

Summary presentation

MAY 2018



The CRG:

Represents a diverse range of perspectives, including:

- Major energy users
- Small business
- Rural business
- Residential customers

Submission process:

- Initial meetings in late 2017
- January meeting decision to attempt to compile a joint submission
- Work comprised six streams, plus a research activity
- Call for stream leaders to undertake stream leader roles
- Chairman assumed the project management role
- Sapere engaged to undertake "author" role, plus undertake research activity

Submission process (continued):

- Work started in earnest in March
- Included engagement with the ENA
- An iterative process
- Frequent process checks to ensure alignment and all member's thinking captured
- Strong alignment, much discussion along the way
- Submitted on time 4th May

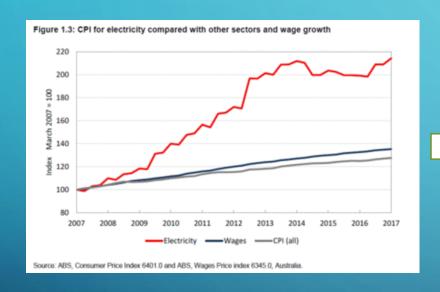
CRG-ENA engagement

- An opportunity for the network representatives to hear directly from consumer representatives and vice versa
- Open and honest dialogue
- Joint position on the averaging period for the risk free rate
- Joint project on RAB/ROR relationship
- Both parties see value in continuing the engagement

CRG perspective:

- Energy is a critical social and business enabler.
- If the price is too high, there are significant consequences.
- The scale and the impact of those consequences is difficult to predict in advance for domestic and small business consumers
- But is very evident after the fact.
- Consumers have a substantial investment in the existing electricity networks and don't want to see that investment devalued as a result of high prices leading to consumers bypassing the network.

The impact (examples):



	Queensland	New South Wales	South Australia	Tasmania	AC
2009–10		15 835	4 748	1 396	88
2010–11		18 561	7 383	958	40
2011–12		23 207	9 893	178	42
2012–13		24 888	10 723	1 057	7
2013–14		32 940	10 148	1 555	26
2014–15		31 979	10 179	1 046	34
2015–16	21 672	30 065	10 546	1 172	3
2016-17	25 201	27 380	10 902	1 016	4/

The affordability threshold is exceeded

CRG view – the key question is:

Does the current guideline get it right?:

A rate of return that reflects efficient financing costs will allow a service provider to attract the necessary investment capital to maintain a reliable energy supply while minimising the cost to consumers.

No excessive (inefficient and unfair) profits on network investments.

In our view, the answer is no.

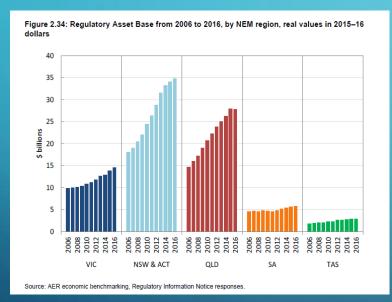
Why?:

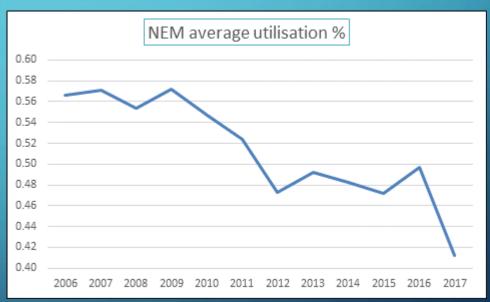
- The reduction in risk faced by the regulated network businesses afforded by the rules is not reflected in the 2013 Guideline.
- The companies from which the AER draws its market data sample do not represent benchmark efficient entities, as these companies operate both regulated and nonregulated businesses.
- There is no data on actual returns against which to compare modelled returns so as to allow the AER to make informed judgements under the Guideline for future periods.
 Previous decisions are reinforced by the use of market data that themselves reflect previous decisions.
- The Black version of the CAPM and the DGM used in the Foundation model (2013 Guideline) result in an excessive allowance for the equity risk premium.

And:

• When exercising its judgement on ROR, the AER has consistently erred in favour of ensuring there is sufficient investment, and has not given enough weight to the consequences of prices being higher than they need to be.

The impact of prices which are higher than they should be is evident they contribute to the "affordability crisis". But on the other hand:





Investment has not reduced, utilization has fallen, profits (no AER data yet) have been demonstrably excessive in at least one jurisdiction, and RAB multiples average around 1.4

The reasons in more detail

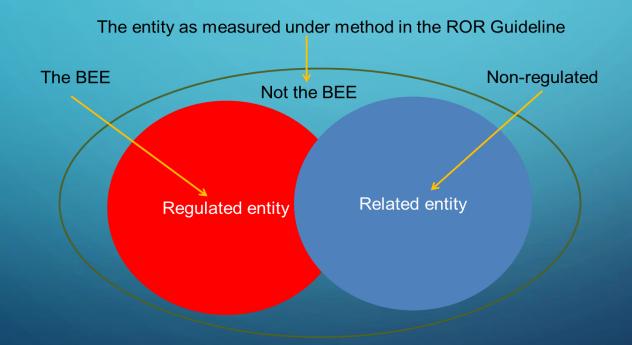
Risk. There are many protections in the rules which minimise risk for energy networks compared to other firms, such as:

- Under a revenue cap, sales volume risk is with consumers. Even a price cap allows for minimisation of this risk through tariff setting
- Assets are indexed to current values, protected from optimisation and technology risk
- All capital invested is recovered in full (no write down risk)
- Future investments are fully guaranteed
- Opex is not benchmarked to international best practice
- Debt is set at Australian costs but firms can access debt at lower overseas costs
- Pass through of costs to consumers is allowed for changes in laws, regulation and for catastrophes



Market data -:

• The CRG contends that the data used to populate the CAPM is not appropriate.



Allowed returns versus actual returns:

There is no data available to determine whether or not allowed returns exceed efficient returns. There is an error reinforcement loop, not an error correction loop. Over compensation in any decision is locked in and becomes part of the data on which future decisions are based.

Our submission details at appendix 1 and appendix 2 a range of suggestions for ensuring such information is available to inform future decision making. These would form part of a broader review following the completion of this review.

The Black CAPM and DGM:

- The CRG contends that regulation and the concept of a benchmark efficient entity an entity that is only providing regulated services reduces or eliminates the uncertainties otherwise associated with the distribution of expected returns.
- It would be an incorrect assessment of the efficient financing costs of a benchmark efficient entity to place any weight on the Black CAPM
- The CRG has doubts about the use of the DGM to inform the MRP, as the assumptions embedded in the DGM are more likely to be optimistic than pessimistic, delivering a biased assessment.

CAPM parameter values

Equity beta:

- When assessing equity beta, the AER should reassess the range of the likely equity betas to accommodate the inherent upward bias from using firms in the cohort that have significant revenue from other unregulated sources. On the revised (lower) range, the AER should use the mid-point of the range and bias the set point down to:
- Adjust for the risks the networks are not exposed to
- Eliminate the upward bias from the imposition of volatility on defensive stocks from share market actions by share traders.
- Recognise that the Black CAPM should not be used as a basis for inflating the AROR above the efficient AROR.
- Reflect that the drive to increase equity beta to incentivise CAPEX is not appropriate as CAPEX is not a
 diversifiable risk and that the Rules already provide sufficient incentive to ensure that there is adequate
 CAPEX
- On this basis the CRG considers that a point estimate for equity beta should be closer to 0.4 or lower.



MRP:

- The MRP is based on the profitability of holding shares, not on physical assets. Use of an ASX derived MRP is questionable when debt and equity for physical assets can be sourced from overseas?
- Use of the long term MRP is influenced by changes in the Australian economy but the general trend is downward and now below 6.0
- The excessive volatility in MRP since the 1960s needs the geometric mean to have more weight
- The DGM assumes historic growth rates but recent falls in consumption and demand indicate the past trends are not appropriate
- MRP comprises returns from all sources, including returns that are excluded from the regulated ROR (eg incentive schemes, lower debt and tax costs, shared assets, unregulated activities, etc)

Gamma:

The CRG suggests the following criteria and assumptions to determine gamma:

- Network businesses are using the most efficient source of finance, Australian investors entitled to make use of imputation credits, with a utilisation rate of 100%
- A distribution rate in line with what an efficiently financed form would be expected to distribute, based on the value of the RAB, depreciation and any necessary new investment in the RAB.
- A reasonable distribution ratio is: 1 ((I D)/(RAB * WACC)).
- Assume that is > 1 and assume the ratio = 1
- The CRG supports Lally's view that the utilisation rate should be 1

Return on debt:

The CRG:

- Believes that the actual debt profile of the regulated businesses is less than 10 years.
- Supports at least the continued use of a simple average of the RBA and Bloomberg series.
- Suggests the use of the simple average of the BBB series and A series for the
 determination of the cost of debt would, subject to the outcomes of the AER's debt
 paper.

CRG estimation of allowed WACC and consumer price impacts

Parameter	AER	CRG	Variance
Risk free rate	2.55%	2.55%	0%
Equity beta	0.7	0.3	- 0.40
Market risk premium	6.50%	5.75%	-0.8%
Return on equity	7.1%	4.6%	-2.5%
Gamma	0.4	0.9	0.5
Expected inflation	2.38	2.38	0%
Gearing	0.6	0.6	0%
Return on debt year 1	6.51%	4.55%	-2.0%
WACC year 2-5	6.68%	4.48%	-2.2%

Cost component	Percentage change
Rate of return on capital (WACC*average RAB or EBIT/average RAB)	-37.2
Total network bill	-18.6
Total customer (retail) bill	-9.3

Broader review

The CRG notes that this review has raised further concerns about the use of the CAPM and we encourage the AER to undertake a more fundamental review of the approach to determining the allowed ROR as soon as the first binding instrument is made. This needs to include a performance evaluation framework.

Thank you