# AER Draft Rate of Return Guideline

## Network sector views

AER Board Presentation, 4 October 2018

Energy Networks Australia

# Key concerns about the AER's process and outcomes

- ‘Foundation Model’ approach has been abandoned – this is not an incremental review
- Movement of equity estimate in opposite direction to market evidence (beta and MRP)
- Proposed equity risk premium fails every one of the AER's standard cross-checks.
- This equity risk premium is extreme by international standards - sets AER as an outlier
- Treatment of joint expert evidence
- Lack of focus on long-term to support key customer outcomes of:
  - Ensuring access to low cost finance due to predictable, evidence-based regulation
  - Providing sufficient incentive to invest in innovative customer service outcomes

**There is a real risk of stakeholders concluding that:**

- **the exercise may be a ‘process put around a predetermined outcome’**
- **outcomes are not based on observable evidence – rather contrary to it**.

# 2013 v 2018: all methodology changes lower returns – balanced?

| Methodology or approach | 2013 Guideline | 2018 Draft Guideline | Directional effect |
|---|---|---|---|
| **Foundation model** | Other models used to inform SL-CAPM parameters | Other models have no effect on SL-CAPM parameters | ↓ |
| **Return on equity cross checks: DRP vs ERP comparison** | Rejected (indicated allowed return was too low) | Used as primary cross check (taken to support the proposed allowance) | ↓ |
| **Equity beta: Black CAPM** | Used to inform beta point estimate | No effect on beta point estimate | ↓ |
| **Equity beta: International comparators** | Used to inform beta point estimate | No effect on beta point estimate | ↓ |
| **MRP: Geometric mean** | Lower bound of range set 20 bp above highest geometric mean | Lower bound of range set equal to highest geometric mean | ↓ |
| **MRP: DGM** | Used to inform beta point estimate | No effect on beta point estimate | ↓ |
| **Return on debt: Data source** | BBB curves | Weighted average of A and BBB curves | ↓ |
| **Gamma: Distribution rate** | Used ATO ‘dividend’ estimate | Uses 20-firms estimate | ↓ |
| **Gamma: Consistency of estimates** | Consistent estimates of distribution and utilisation rates | Pairs listed equity distribution rate with all equity ownership estimate | ↓ |

# Need to address process issues for long-term regulatory confidence

## Joint Expert Sessions and Report

- In theory a good process but:
- Agreed expert positions departed from because the AER considered its expert <u>may</u> have come to a different view <u>if</u> the AER had allowed more time
- Departures impact on equity beta and MRP estimation

## Independent Panel

- Raised issues around significant discontinuity in equity risk premium (95 basis pts)
- Reinforced that final guideline needs stakeholder trust to promote efficient outcomes



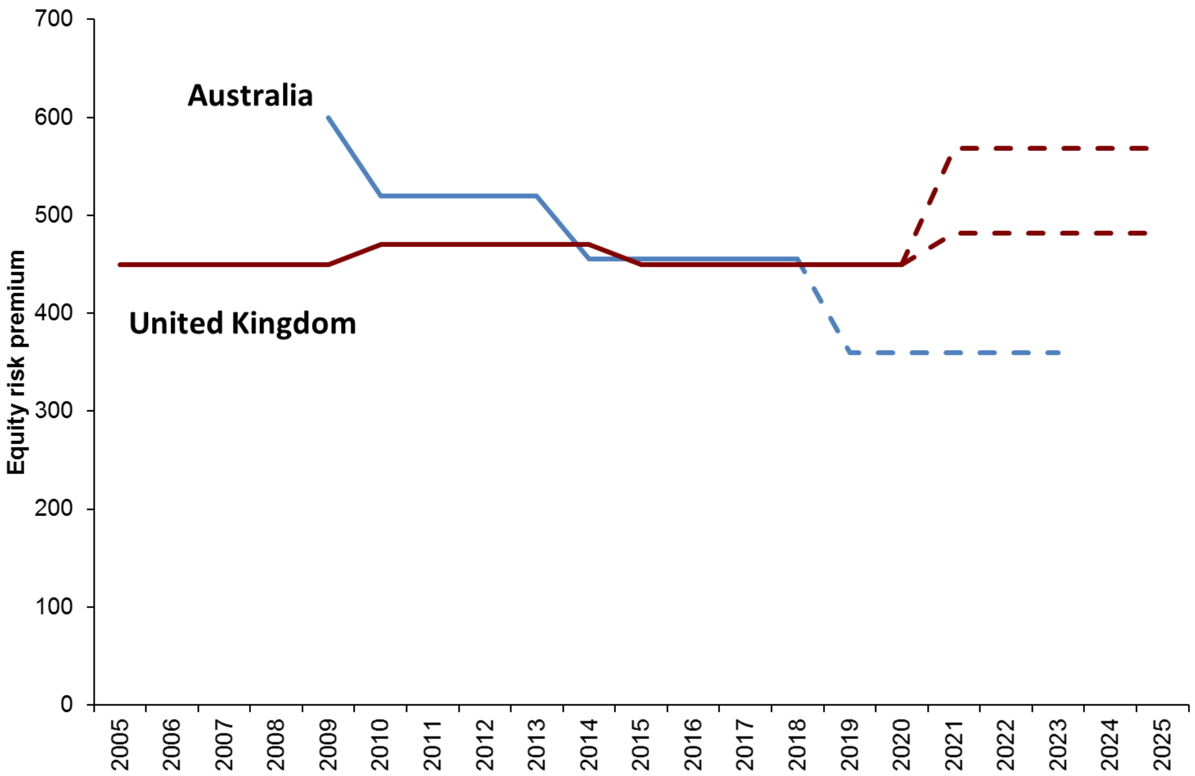
Energy Networks Australia

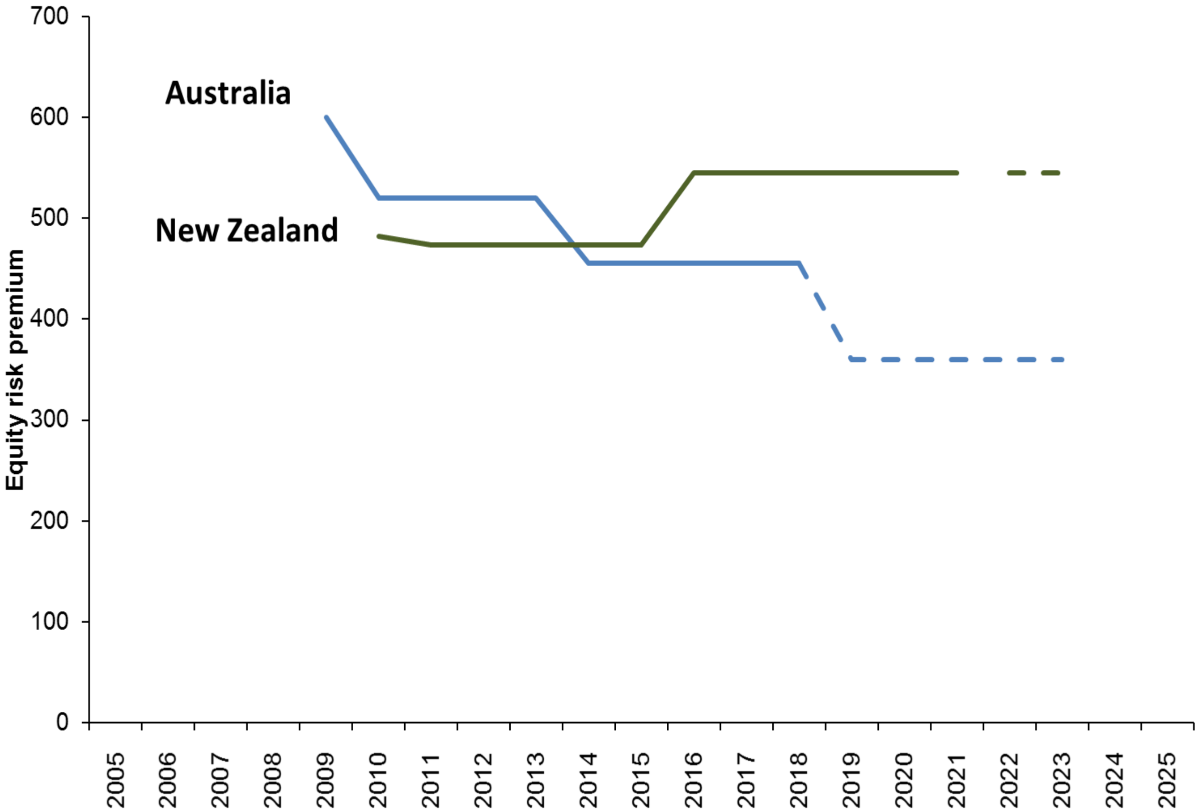
# Where does this reasoning take Australian regulatory returns?

| | Allowed equity risk premium | Source |
|---|---|---|
| **AER – July 2018** | **3.60%** | AER Draft Guideline |
| **Public Utilities Commissions (United States) - electricity** | 5.46% | Average of 2017 decisions, Earwaker Expert Report, Table 5, p.9 |
| **Commerce Commission (New Zealand)** | 5.51% | Cost of capital determination for disclosure year 2019 (Electricity distribution businesses and Wellington International Airport), April 2018 |
| **Ofgem (Great Britain)** | 5.83% | RIIO-2 Framework Consultation document, March 2018, Table 4; accompanying CEPA papers |
| **Canadian regulators – electricity** | 6.31% | Average of 2017 decisions, Earwaker Expert Report, Table 5, p.9 |
| **Federal Energy Regulatory Commission (United States)** | 8.07% | Emera Maine v. Federal Energy Regulatory Commission, Case No. 15-1118, 14 April 2017; US government bond yield data obtained from the US Department of the Treasury |

# Australia is moving to extreme regulated equity returns (I)

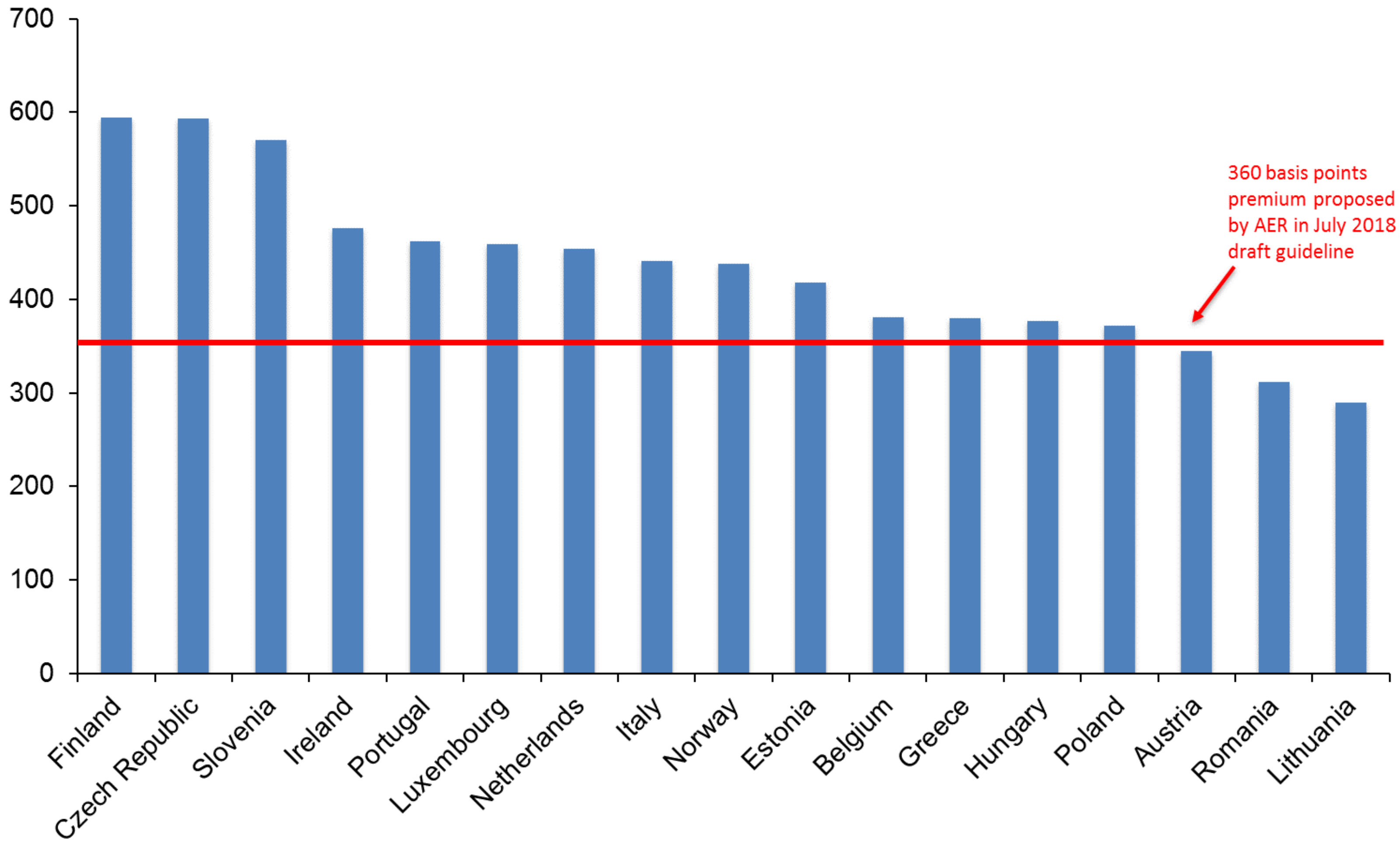
## Equity risk premiums in UK and New Zealand



# Australia is moving to extreme regulated equity returns (II)

## Premium in allowed cost of equity over the risk-free rate (basis points)



# Outcome fails all AER's 2013 cross-checks, but new check introduced…

| Cross check | Current AER guideline ERP=4.55 | Proposed guideline ERP=3.6 | Notes |
|---|---|---|---|
| **Wright approach** | ✓ | ✗ | Provides no evidence on beta, only MRP |
| **Other regulators estimates** | ✓ | ✗ | Noting MRP is market wide, and other regulators were assessing firms were same or lower risk |
| **Broker estimates** | ✓ | ✗ | AER: "**Our equity risk premium estimate is below the bottom of the unadjusted range**" |
| **Ind. expert valuations** | ✓ | ✗ | Lower bound reported in every one of the available reports is higher than the proposed 3.6% allowance |
| **New 2018 cross-check: Equity and debt risk premium** | ✓ | ? | Never previously used. AER (2013): "***There is a body of evidence suggesting this analysis is not robust. Also, we have expressed concerns about the comparability of credit spreads to equity premiums***" |



Energy Networks Australia

# LTIC - final guideline needs a balanced long-term outcome for customers

1. Perception of ‘putting a process around a predetermined outcome’
   – lowered stakeholder participation, lowered ‘buy in’ to future processes
2. Damage to reputation and stability of Australian investment framework
   – further reductions in network investment, below efficient levels
   – lack of timely investment in enabling infrastructure will make transition more costly
3. Reduced access to low-cost financing
   – harming the long-term interests of customers
   – any gains from short-term equity cuts outweighed by long-term increases
4. Lowers trust and confidence in independence of Aust energy institutions
   – what can be a positive outcome of lower trust and confidence?
   – adverse outcomes hard to reverse or correct once set in motion

# Issue #1: Recognition of low-beta bias and the Black CAPM

**Equity beta**

- AER computes a range of domestic beta estimates.  Most of these are frozen in time as they relate to firms that have been delisted.  Those that relate to firms that remain live have all increased since 2013.  That is, **every beta estimate that could possibly move has increased since 2013**.
- AER has increased the upper bound of its beta range from 0.7 to 0.8 and the lower bound of 0.4 has not changed → but AER has reduced its estimate
- There is consistent evidence that the SL-CAPM understates the returns on low-beta stocks.
- The Foundation Model approach recognises this evidence when selecting the equity beta point estimate.
- <u>Low-beta bias is the most consistent and compelling evidence</u> in finance:
  - The evidence has been established by leading finance scholars (including two Nobel Laureates) in the world's top journals over several decades.  It appears as established fact in standard textbooks.
  - It is not possible to produce evidence that is more compelling.
- The Draft Guideline now proposes to give this evidence zero weight
- **<u>There is no reasonable basis for elimination of Black CAPM from the Foundation model.</u>**

# Issue #2: Mathematically incorrect use of geometric mean

- The AER's MRP allowance is now based entirely on mean estimates from historical excess returns.
- The AER acknowledges that the arithmetic mean is more appropriate, but gives material weight to the geometric mean:
  - The arithmetic mean supports a range of 6.0% to 6.5%. The AER considers a geometric mean estimate of 5.0%, and adopts a final point estimate of 6.0%.
- In submissions and the concurrent evidence sessions, the AER was presented with evidence of a mathematical proof that the arithmetic mean must be used in the AER's process:
  - Such a proof has been provided to the AER by its own consultant.
  - This is not a matter of opinion or judgment – there is a formal mathematical proof that has been provided to the AER.

- **<u>No reasonable basis for continued use of geometric mean estimate.</u>**



Energy Networks Australia

# Issue #3: Consistency in dividend growth model use

- AER developed preferred specification in 2013 and model is key component of the Foundation Model approach.
- AER considered the strengths and weaknesses of the DGM in developing the preferred specification and selecting its role in the Foundation Model approach.
- AER now raises three new issues:
  - Dividend reinvestment schemes – rejected by the Independent Panel.
  - Uncertainty about long-run inflation estimate – but AER already uses 2.5% throughout its process.
  - Estimates inconsistent with AER's pre-determined view – but AER's views should be tested against the evidence, not the other way around.
- AER also claims that there is a wide range of possible estimates of long-run growth rate:
  - But the AER has erroneously mixed **real and nominal** growth rates; and
  - The AER relies on third party 'Fenebris' estimates that the AER's own advisers consider to be implausible.
- <u>**No reasonable basis for elimination of DGM evidence.**</u>



Energy Networks Australia

# Issue #4: Approach to gamma approach is flawed

**Problematic process in relation to ATO tax statistics**

- ATO must know how much corporate tax it collects each year and how many imputation credits are redeemed from it each year
- This is all that is required to produce a direct estimate of gamma
- Why not just ask the ATO to provide the data, which they certainly must have?

# Possible alternate views of evidence: key parameters

| Parameter | AER Draft Guideline | Network position based on evidence | Possible alternate view of evidence | Comments |
|---|---|---|---|---|
| **Equity beta** | 0.6 | 0.7 | 0.7 | Having some regard to Black CAPM and low beta bias + regulatory stability considerations |
| **Market risk premium** | 6.0 | 6.5 | 6.25? | No regard to geometric means, limited weight to DGM |
| **Equity risk premium** | 3.6 | 4.55 | 4.38 | Note standard AER cross check range of 4.1-9.36 |
| **Passes AER cross checks** | ✗ | ✓ | ✓ | Note 0.7 beta and lower MRP of 6.0 fails 2 of the 4 standard cross-checks and below international range |
| **Gamma** | 0.5 | 0.34 - 0.39 | 0.4 | Note AER argued in court for 0.4 |

# Summary – Final Guideline outcomes are critical

- "Capable of acceptance" is an overall concept
  - it does not mean networks must be happy with all parameters
  - but draft Guideline has three key problematic parameters

- Keen on long-term focus to support energy transformation
- An equity risk premium more in line with international standards is essential
- Gamma value should be evidence-led and result of a transparent investigation
- Ability of AER decisions to respond to evidence in balanced way is an important indicator of a robust process



Energy Networks Australia