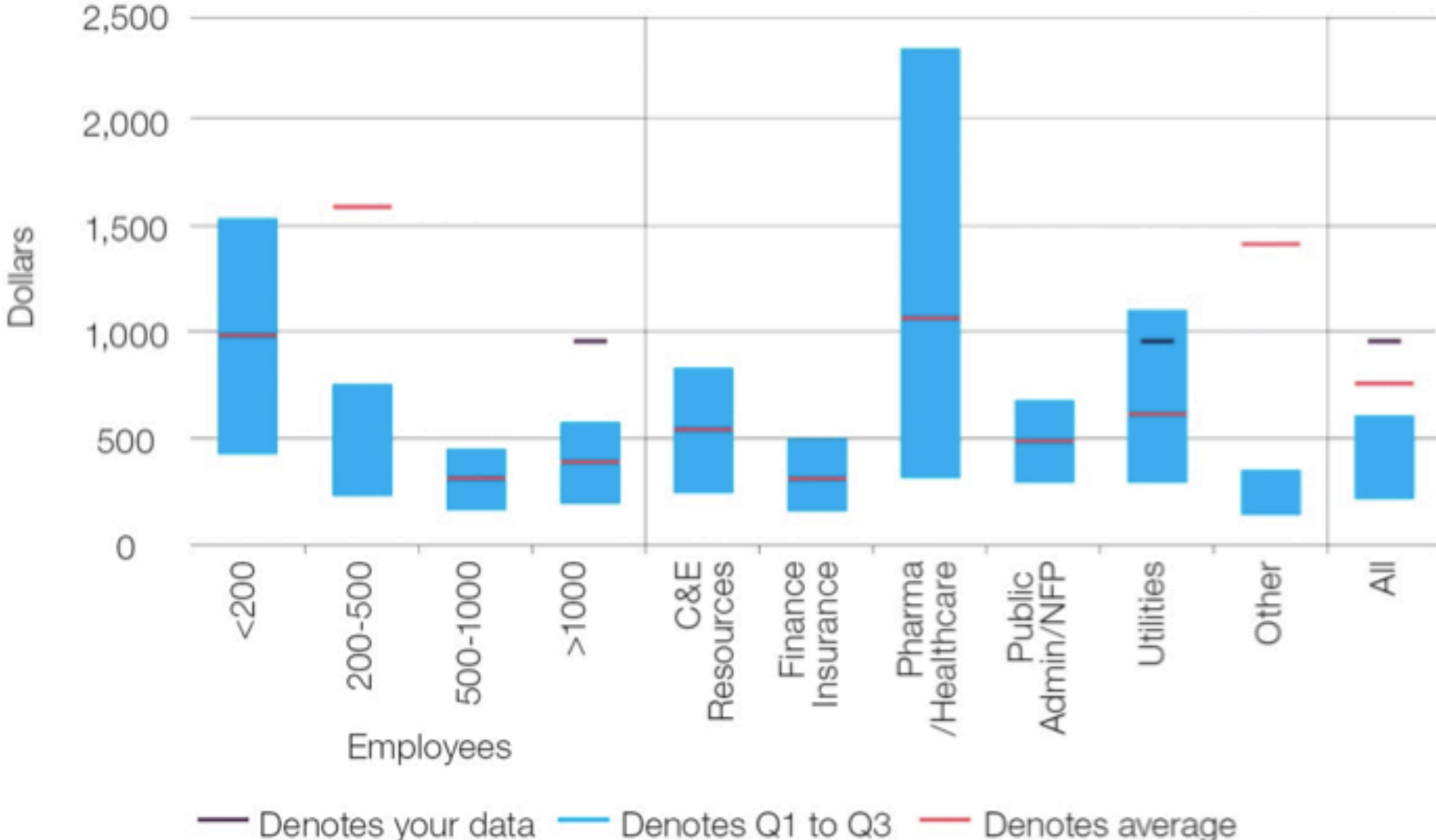


Training Cost Per Full Time Employee



Denotes your data
 Denotes Q1 to Q3
 Denotes average

Payroll Cost Per Full Time Employee



'Economies of Scale' Factors

Economy of Scale Factors

Expenditure Category	Scale Factor for Labour	Scale Factor for Materials
Maintenance	95%	95%
Maintenance Support and Asset Management	25%	25%
System Operations	25%	25%
Grid Planning	25%	25%
Rates and Taxes	10%	100%
Property	25%	25%
Health, Safety and Environment	25%	25%
Information Technology	10%	10%
Business Administration	10%	10%
Corporate and Regulatory Management	10%	10%

Source: TransGrid.

PERFORMANCE INCENTIVE SCHEMES

Performance incentive schemes

- Efficiency Benefit Sharing Scheme (EBSS)
- Service Target Performance Incentive Scheme (STPIS)
- Demand Management Incentive Scheme (DMIS)
- Capital Expenditure Sharing Scheme (CESS)
- Network Capability Incentive Parameter Action Plan (NCIPAP)

Efficiency Benefit Sharing Scheme - Payments

Endeavour Energy

Table 7: Forecast EBSS Adjustments

\$m; Real 13-14	2014-15	2015-16	2016-17	2017-18	2018-19	Total
EBSS Adjustments	95.1	31.7	39.2	31.0	0.0	197.0

Ausgrid

	2014/15	2015/16	2016/17	2017/18	2018/19	Total
EBSS Carryover	102	125	90	148	-	465

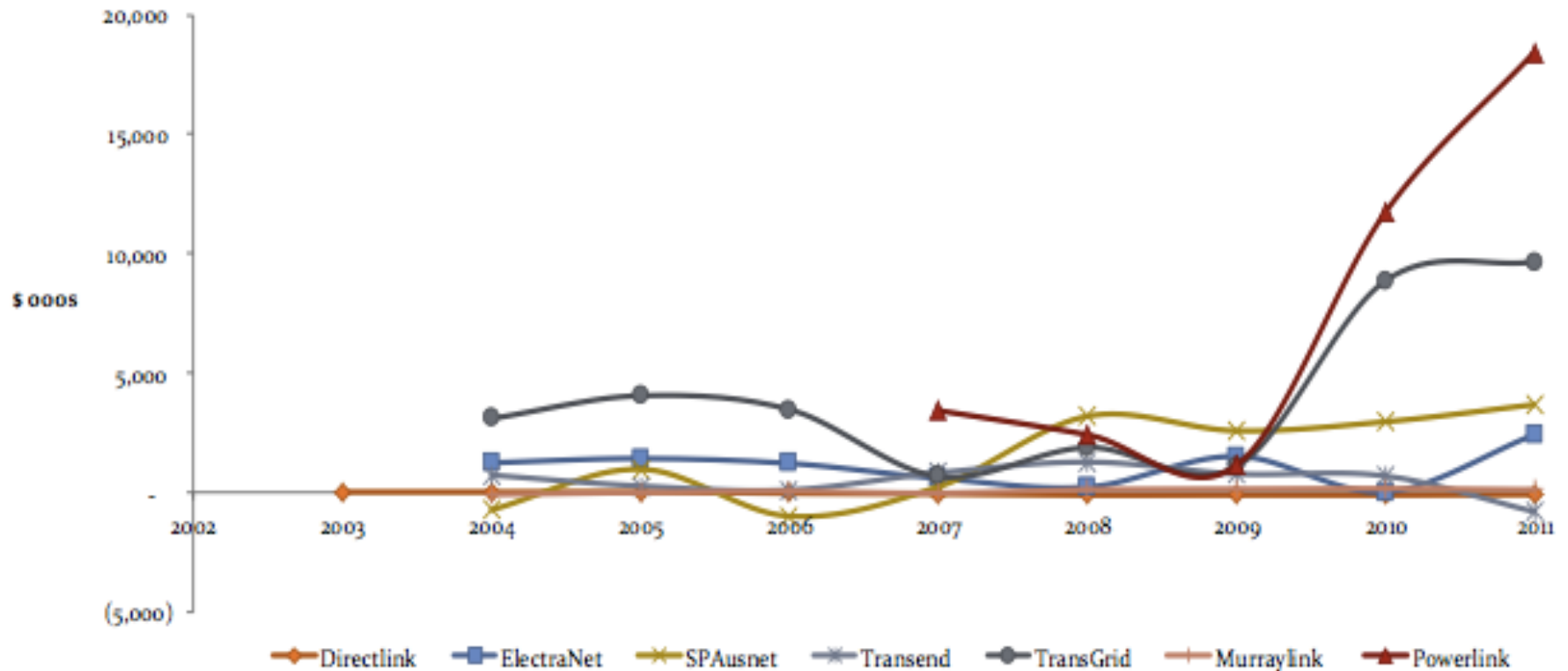
TransGrid

	2014/15	2015/16	2016/17	2017/18	2018/19	Total
Efficiency Carryover	21	12.1	14.5	23.5	-	71.1

Source: NSPs' Transitional and Revenue Proposals

Incentive Schemes - Reliability

Figure 9.1 Financial incentives in \$2011 million



Source: AER TNSP Performance Report 2009/10

STRANDED ASSETS?

Death Spiral?

“It could be inevitable that all forms of centralised generation and transmission will be made redundant over time”

Rob Stobbe, CEO - SA Power Networks

“Will we see a time in the next decade where renewables and battery storage will be cheaper than grid power for the domestic consumer?”

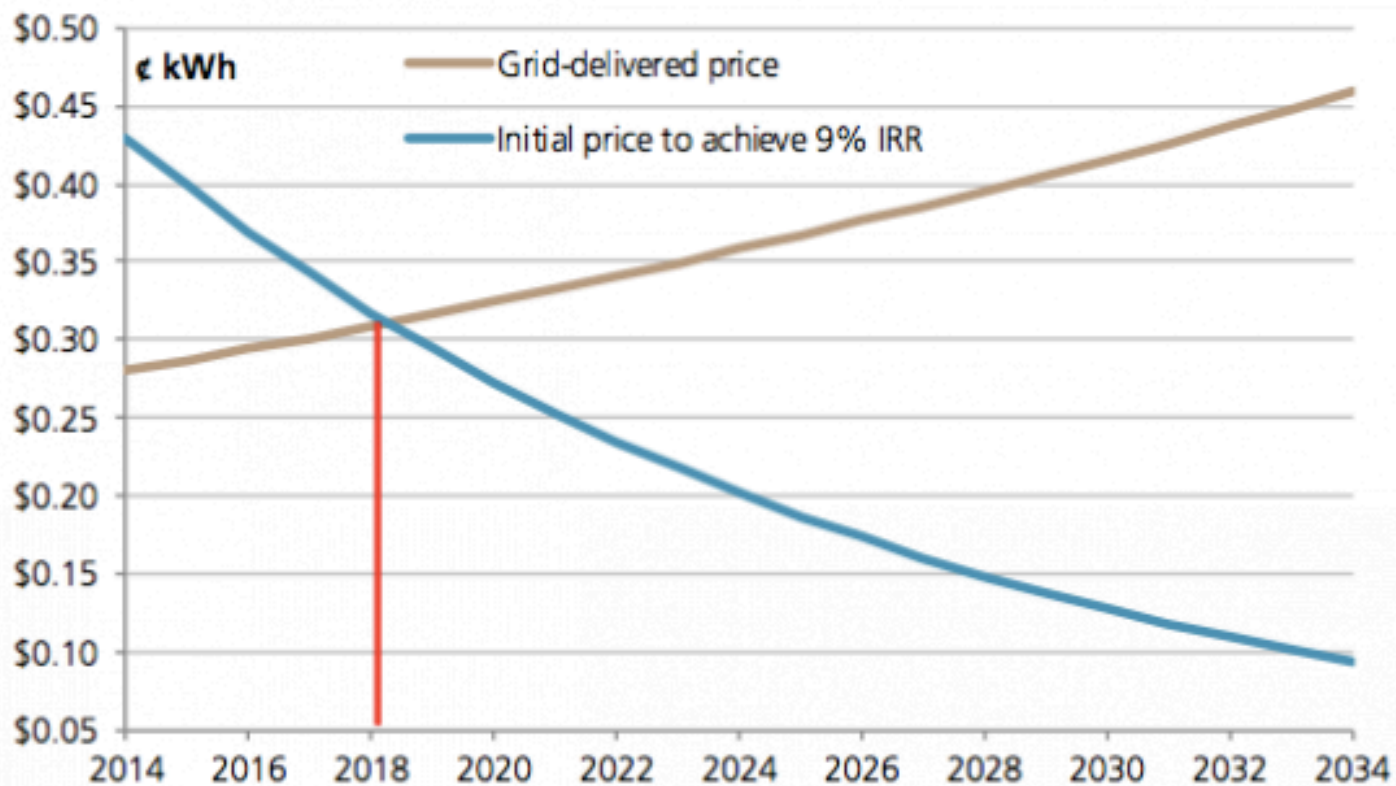
Malcolm Hall-Brown, Chairman - Ergon Energy

Sources:

- Giles Parkinson article: “SA network operator: Rural communities could quit the grid”, 30 April 2014
- Ergon Energy 2012/13 Annual Stakeholder Report, Chairman’s Message

Distributed Generation - Economics

Figure 1: Off-grid compared to grid (assumes off-grid capex cost falls 5% p.a.)



Source: UBSe

Stranded Asset Risks

- TransGrid's proposal has effectively ignored the “elephant in the room” - the decreasing energy delivered by its network and the associated risks of stranded, or significantly devalued, assets
- TransGrid's proposal suggests that if any assets become stranded, then they would easily be relocated or recycled
- This is clearly not a credible response to this critical issue
- Consumers expect the AER to seriously challenge all networks on their approaches managing this critical issue

Concluding Comments

- The AER will determine the future revenues of 17 Australian electricity networks over the next 2 years, using the new regulatory rules
- The TransGrid determination provides the opportunity for consumers to outline how they expect the new rules to be applied
- Consumers' involvement will be critical in influencing the AER to make regulatory decisions ***“in the long term interest of consumers”***

Thank You

AER Public Forum - 10th July 2014

Hugh Grant - Executive Director, *ResponseAbility*