INCENTIVISING INVESTMENT IN ENERGY INFRASTRUCTURE

NETWORK SHAREHOLDERS GROUP – PRESENTATION TO AER'S WEBINAR ON TERM

June 15, 2021

Three key points

1. We are key stakeholders in this review
   - Providers of capital for long term assets
   - Direct experience in estimating the cost of capital
2. Returns are globally uncompetitive and should be corrected not reduced further
   - Compelling evidence of falling investment in network infrastructure
   - Difficult to explain if returns are sufficient
   - How can AER be confident that its estimate is an unbiased best estimate?
3. A 10 year term is appropriate
   - It reflects efficient practice (debt) and reflects equity investor requirements
   - Does not need to be aligned with inflation term
   - A change now is not supported by evidence, could be seen to be biased, and introduces additional unnecessary risk

NETWORK SHAREHOLDERS GROUP (NSG)

INFRASTRUCTURE INVESTORS WITH MORE THAN $280 BILLION IN EQUITY INFRASTRUCTURE[1]

MACQUARIE	ifm investors	spark infrastructure	AMP CAPITAL	AustralianSuper	MORRISON&CO	OMERS	Caisse de dépôt et placement du Québec
AUM: $204bn	**AUM:** $155bn	**AUM:** $18bn	**AUM:** $190bn	**AUM:** >$200bn	**AUM:** $20bn	**AUM:** $112bn	**AUM:** $390bn
Equity Infra: $100.5bn	**Equity Infra:** $68.9bn	**Equity Infra:** $3.6bn	**Equity Infra:** $20.4bn	**Equity Infra:** >$20bn	**Equity Infra:** $16bn	**Equity Infra:** $23.6bn	**Equity Infra:** $33.9bn
Markets: Australia, UK/Europe, North America, Asia	**Markets:** Australia, UK/Europe, North America	**Markets:** Australia **ASX Listed**	**Markets:** Australia/NZ, UK/Europe, North America/ Latin America, Asia	**Markets:** Australia, UK/Europe, North America, Asia	**Markets:** Australia/NZ, UK/Europe, North America, Asia	**Markets:** Australia, UK/Europe, North America/ Latin America, Asia	**Markets:** Australia, UK/Europe, North America/ Latin America, Asia

Australian energy investments

Ausgrid, TransGrid, SPARK RENEWABLES, Endeavour Energy, flow systems, evergen, SA Power Networks, Powercor AUSTRALIA, CITIPOWER, ElectraNet, Macarthur Wind Farm, tilt renewables

[1] All data supplied by NSG members, values are in AUD.

OBJECTIVE: THE BEST UNBIASED ESTIMATE

But outcomes are important too

Returns are globally uncompetitive – investment at all time lows

- Falls in risk free rate passed directly through to reduce returns on equity further
- Economic conditions recovering from the economic impact of one in one-hundred-year pandemic
- Focus should be on correcting low returns to reflect the forward looking market cost of capital

The process should support an unbiased estimate

- Avoid continual change to approach and timing
- Multiple papers seeking views on narrow issues are difficult to respond to when relationships matter
- Issues being investigated by the AER all aim to reduce returns further through methodological changes
  - Debt yield – an actual debt index that excludes some debt and ignores inflation
  - Term – change long standing assumption when gap is widest
  - Re-open relationship between MRP and RFR when RFR rising – rejected when falling
- A biased approach to consultation (issues and stakeholders) undermines confidence in the regulator and regulatory process

Objective and transparent framework for assessing longer term impacts assists all stakeholders

- Incentives and investment – financeability and/or return sufficiency
- Long term interests of consumers – price, service, security
- Outcomes over time and projected into the future

How will the estimate be assessed to be the best unbiased estimate?

RETURNS ON NETWORK ASSETS IN AUSTRALIA ARE GLOBALLY UNCOMPETITIVE

Australia is an unattractive investment destination

- Australia is ranked in the third quartile for relative attractiveness of investing in regulated networks[2]
- Australia ranked second lowest at 1.6% on the allowed pre-tax WACC (adjusted for inflation and government bond yields to account for sovereign risk)[3]
- The AER's Brattle Report highlighted that the 'outlier' approach of the AER led to an equity return lower than seven other regulators in UK, US, NZ, Italy, and Netherlands[4]

Exhibit 1:

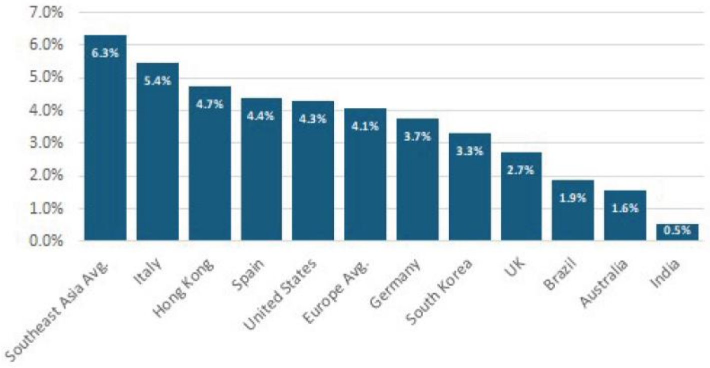
Relative Attractiveness of Regulated Utilities by Region — Ranked by Quartile

	DDM Analysis		Multi-Factor Analysis		Average	
Region / Country	Net Equity Return	DDM Ranking	Score	Multi-Factor Ranking	Combined Ranking	Quartile
Europe	6.2%	2	5.7	3	2.5	1st
Hong Kong	4.9%	4	6.7	1	2.5	1st
United States	4.5%	6	5.7	2	4.0	2nd
India	7.4%	1	3.1	7	4.0	2nd
Australia	5.3%	3	3.8	6	4.5	3rd
Southeast Asia	3.9%	7	5.3	4	5.5	3rd
South Korea	4.7%	5	2.6	8	6.5	4th
Brazil	2.3%	8	4.6	5	6.5	4th

Note: For Net Equity Returns and the Multi-Factor Analysis Score, higher numbers are better. For rankings, lower numbers are better. Data as of 3/26/2021. Source: Eikon, IMF, Morgan Stanley Research estimates

Exhibit 13:

Allowed Pre-Tax WACC (adjusted for inflation and sovereign risk)



Source: Morgan Stanley Research estimates

OBSERVED DIFFERENCES AND SIMILARITIES

Equity and debt premiums

- We calculate equity and debt premiums as the difference between:
  - the authorised return on equity (or debt) and
  - the regulator's determination of the risk-free rate

		AER	ACM	FERC	STB	ARERA	NZCC	Ofgem	Ofwat
Decision year		2020	2016	2020	2018	2019	2019	2019	2019
Nominal risk-free rate	[1]	1.03%	1.28%	2.70%	3.02%		1.12%		
Real risk-free rate	[2]	-1.24%				1.89%		-0.75%	-1.39%
Equity premium	[3]	3.66%	3.74%	7.35%	10.84%	3.88%	4.75%	5.55%	5.58%
Debt premium	[4]	3.73%	0.76%		1.14%	0.50%	1.60%	2.68%	3.43%

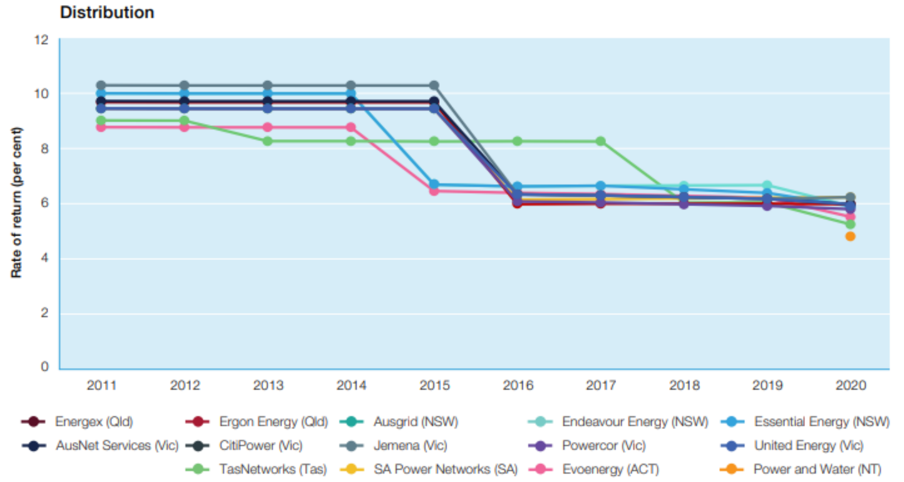
Notes:
Please see Brattle paper for sources and calculations.
All figures relate to energy transport utilities except STB (rail) and Ofwat (water).

The focus should be on correcting low returns, not seeking methodological changes that would reduce them further

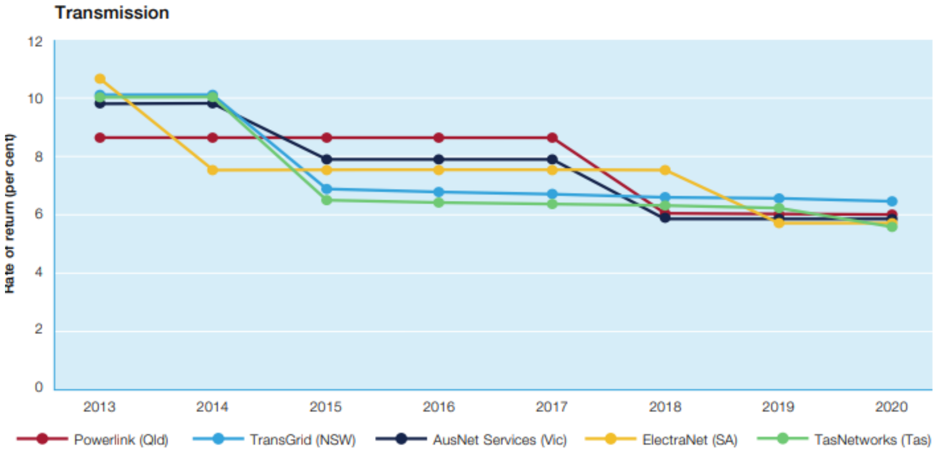
[2] Morgan Stanley "Utilities Global Lens: Where to Invest in Regulated Utilities Amidst Global Macro Environment", April 2021, p3
[3] Ibid, p11
[4] The Brattle Group "International Approaches to Regulated Rates of Return", September 2020, p11

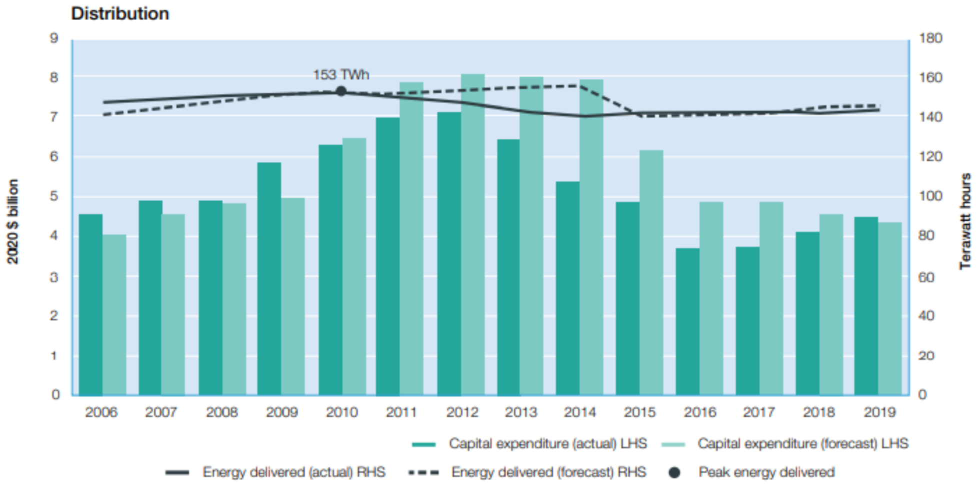
INVESTMENT IN ELECTRICITY NETWORKS IS FALLING

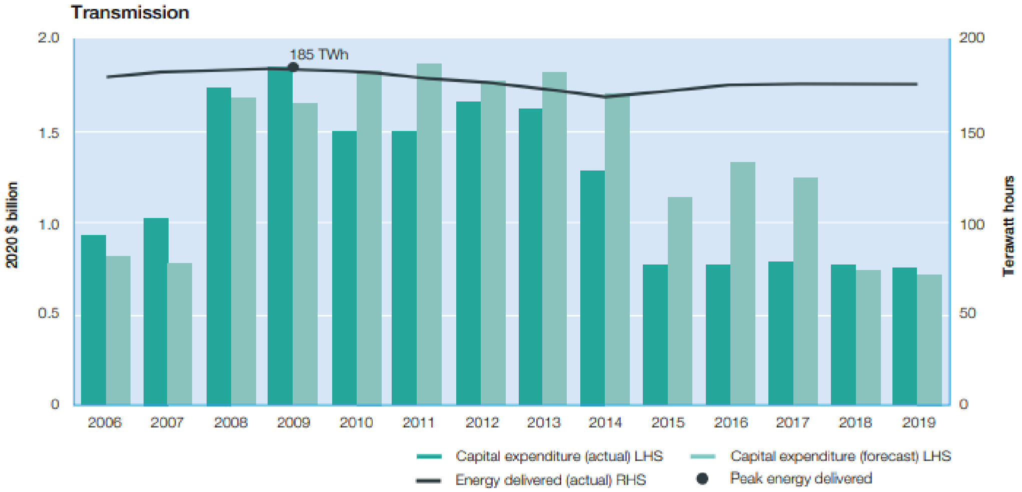
INVESTMENT TRAJECTORY CORRELATES WITH FALLS IN REGULATED RETURNS[5,6]



Note: Rate of return is the nominal vanilla weighted average cost of capital (WACC).
Source: AER decisions on electricity network revenue proposals; AER decisions following remittals by the Australian Competition Tribunal or Full Federal Court.







- The 2018 RORI reduced equity returns by nearly 100 basis points
- Equity returns have since reduced further by as much as 180 basis points due to falling bond yields
- The NSG is concerned that the AER is contemplating further reductions in the 2022 RORI
- This will impact on investors' willingness to deploy capital in a timely fashion and on a sustained basis

[5] Australian Energy Regulator "State of the Energy Market 2020", July 2020, p148
[6] Ibid, p156

HOW WILL THE AER ASSESS WHETHER IT'S ESTIMATE IS THE BEST ESTIMATE?

REJECTED FINANCEABILITY ASSESSMENT BUT APPLIED A DIFFERENT TEST

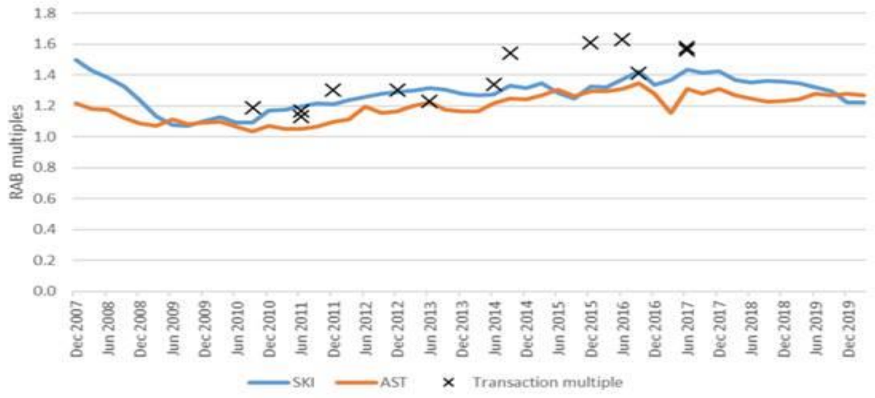
"Regulated NSPs have become less profitable in recent years, following reductions in allowed rates of return. Nonetheless, our analysis of market evidence suggests that investors continue to view allowed returns as being at least sufficient to attract efficient investment" [7]

Australian Energy Regulator

- In reaching its conclusion, the AER[9]:
  - relied on a very small sample (two listed companies)
  - did not adjust for unregulated earnings and future growth prospects
  - used data for a period mostly before the 2018 RORI was available (July 2018) or applied (July 2019)

- It is difficult to explain the persistently low investment (including below allowances) if returns are sufficient but there is no attempt to do so

Figure 6-8 AER regulated NSPs – transaction and trading multiples



Source: Morgan Stanley Research, AER analysis.

Note: SKI is Spark Infrastructure, which holds ownership stakes in SA Power Networks (49%), Victoria Power Networks (49%) and TransGrid (15%). AST is AusNet Services, which owns a Victorian electricity distribution network, electricity transmission network and gas distribution network.

Recognising that the drivers of RAB multiples are difficult to quantify precisely, we consider the evidence on RAB multiples in combination with the other analysis in this report. In aggregate, we consider these measures support a view that investors view regulated returns as being at least sufficient to attract investment. Put conversely, it would be difficult to explain the persistence of premiums in both trading and transaction multiples if investors perceived systematic deficiencies in allowed returns.

We support a test of sufficiency of returns but it should be robust and specified in advance

[7] Australian Energy Regulator "Electricity Network Performance Report ", September 2020, p3
[8] Ibid, p50

A TEN YEAR TERM REMAINS APPROPRIATE

What is the objective of changing the term?

- The AER has continually confirmed that a 10 year term is appropriate – both for debt and equity

- There is no evidence for a change in term
  - Equity investors (and analysts and valuation experts) use a longer term when estimating the cost of equity for long term asset investments
  - It is efficient practice to utilise long term debt for long term assets
    - Term may vary with specific circumstances (e.g. change in ownership, volatile/uncertain market conditions)
    - The AER's evidence is that it is longer than the regulatory period – and more consistent with 10 years than 5 years

- There is no reason for a change in term
  - The AER has rejected methodologies adopted by the ERA when they would have increased returns (breakeven inflation, Equity Beta of 0.7) There is no link to the estimate of inflation which is used to estimate what will be added back at the end of five years so it can be taken out – not relevant for debt or equity.

- Could exacerbate the concern that there is a continued focus on reducing returns rather than estimating the efficient cost of capital
  - A change to a five year term now would be at a time when the change is most significant in reducing returns when returns are already too low
  - Introduces unnecessary additional risk that reduces incentives to invest
  - Is not in the long term interests of consumers – inefficiently low levels of investment put future services and prices at risk

Change for change sake unnecessarily increases risk and reduces confidence in the regulatory system