

## Introduction

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Our members are highly exposed to movements in both gas and electricity prices and have been under increasing financial stress due to escalating energy costs. These increased costs are either absorbed by the business, making it more difficult to maintain existing levels of employment or passed through to consumers in the form of increases in the prices paid for many everyday items.

Much of Australian manufacturing industry has been built on the availability of internationally competitive and reliable electricity supply. This international competitiveness has been severely challenged in recent years due to a range of factors including rising gas and coal prices, the sometimes chaotic transformation of energy markets and climate policy uncertainty.

The EUAA recognise the need to comprehensively evaluate the best pathways to a decentralised and decarbonised electricity system including the challenges that come with the retirement of thermal plant and the integration of new and emerging technologies. This is becoming increasingly important as governments seek to put in place ambitious climate change objectives such as net zero emissions by 2050.

In this regard, we support the development of the ISP as a guide for future investment and see it having the potential to play a key role in facilitating this transition pathway at the most efficient cost to consumers. However, the ISP has moved beyond being a plan to guide investment decisions to a plan that directs investment decisions, largely driven by the desire of COAG Energy Ministers to make the ISP actionable.

While on the surface this seems a worthwhile objective, it is not without significant risks. In particular we should not be sacrificing sound governance practices, such as diminishing the role of the AER, removing important checks and balances in the independent economic assessment process or transferring risk to consumers in order to achieve an expedited result.

We are concerned that declaring specific projects as “actionable” under the ISP is seen by some as a project “green light”, even before the formal regulatory approval process has commenced. This creates an expectation that the project will deliver significant net benefits (experience to date indicates otherwise) and that investment will automatically flow. This places significant pressure on project proponents to proceed, even after costs increase significantly and net benefits decline and is a direct outcome of moving the ISP from a plan to guide investment to a plan that directs investment.

Within this environment of great change all market participants are faced with new and unique challenges. Unfortunately, it seems that the first response to these challenges from many industry participants is to develop solutions that assume customers will take on all costs and risks so as to reduce investor and/or participant risk.

This in turn is meant to lead to a lower cost of capital and therefore it is claimed to be in the long-term interests of consumers.

We are not convinced that it is in the long-term interest of consumers to accept costs and risks that they can't reasonably control or where there are significant number of other beneficiaries who should reasonably contribute to the recovery of cost and sharing of risk.

Therefore, we welcome this opportunity to provide our views on this proposed rule changes and also welcome further consultation should it be required.

## Overview

Our understanding of the rule change is that TransGrid and Electranet argue they will not be able to finance ISP projects at the AER's benchmark 60/40 debt equity ratio. They state that the only way they will be able to finance these projects is to increase their level of borrowings which will reduce their credit rating below 'investment' grade to 'junk' status. They further claim this will increase borrowing costs which will not be compensated through the AER's WACC calculation leaving equity to effectively pay for the higher borrowing costs through lower returns.

Under the current rules, consumers start to pay for new network investments at two stages:

- Via a return *on* capital from the time the spending starts to build the project, and
- Via a return *of* capital (depreciation) following commissioning.

Depreciation, a significant contributor to revenue, is based on an inflated asset base. This means that consumers pay less in the early years and more in later years (asset value increases by inflation less depreciation) when the assets are delivering their benefits.

The rule change proponents are proposing two fundamental changes to this approach, only for themselves and only for their ISP projects, to address their perceived financing risk. The change will not apply to other TNSPs and not for the remainder of the two proponents' other capital expenditure.

The two fundamental changes are:

- Depreciation revenue is earned from the start of construction which is effectively accelerated depreciation
- Adding inflation to the allowed rate of return rather than the asset base i.e. a nominal rate of return on a depreciated actual cost asset base

This leads to earlier recovery of the investment than the current rules allow, as a higher rate of return is applied to the higher asset value in the early years of its life. It also means that the move to a nominal framework pushes inflation risk back on to consumers.

The EUAA does not support the proposed derogation for the following reasons:

- We are not convinced that the current regulatory framework causes financeability issues for ISP projects

- We do not consider our members would be better-off under the proposed derogation
- Our members are not willing to accept the certainty of higher prices now in return for the promise of lower prices in 15-20 years' time.

While there may be a case for a financeability test to be introduced to the NEL, we are not in a position to support this particular request and not without significant additional evidence is presented by proponents and independent analysis conducted.

The issues raised by the rule change proponents appear to have come to a head due to their apparent difficulty financing the new NSW-SA interconnector, Project Energy Connect (PEC). Many energy user advocates including the EUAA and its members, have already expressed concerns regarding this project, which have been amplified when they see the AER concluding in September 2020 that based on a project cost of \$2.4b, net benefits (~\$150m) of PEC, as assessed under the rules, are 'likely to be overstated'<sup>1</sup>.

We and our members are also concerned when we see the project proponent's justification for the rule change to be driven by forecast benefits that are outside the RIT benefits measured under the rules. We strongly suggest the level of these benefits should not be a factor in the Commission's consideration of the rule change.

In any case we do not find the results of the benefits modelling commissioned by TransGrid as persuasive in our consideration of this rule change. Under the proposed rule change, most of the modelled benefits are forecast to occur at least 15 years after consumers are being asked to start paying for an asset with a 50-60 year life. We are not convinced of the certainty of 'substantial long-term benefits to customers' as claimed by TransGrid in their presentation at the AEMC Forum, particularly given recent announcement of the NSW Electricity Infrastructure Roadmap and separate announcement by AGL of a 250MW battery in SA.

We are convinced, though, that the \$2.4b costs are very certain.

We are also not convinced that this rule is required to ensure consumers get access to a large net market benefit under the rules as the AER has shown these benefits are significantly less than we would have expected from a project of this scale.

We encourage the Commission to closely examine the claims by the proponents around what potential investors will or will not invest in.

In particular:

- are there other financing options apart from the approach proposed by the proponents, or?
- are there other parties willing and able to build this asset without the rule change?

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<sup>1</sup> [https://www.aer.gov.au/system/files/AER%20-%20Letter%20of%20response%20to%20ElectraNet%20-%2028%20September%202020\\_0.pdf](https://www.aer.gov.au/system/files/AER%20-%20Letter%20of%20response%20to%20ElectraNet%20-%2028%20September%202020_0.pdf)

We also see a number of conflicting statements being made by the proponents which makes it difficult for us to get a clear picture of the situation. Unfortunately, the project proponents have presented a range of views that we find slightly confusing between what they say in their application:

- the project could seek to proceed with 60% debt funding but this could only occur on a sub-investment grade ('junk') basis (p.4)

and what they said at last week's AEMC Forum on the rule change:

- "whether it is junk or not, I don't know, we would obviously be subject to qualitative factors as [the AER] mentioned [in their presentation]"
- "My Board and my owners have made it explicit ... that we will not invest... in any project that jeopardises our current credit rating of BBB"

When asked to align this Board view with the recent purchase by OMERS and Spark investor statements that highlighted TransGrid's growth opportunities the response was

- "I can't speak for the motivations of investors...in terms of the value or growth attributed to the ISP projects ...you'd need to talk to my individual investors to make it clear or understand what...their individual assumptions are around the growth of the business is in that regard"

We find this a statement to be somewhat confusing given we assume the individual investors in question are also represented on the TransGrid board. They are either concerned, as expressed through this rule change, or they are not, as it appears they have indicated elsewhere.

Compounding our confusion, at the Forum neither TransGrid nor Electranet gave an unequivocal answer to the question - will the ISP projects be built as planned without the rule change? Surely if a rule change of this magnitude is required then the answer to the question would have been "no".

We would suggest that if the proponents are unable or unwilling to build these projects, as they have indicated in this rule change request, then there is always the option of testing the market to identify if there are other parties willing to build the projects under current rules.

Finally, given the complexity of the issues, we doubt the current timetable of making a final decision by the end of March 2021 will provide sufficient time to appropriately consider the proposal.

We pose these questions in the interests of improving our, and the commissions, understanding of the issues at hand and their materiality. Greater clarity and consistency in response to stakeholder questions from the rule change proponents would also be most helpful.

## Detailed response

We offer the following comments to support our position.

This matter should be considered in the form of a rule change applying to all TNSPs, not by way of a specific derogation just applying to two TNSPs

It seems that TransGrid and Electranet have approached the issue by way of a limited derogation rather than a general rule change applying to all TNSPs and all capex because of their deadline on making a PEC investment decision.

We think that such a fundamental change to the regulatory framework should be considered by way of a general rule change applying to all TNSPs. This will result in consideration of the issues in an appropriate context without being beholden to the particular proponents' own timetable. We were pleased that the Commission decided the proposal did not meet the requirements of an expedited rule change given the importance of the issue and potential impacts on consumer costs.

In considering what is being proposed, it seems unusual to set up two RAB buckets – one for ISP projects and one for everything else. If the argument applies to just funding ISP projects, why does it not apply to overall funding? It's not as if other TNSPs will be seeking project funding for ISP projects and corporate funding for the remainder. If so, then the proponents should prosecute a rule change applying to all their assets. But it seems that an 'all capex' option would not have met the desired timetable. We think the consideration of the issue should drive the timetable, not the other way around.

The proponent's proposal is significant for consumers in that involves a move from a real return to a nominal return framework which would shift inflation risk to consumers, though there is no explicit mention of this in their proposals. We would have thought that such a fundamental change should be part of the current AER rate of return review, not prosecuted through the narrow derogation. This is no different from the AER's rejection of the networks' proposal for a hybrid approach (involving a nominal return on debt) in the current review of expected inflation.

While the regulatory framework is designed to replicate what happens in a workably competitive market, firms in this type of market:

- do not earn a return on capital spent during construction (which TNSPs already get), nor
- depreciation during construction (that this rule change seeks)

Why is this proposal coming now, with a claim of urgency, rather than any time in the last 2 years?

There seems to be two reasons:

- (i) We only now realise the level of capital involved

TransGrid notes in its rule change application<sup>2</sup>:

“In the course of our assessment of Project Energy Connect (PEC), we have identified there are features of the regulatory framework that have significant implications for the financeability of large scale projects with

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<sup>2</sup> See p. 1 <https://www.aemc.gov.au/sites/default/files/2020-10/New%20Rule%20Change%20Proposal%20-%20National%20Electricity%20Rules%20-%20TransGrid%20-%20Making%20ISP%20projects%20financeable%20-%2020200930.PDF>

long asset lives. This issue has not been apparent before and has emerged as a direct result of the unprecedented capital investment required in order to deliver the ISP projects.”

The prospect of large ISP related expenditures for TransGrid has been obvious for some years. The 2018 ISP listed \$(2017/18)6.4b ± 50% of projects in NSW<sup>3</sup>. While this number has grown in the 2020 ISP<sup>4</sup>, it is difficult to understand how the additional estimated costs have now created an issue that did not exist in 2018.

We acknowledge there has certainly been a large increase in the PEC capex – now \$2.4b compared with \$1.53b in the PACR and the AER’s 5.16.5 review. We suspect that had there been a more accurate estimate of capex in the PACR (even at near the upper limit of a Class 3 rather than the Class 4 AACEI estimate<sup>5</sup> Electranet presented) and hence when the AER completed its 5.16.6 review, the project would have not passed the AER review. This review reduced net benefits to just \$269m compared to ElectraNet’s claimed \$924m. As the AER concluded, after referring to ElectraNet’s revised modelling to correct errors in the \$924m calculation<sup>6</sup>:

“The additional modelling undertaken by ElectraNet corrected for these errors and adopted our alternative inputs and assumptions. The results of this further modelling indicate that the net economic benefits of the preferred option in the central scenario remain positive, assuming interconnector costs of \$1.53 billion. However, the additional modelling also indicates that the net benefits in the central scenario may be significantly lower (about \$269 million rather than \$924 million) using the alternative inputs and assumptions.”

We do not consider it reasonable for consumers to effectively have to pay a higher upfront cost because of the lack of a reasonably robust capex estimate in the PACR.

(ii) If we do not build PEC quickly the lights will go out

TransGrid argues that without quick approval of the rule change under Rule 87 then<sup>7</sup>:

“...the security and reliability of the national electricity system will be prejudiced. This would have a flow on effect and would risk prejudicing the timely delivery of renewable projects and the ISP as a whole which will put the security and reliability of the national electricity system at further risk”

We do not agree. While AEMO may have been of that view when the 2020 ISP was published in June (although the 2020 ESOO paints a slightly different picture again), we would suggest that subsequent passing in NSW of the Electricity Infrastructure Roadmap legislation together with the AGL announcement of its 250MW battery in SA and other announced batteries, that TransGrid’s concern is an overstatement. These announcements must also cast doubt over the 2020 ISP, if not in its entirety but certainly of both scope and timing of many identified projects.

<sup>3</sup> See Appendix D3 pp 68-70 [https://aemo.com.au/-/media/files/electricity/nem/planning\\_and\\_forecasting/isp/2018/isp-appendices\\_final.pdf?la=en&hash=D52884BF713B2B23EEB3F90BA784CFAD](https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/isp/2018/isp-appendices_final.pdf?la=en&hash=D52884BF713B2B23EEB3F90BA784CFAD)

<sup>4</sup> It is difficult to estimate the NSW portion of the costs in the Transmission Outlook excel spreadsheet.

<https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2020-integrated-system-plan-isp>

<sup>5</sup> See [https://web.aacei.org/docs/default-source/toc/toc\\_18r-97.pdf?sfvrsn=4](https://web.aacei.org/docs/default-source/toc/toc_18r-97.pdf?sfvrsn=4)

<sup>6</sup> Pp 6-7 <https://www.aer.gov.au/system/files/AER%20-%20Determination%20-%20SAET%20RIT-T%20-%2024%20January%202020.pdf>

<sup>7</sup> Rule Change Proposal p.31

We also see that neither AEMO or TransGrid are the sole determiner of the timing of network construction in NSW. Under Clause 31 of the just passed NSW Electricity Infrastructure Investment Bill 2020, the Minister:

“... may...direct a network operator to carry out... a priority transmission infrastructure project.”

Further, an alternative to the rule change proponents pursuing PEC, the option of an AEMO competitive tender might be considered. AEMO as the jurisdictional transmission operator in Victoria currently undertakes a tender process for transmission projects. TransGrid and ElectraNet as the relevant jurisdictional operator can do that in their States. They do not have to undertake the project themselves.

### Ratings and funding - not a simple story

The proponents argue that applying the benchmark 60/40 debt equity ratio will mean they are not able to raise the required debt without being re-rated to ‘junk’ status. For the project to proceed the resultant higher borrowing costs will be paid for by lower equity returns i.e. debt return for the additional equity they would need to contribute.

TransGrid’s application argues<sup>8</sup>:

“Our analysis confirms that cash flows from PEC (and many other ISP projects) will be insufficient to support 60% debt funding at a BBB+ credit rating (or indeed an investment grade credit rating at all) for an extended period of time.

This has two implications, each of which creates a significant barrier to securing the funding necessary to proceed with the project and substantially undermines the incentive to invest.

Either:

- the project would require equity funding substantially in excess of the 40% ratio provided for in the revenue allowance, resulting in an uneconomic return to equity investors and lower than the equity returns to those set out in the AER’s RORI (the return on additional equity would be at the regulated cost of debt); or
- the project could seek to proceed with 60% debt funding but this could only occur on a sub-investment grade (‘junk’) basis resulting in debt funding costs substantially in excess of those compensated for in the revenue allowance, causing serious adverse impacts to financial resilience increasing the risks borne by equity holders to significantly above the level contemplated in the AER’s RORI. Further, the shortfall between compensated debt costs and those incurred at sub-investment grade would have to be borne by equity holders reducing returns to equity holders below those set out in AER’s RORI.

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<sup>8</sup> See pp3-4 <https://www.aemc.gov.au/sites/default/files/2020-10/New%20Rule%20Change%20Proposal%20-%20National%20Electricity%20Rules%20-%20TransGrid%20-%20Making%20ISP%20projects%20financeable%20-%2020200930.PDF>

The AER agrees with the TransGrid modelling showing a reduction in the FFO/net debt ratio at a 60/40 capital structure<sup>9</sup>.

While the mathematics might be correct, the relevant question for consumers is, so what? As the AER stated in its presentation to the Forum, it is exploring with the rating agencies the many quantitative and qualitative factors that contribute to a company's rating, one of which is FFO/net debt. Presumably like the revenue cap regulation in a country with a AAA sovereign debt rating.

A sole focus on the FFO/net debt ratio seems to assume that the debt for ISP project will be raised as ISP project specific finance rather than based on corporate debt backed by the secure revenue flows that come with revenue cap regulation. You cannot look at financing ISP projects in isolation from financing the whole regulated asset portfolio. As the AER noted in its Forum presentation:

“We note that ratings agencies do not look at ‘hypothetical’ benchmark cash flows, but the firm’s actual cash flows”

In ElectraNet’s case, it is difficult to see that the funding of an additional \$474m for its share of PEC creates such a financing issue. This is for a TNSP that has an approved capex budget in the current 2018-23 revenue period of ~\$920m - approved capex (\$462m) + Eyre Peninsula upgrade (\$290m) + MGSS syn cons (\$170m).

This consideration of a range of factors is seen in Moody’s recent assessment of ElectraNet’s rating. While it downgraded Electranet from Baa1 to Baa2<sup>10</sup>, it still retains an investment grade rating that is two notches above junk status.

Moody’s noted<sup>11</sup>:

“The stable outlook however reflects Moody’s expectation that ElectraNet’s metrics will be sustained at levels consistent with the Baa2 rating, given (1) the stable and predictable nature of ElectraNet’s regulated revenue, (2) the company’s track record of delivering on both regulated and unregulated capital works, and (3) the strong commitment from the shareholders to support ElectraNet by maintaining a stable capital structure.”

Moody’s also commented that at a Baa2 credit rating, ElectraNet could be upgraded if its FFO/net debt improved to 9% and “...net debt to RAB fell below 80% ...”. This clearly implies that the very high gearing of ElectraNet can be maintained at little cost.

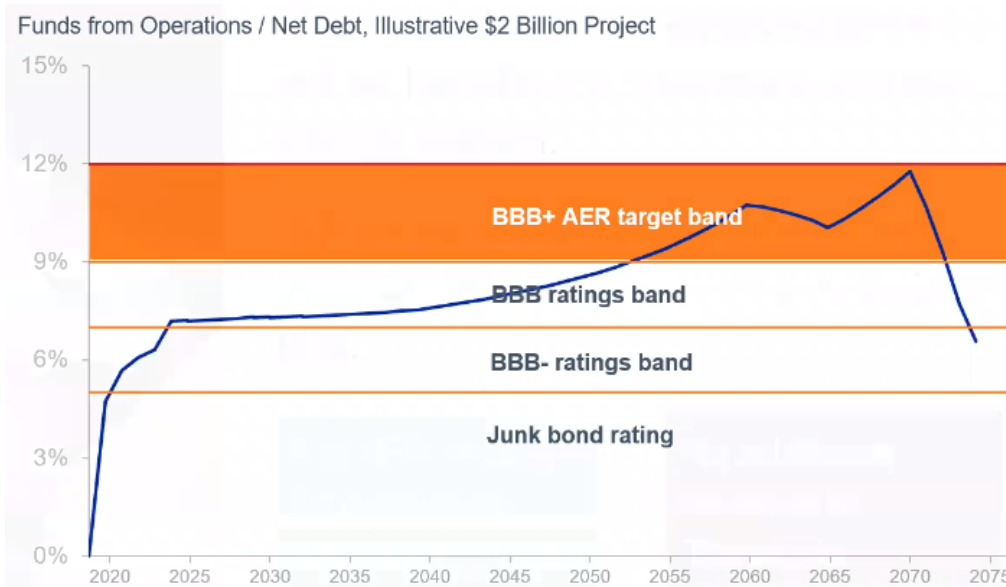
The Moody’s report also suggests there is no junk bond risk for Electranet and no suggestion of a financing risk. This latter point seemed to be supported by TransGrid in the 26<sup>th</sup> November Forum. The TransGrid CFO said that, following implementation of the rule change, even though cash flow is below the AER target band for 30 years, the project can be debt financed.

<sup>9</sup> Electranet did not discuss their modelling with the AER

<sup>10</sup> Moody’s Baa1 is equivalent to S&P BBB+ and Baa2 to S&P BBB

<sup>11</sup> Moody’s Investor Services rating Action: “Moody’s downgrades ElectraNet to Baa2; outlook stable” 9 October 2020





In TransGrid’s case, the approved 2018-23 capex of \$1.25b plus \$4.9b of contingent projects<sup>12</sup> did not seem to raise a concern around financeability, at least for Macquarie Equities. In their recent report on TransGrid<sup>13</sup>, they advised:

“NSW Roadmap is attractive to TransGrid. The legislation allows the carving out of the REZ transmission costs into a separate RAB, and may have a contractual payment initially before reverting back to AER price regulation. Like with the SA-NSW applications, it allows TransGrid to better align cash flow to meet debt and equity requirements.”

This will provide further unregulated return opportunities some of which may flow from ISP projects. Given this analysis it is difficult to see how funding of ISP capex can be separated out from overall TNSP funding – for both regulated and non-regulated assets. We assume the TNSPs will not be seeking ISP specific project funds that are reliant only on the cashflow from the specific ISP project but on the cash flow from existing assets, from the ISP project and the cash flow from the unregulated services they will provide to those seeking to connect to the ISP projects.

As the AER said at the Forum – is a lower FFO/net debt metric really a problem that requires a rule change? Or can it be addressed through a change in the TNSP’s capital structure?

Due to conflicting information and a changing narrative, it sometimes it is difficult to clearly understand what the proponents’ position really is. As noted above, at the Forum, the proponents did not give an unequivocal answer to the question - will the ISP projects be built as planned without the rule change? After saying they will be downgraded to ‘junk’ status in the application, over the course of the Forum the TransGrid CFO said:

<sup>12</sup> See [https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20TransGrid%20transmission%20determination%20-%20Attachment%206%20-%20Capital%20expenditure%20-%20May%202018\\_0.pdf](https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20TransGrid%20transmission%20determination%20-%20Attachment%206%20-%20Capital%20expenditure%20-%20May%202018_0.pdf)

<sup>13</sup> Macquarie Research “Spark Infrastructure Group” 20 November 2020  
Participant Derogation: Financeability of ISP Projects ERC 0320 and ERC 0322 | 03 December 2020

- in his presentation - after exploring all options it is not possible to source funding without ‘materially downgrading’ of their current BBB rating.
- in an answer to a subsequent question – he seemed to backtrack on the claim that TransGrid would go to junk bond status, acknowledging the point made by the AER in its presentation that there are also qualitative factors apart from FFO/net debt that go into assessing a rating.
- In an answer to a further question about the evidence that investors will not invest without the rule change - replied that the TransGrid Board will not invest in any manner that “...jeopardises our current credit rating of BBB”;

However, TransGrid’s current rating is BBB+ (as is ElectraNet’s) and the figure on the previous page shows that it is willing to be less than BBB+ for nearly 30 years following acceptance of the rule change, indicating it is willing to invest. Perhaps we have not interpreted these answers correctly and clarification from the proponents would be helpful.

To try to understand the materiality of this situation we have looked to the broader infrastructure investment environment. Recently we have seen a range of superfunds publicly advocating for additional infrastructure investment to support the energy transition to achieve their funds’ net zero emissions aim. They are keen to use their members funds to invest in such long-term assets. The just published Industry Super Australia report on the role of industry super funds in the national economy highlighted the impact these funds can have on infrastructure investment<sup>14</sup>. It draws on a recent G20 report that estimated Australia will have a public infrastructure deficit of \$226b by 2040 and says that<sup>15</sup>:

“Industry super funds and their asset managers have plans to invest up to \$33 billion dollars over the next five years in Australian public infrastructure projects, representing a significant contribution to eliminating the measured infrastructure shortfall.”

AustralianSuper comments<sup>16</sup>:

“AustralianSuper currently invests in a range of renewable energy projects across markets. We plan to have investments of over \$1 billion in the sector by the end of 2022. We expect this allocation to increase over time.”

In publishing HESTA’s submission to the Technology Roadmap, their CEO said<sup>17</sup>:

“HESTA CEO Debby Blakey said: ‘Domestic investment opportunities with appropriate scale and long-term contractual certainty are relatively rare.

“In Australia alone we have an incredible opportunity to attract not only global investment but to draw on the almost \$3 trillion pool of superannuation savings to power a green-led recovery from COVID-19. But

<sup>14</sup> Industry Super Australia “Super in the Economy 2020 – Economic Paper 7 September 2020  
<https://www.industrysuper.com/assets/FileDownloadCTA/ISA-Super-in-the-Economy-2020.pdf>

<sup>15</sup> Ibid p. 73

<sup>16</sup> <https://www.australiansuper.com/investments/how-we-invest/climate-change>

<sup>17</sup> <https://www.hesta.com.au/about-us/media-centre/HESTA-calls-clear-policies-to-tackle-climate-change.html>

there is growing global consensus from investors and business leaders about the urgent need to set long-term emission reduction targets.

‘By getting the policy settings right, super funds like HESTA would have significant appetite to invest more in renewable infrastructure in Australia,’ Ms Blakey said.”

We have also observed that the risks TransGrid is saying its equity owners cannot bear, did not stop the sale of 19.9% of TransGrid to the Canadian pension fund OMERS last July. The buyer reportedly paid ~1.8 times RAB, a very high multiple<sup>18</sup>. This suggests that OMERS did not have any concerns about the ability of it as an equity owners to raise sufficient funding for its share of the ISP projects discussed in the December 2019 Draft 2020 ISP.

In addition to this, when Spark Infrastructure, which has 15.01% of TransGrid was considering whether to exercise its pre-emptive rights and purchase the Wren house share that was ultimately bought by OMERS, they were talking up the "multi-billion-dollar potential growth pipeline" coming from the ISP<sup>19</sup>.

We recognise that TransGrid’s equity investors will have a range of reasons for their investment that provided both a regulated return for prescribed services and a competitive market return for an expanding part of the business that will be driven by ISP projects. Given the potential for expansion of that unregulated business from expanded REZs connected to ISP projects, we find it difficult to comprehend that the investment returns will be assessed excluding the potential unregulated returns that ISP projects might offer.

Given these apparent inconsistencies, we would encourage the Commission to thoroughly test the networks’ various claims.

### We are not convinced by the claim that the proposal is ‘NPV Neutral’

This one of the most used, and abused, terms in national energy market regulation. It is more a mathematical statement based on particular assumptions than an effective argument to show consumer indifference between two outcomes.

There are many unrealistic assumptions required e.g.:

- Why should consumers’ discount rates (which would vary widely among consumers) be similar to networks?
- Why would they not change over the life of the asset?
- Why is it appropriate to apply the same discount rate to benefits (which are uncertain) as is applied to costs (which are certain)?

Finally, we are not aware of any consumer engagement that the proponents have undertaken to establish the intergenerational discount rates of consumers nor whether today’s consumers are willing to pay a certain amount

<sup>18</sup> Sarah Thompson et al “TransGrid investors pass up rights, prepare to welcome OMERS” Australian Financial Review 1 April 2020 <https://www.afr.com/street-talk/TransGrid-investors-pass-up-rights-ready-to-welcome-omers-20200401-p54fv7>

<sup>19</sup> Elouise Fowler “Spark Infrastructure talks up TransGrid” 25 February 2020 <https://www.afr.com/companies/energy/spark-infrastructure-talks-up-TransGrid-20200225-p5441c>

today to provide consumers in 20-30 years' time with a very uncertain benefit. EUAA members are certainly not willing.

We are not convinced that we should pay extra early for a project that has marginal net benefits while consumers still bear some capex risk even after the contingent project approval

The EUAA has long expressed its concern about the robustness of the Project Energy Connect business case and the highly volatile political and market environment that has material impacts on it. The AER shares this view. In its 28<sup>th</sup> September 2020 letter to Electranet<sup>20</sup>:

“The updated modelling results indicate that PEC is likely to remain the preferred option, but that the net economic benefits remain finely balanced and there is a significant zone of uncertainty. It is difficult to precisely estimate the net economic benefits with a high degree of confidence and there are a number of reasons for this.”

and then goes on to detail three reasons before stating:

“In addition to these uncertainties, we consider that the estimated benefits of PEC are likely to be overstated...”

Given this analysis by the AER, our members are reluctant to support what is such a marginal project under the rules even without paying more upfront under the proposed rule change. Even more so when they also face bearing capex over-run risk where:

- the TNSP can spend within their approved capex for the regulatory period but reduce/delay non-ISP capex to allow for an increase in ISP capex above the contingent project CP allowed capex; here all the over-run up to the approved cap gets into the RAB, irrespective of whether the additional capex is considered ex post efficient, or
- Go over the approved capex cap for the regulatory period and get consumers to share 30% of the additional cost under CESS

If PEC is granted final approval to proceed by the AER, then we will accept the “umpires” decision and move on. It is a different story altogether to accept the cost recovery and risk allocation profile that would result from the proposed rule change.

Even if the net benefits under the rules are marginal, there are substantial other benefits in lower power prices to consumers

At the Forum when Electranet was challenged by a participant about whether benefits are relevant to the rule change, Electranet responded that “...this is not about benefits”. This is a curious thing to say given ‘consumer

<sup>20</sup> [https://www.aer.gov.au/system/files/AER%20-%20Letter%20of%20response%20to%20ElectraNet%20-%2028%20September%202020\\_0.pdf](https://www.aer.gov.au/system/files/AER%20-%20Letter%20of%20response%20to%20ElectraNet%20-%2028%20September%202020_0.pdf)

benefits’ are at the core of their justification for the rule change – ‘support the rule change or else the benefits may (?) not come your way’.

It seems that even if the AER has doubts about the Electranet measure of ‘net benefits’ under the rules and we may argue against the ‘NPV neutral’ claim, it appears the proponents suggest the level of additional benefits to consumers (which are outside of the ‘net benefits’ in the rules used by the AER assess whether it passes the RIT-T test) swamp these concerns.

For example, the Electranet presentation at the Forum claimed:

“Modelling shows expected customer price reductions in both regions which outweigh the additional transmission costs by a factor of 6-7 times or more”.

and both proponents’ presentations were dominated by an assessment of these benefits.

These estimates come from modelling by ACIL Allen (for Electranet) and FTI (for TransGrid). We focus here on the FTI modelling results.

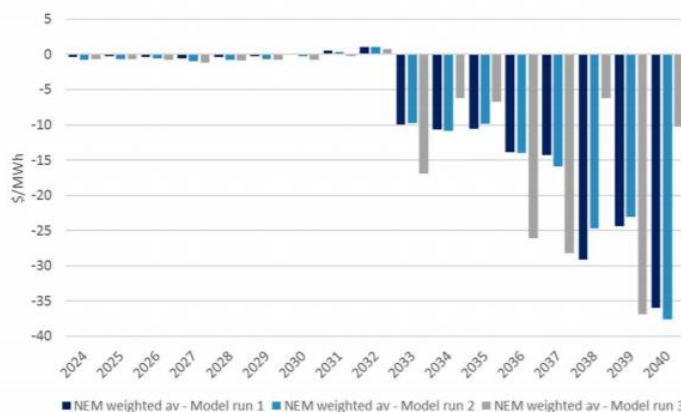
The FTI modelling has very large estimates of the benefits over the next 50 years:

- Lower wholesale power prices over the modelling period to 2040
- ‘Hard to monetise’ benefits, and
- Lower wholesale power prices from 2040-2073

(i) Lower wholesale power prices over the modelling period to 2040

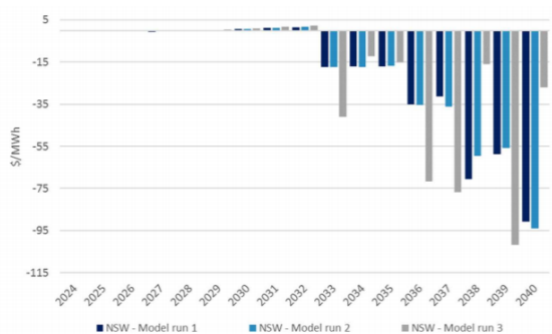
The wholesale price forecasts to 2040 are based on the 2020 ISP assumptions. This figure from the report summarises the results<sup>21</sup>:

**Figure 2-3: Annual weighted average NEM wholesale price impact from EnergyConnect**

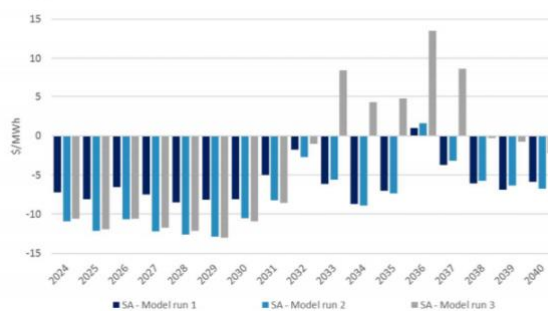


<sup>21</sup> See [https://www.aemc.gov.au/sites/default/files/documents/new\\_rule\\_change\\_proposal\\_-\\_national\\_electricity\\_rules\\_-\\_TransGrid\\_-\\_making\\_isp\\_projects\\_financeable\\_-\\_fti\\_report\\_-\\_20200930.pdf](https://www.aemc.gov.au/sites/default/files/documents/new_rule_change_proposal_-_national_electricity_rules_-_TransGrid_-_making_isp_projects_financeable_-_fti_report_-_20200930.pdf)

**Figure 2-4: Annual weighted average NSW wholesale price impact from EnergyConnect**



**Figure 2-5: Annual weighted average SA wholesale price impact from EnergyConnect**



Breaking down the jurisdictional impacts:

- There are some relatively small (compared with NSW) reductions in SA prices in the 2020s flowing from reduced gas generation in the State. These benefits decrease significantly in the 2030s with one model run showing price increases.
- The vast majority of the benefits are in NSW but these do not come until the mid 2030s based on the import of cheaper renewables from SA.

This second impact is particularly significant. In response to a question in the Forum, the TransGrid CFO emphasised a reason to support the rule change was to bring benefits into line with the proposed revenue recovery profile. While this may be the case for SA consumers, it is certainly not the case for NSW consumers.

Based on the two year ISP cycle, there will be around 8 ISPs, and 8 changes in assumptions, before the majority of the claimed benefits will accrue to the children of the consumers the proponents are asking to pay more now.

To demonstrate this risk, two significant developments in recent weeks are:

- the passing of the NSW Roadmap legislation in the State Parliament<sup>22</sup> which is specifically designed to underwrite a large increase in renewable generation within NSW so that it substantially reduces the need to import renewables from SA, and
- the announcement by AGL in mid-November to build a 250MW battery with a duration of four hours<sup>23</sup>.

We suggest that if we insert assumptions on these two developments to the FTI modelling, it is reasonable to expect that the NSW benefits will substantially disappear.

(ii) 'Hard to monetise' benefits

<sup>22</sup> See <https://www.parliament.nsw.gov.au/bills/Pages/bill-details.aspx?pk=3818>

<sup>23</sup> See <https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2020/november/agl-unveils-plans-for-grid-scale-battery-in-south-australia>

Apart from its modelling of the lower wholesale prices to 2040, FTI argues that there are also so-called ‘hard-to-monetise’ benefits which are not recognised in the RIT-T framework.

They argue<sup>24</sup>:

“In addition, EnergyConnect has an expected useful life of around 50 years and is unlikely to stop operating in 2040 (which is the end-point of the period of the RIT-T’s benefits assessment). Instead it is likely to continue operating and delivering benefits to the NEM. Although the long-term benefits are much less certain, excluding them (as per the RIT-T) could undervalue the merits of the project.”

These benefits are in three categories – supporting the integration of renewables into the grid, connecting complementary generation mixes in SA and NSW and contributing to security of supply in SA.

On the first:<sup>25</sup>

“EnergyConnect creates the option for excess renewables from one region to be exported to the other connected region, increasing the total demand that can be served. This may be particularly beneficial if there are specific geographic areas that are well suited to the deployment of renewables (i.e. experience high levels of sunshine or high wind speeds) but are distant from the significant load needed to consume electricity at times of peak production. The additional transmission provides greater market access for renewables generation and, in so doing, encourages additional production and deployment of renewables generation in the localities best suited for it.”

While moving renewables across jurisdictions to take advantage of relative costs and locational diversity of generation is an important concept for a national market, the NSW Roadmap seems deliberately designed to expand generation in NSW for NSW economic development reasons. It seems clear that the NSW government wants to generate its power in NSW, not import it from SA.

On the third, FTI use the case of the high FCAS costs in early 2020 from the outage of the Heywood interconnector. This event resulted in large commercial and industrial customers paying considerable pass through costs. We would suggest that these high costs as not so much an advertisement for building Energy Connect as it is for inadequate connection and access standards set in the past for inverter based generators. Requiring past and future inverter based generators to meet appropriate system strength standards is likely to reduce system security costs and may well be a much cheaper alternative.

Drawing on experience in other jurisdictions, FTI distinguish between two types of transmission investments<sup>26</sup>:

“While some transmission investments are developed as economic assets (and therefore are required to meet specific benefit-to-cost thresholds), there are other classes of transmission investments that follow different rules. In particular, the need for a public policy asset is typically identified by the New York Public Service Commission (“NYPS”), the public utilities regulator for the New York State.”

<sup>24</sup> FTI p. 17 [https://www.aemc.gov.au/sites/default/files/documents/new\\_rule\\_change\\_proposal\\_-\\_national\\_electricity\\_rules\\_-\\_TransGrid\\_-\\_making\\_isp\\_projects\\_financeable\\_-\\_fti\\_report\\_-\\_20200930.pdf](https://www.aemc.gov.au/sites/default/files/documents/new_rule_change_proposal_-_national_electricity_rules_-_TransGrid_-_making_isp_projects_financeable_-_fti_report_-_20200930.pdf)

<sup>25</sup> Ibid p.28

<sup>26</sup> Ibid p.42

And seeking to apply this to Project Energy Connect they argue<sup>27</sup>:

“...we consider that the wider, hard-to-monetise effects of EnergyConnect are likely to help the NSW and SA governments advance a number of stated public policy aims. In this way, the benefits of EnergyConnect can be seen through the lens of a ‘public policy’ objective, similar to how certain European and US projects are evaluated when they are perceived to be in the wider interest of society.

Reference is made to State Government zero net emissions targets as part of the ‘public policy benefits’ without any analysis of whether PEC is the most efficient way to achieve these. Even if there are these public policy benefits we would suggest the taxpayer rather than the electricity consumer is the payer as they are the beneficiary. We suggest that State Governments have the option of contributing to the capex of PEC to enable it to achieve ‘public policy benefits’ as has been the case in other places<sup>28</sup>. For example, last month the CEFC agreed to provide a \$125m corporate debt facility to TransGrid to support exporting power from Snowy 2.0<sup>29</sup>.

Aside from the NSW Roadmap and what State Government public policy objectives might be, there are also technological development considerations. The rapid improvement in the competitiveness of large-scale batteries suggests that local DER will become more important and increase the risk of interconnectors being stranded, aside from the impact of the NSW Roadmap. If this continues then there are less benefits from connecting complementary generation mixes, less security of supply benefits and less benefit from lower prices beyond 2040.

(iii) Lower wholesale power prices from 2040-2073

Finally, after the conventional 20 year lower wholesale prices forecast and the ‘hard to monetise’ benefits there are what we would refer to as the ‘wet finger in the air benefits’ from lower wholesale prices after 2040. While we understand the conceptual basis for these benefits, there is no evidence provided to justify the proposed upper and lower bounds of those reductions. The suggested range of gross savings of \$6.8-14.7b for 2040-73 (the remaining asset life) is pure speculation and could be considered “heroic” given the uncertainty. We can assure you that our members are unwilling to pay a certain cost now for an uncertain benefit sometime in the distant future.

The proponents have not appropriately consulted with stakeholders and incorporated our views into their proposal

TransGrid notes in its application<sup>30</sup>:

“We have been working closely with the AER and other stakeholders through the course of this year to find an appropriate solution that facilitates the timely and efficient delivery of ISP projects and reduces the barrier to securing capital in a manner that does not increase the costs to customers. This dialogue has

<sup>27</sup> Ibid p.44

<sup>28</sup> E.g. the Queensland Government’s recent commitment of \$145m for transmission infrastructure to facilitate the connection of renewable generation. See Queensland Economic Recovery Plan p. 41

[https://www.covid19.qld.gov.au/\\_data/assets/pdf\\_file/0025/128194/economic-recovery-plan.pdf](https://www.covid19.qld.gov.au/_data/assets/pdf_file/0025/128194/economic-recovery-plan.pdf)

<sup>29</sup> <https://www.cefc.com.au/media/media-release/cefc-and-transgrid-services-in-landmark-investment-to-support-snowy-2-0-grid-development/>

<sup>30</sup> See p. 6



concluded that the issue is unable to be resolved within the existing regulatory framework, and a rule change is the most efficient solution.”

The EUAA is a long-time member of TransGrid’s Advisory Council and appreciate the company’s willingness to engage with stakeholders. For this they should be commended.

We have has been involved in a number of briefings from TransGrid over the course of 2020 on why they were going to propose the rule change. We expressed no view on whether the issue required the proposed rule change and suggested that we would not be inclined to agree with the proposed rule change when presented with it as a solution. Importantly, there was no detailed discussion of the implication of moving away from indexing the RAB to a nominal return framework and how this effectively pushes inflation risk on to consumers.

At the Forum, Electranet said that it has no concrete evidence that shows consumer preferences for the rule change.

What is being proposed is highly complex and requires specialist knowledge, time and resources to fully understand the issues and impacts. As much as the proponents engage on these issues, stakeholders still rely on regulatory bodies to provide an independent assessment. Therefore, we encourage the commission to consider our concerns and provide us with an outcome that is in the interests of consumers.

In closing, clearly we will accept any final decision by the AER to approve PEC under the current rules. However, further discussion with the proponents and other stakeholders has only confirmed our concerns and firmed our view that we could not support this rule change.

Do not hesitate to be in contact should you wish to discuss this further.



Andrew Richards  
Chief Executive Officer