1 October 2021

Australian Energy Market Commission

Lodged via AEMC website

Re: Response to Consultation Paper – Transmission Planning and Investment Review

The Network Shareholders Group (**NSG**) comprises a mix of Australian and foreign investors with significant and ongoing capital invested in Australian electricity network assets that play a significant role in supporting the transition to a low cost, low emission energy future. We are AMP Capital, AustralianSuper, CDPQ, HRL Morrison & Co, IFM Investors, Macquarie Infrastructure and Real Assets, OMERS, and Spark Infrastructure. Our electricity network assets serve consumers in New South Wales (**NSW**), South Australia (**SA**) and Victoria (**VIC**).

The NSG is the preeminent reference group representing private investors' interests in electricity network assets in Australia, and several our members have recent real experience in financing large transmission projects necessary to deliver the transition in the National Electricity Market (**NEM**). This submission is provided on behalf of our members with interests in electricity transmission assets.

We have an important role in ensuring public policy and regulatory processes for Australia's future infrastructure investments are well-informed and carefully consider conditions in financial capital markets. In turn, this supports necessary and efficient capital investment to ensure that government infrastructure and policy commitments can deliver improvements to the lives of all Australians.

We are already investing in the transition of the NEM to a low emission, low cost, reliable and secure energy system by committing substantial amounts of new capital into significant transmission electricity infrastructure. Transmission networks are critical to provide the transfer capacity to connect new renewable generation and to support renewable energy zones (**REZs**). The prospective investment required in networks remains significant over the next two decades as coal-fired generation retires but will unlock significant savings to customers.

We welcome the Australian Energy Market Commission's (**AEMC**) review of transmission and investment planning and consideration of issues that can further streamline regulatory processes and address commercial considerations to promote timely and efficient investment in major projects. It is important that this review goes further than considering whether there are barriers to financing major projects and instead ensures that the regulatory framework promotes efficient investment including for major projects.

We recommend the following modifications to the National Electricity Rules (**NER**) to achieve this:

- Make it an explicit requirement for the notional regulated Network Service Provider (**NSP**) to remain financeable, that is maintain benchmark credit ratings and gearing, consistent with the assumptions in the regulated rate of return.
- Provide flexibility in the profile of revenue to be recovered to maintain benchmark credit rating and gearing to support cycles of investment and major projects across regulatory periods.
- Mitigate the higher risk associated with cost recovery and penalties for major projects by providing certainty in cost recovery for early works and the ability to avoid penalties under financial incentive schemes.

- Improve regulatory processes and confidence in outcomes by enabling the Integrated System Plan (**ISP**) and regulatory investment test for transmission (**RIT-T**) processes to take account of broader and non-quantifiable benefits, identify cost savings to customers, and limit responsibility for considering non-network alternatives to the Australian Energy Market Operator (**AEMO**) as part of the ISP.

The biggest issue hindering major transmission investment is financeability

There has been significant progress in streamlining the regulatory and planning processes to facilitate the delivery of significant electricity network projects, however, financeability remains the most significant issue. Financeability issues under the regulatory framework results from the mis-match of revenue recovery to achieving the financial ratios underpinning the benchmark credit rating. This reduces the expected return on investment below the required return on investment and is the primary reason that a transmission NSP (**TNSP**) may not invest in a major transmission project.

This issue is exacerbated when the regulated return is lower than market estimates of the efficient cost of capital and where there is greater risk of not recovering costs, delays in cost recovery, penalties, and ex-post review exposure. Addressing these issues will improve but not resolve all the regulatory issues associated the financeability of a major project. If unresolved, these issues will remain barriers to realising the $11 billion in benefits outlined in the ISP.

Contestability is not an effective or proportionate solution to delivery risk

We understand the AEMC's concern that significant benefits to customers from investing in major projects may not occur if a TNSP chooses not to proceed with a major transmission project. We can assure you that no investor in a TNSP would make this decision lightly and without exploring all options available to it. However, introducing contestability is not a proportionate or effective response to this problem.

A proponent in a contestable framework will face the same financing challenges as a privately held NSP and the same competition in project cost tender processes. Indeed, financeability issues could be greater for a stand-alone project without the benefit of the underlying Regulatory Asset Base (**RAB**). A contestable framework also introduces new operational, reliability and security risks. A more effective solutions would be to address the financing challenges in the regulatory framework which would also avoid the significant cost of establishing a contestable framework and the significant risk to operation and security of the system that it brings.

If a contestable framework is pursued, it should be a 'last resort' option if a TNSP does not proceed. However, in the absence of providing more flexibility in relation to returns and revenue, the risk that a project would not proceed remains. If more flexibility is provided, the TNSP should be able to participate in that subsequent contestable process where more favourable revenue, return and risk outcomes may be available than in the regulatory framework.

This submission outlines our view on the problems that lead to delays and higher cost of major transmission investment and the potential solutions that should be investigated. It is important for a detailed cost benefit assessment to be undertaken of all options, and tested with relevant parties, including the option of providing more revenue flexibility in the regulatory framework.

We would be happy to discuss these matters further and in the first instance we recommend you contact Sally McMahon on 0421057821 to organise a meeting.

We also note that the Clean Energy Finance Corporation (**CEFC**) was significantly involved in the recent financing solution for Project EnergyConnect. We strongly recommend that the AEMC approach the CEFC to discuss their views and involvement in this recent example.

Yours sincerely,

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Attachment A: Responding to the issues raised in the Consultation Paper

1. Introduction

The AEMC has initiated this review to identify issues with the existing regulatory frameworks in relation to the timely and efficient delivery of major transmission projects, explore options for reform or improvements and recommend changes to the National Electricity Rules (**NER**) and other regulatory instruments to support framework that are fit-for-purpose and promote the timely and efficient delivery of transmission services.

The AEMC has identified two overarching issues with the existing regulatory framework:

1. The transmission planning framework and whether the ex-ante incentive based framework is fit for purpose to support the timely and efficient delivery of major transmission projects; and
2. The framework for transmission investment and delivery and whether the exclusive right, with no obligation to deliver major projects, leads to uncertainty as well as the role of financeability and contestability in contributing to or resolving this issue.

We consider that the primary issue that gives rise to uncertainty that major projects will be delivered is financeability. This issue arises due to the deferral and inflexibility of the revenue profile but is exacerbated by low returns and higher risks of recovering costs under the regulatory framework, further exacerbated whether there is no avenue of recourse or appeal under the regulatory system. It will not be resolved by introducing contestability but could be mitigated with some changes to the regulatory framework.

2. Financeability is the primary problem

Financeability is a problem under the current regulatory framework because the revenue provided is insufficient for a notional regulated transmission network service provider (**TNSP**) undertaking major projects to achieve financial ratios required to maintain the benchmark credit rating. This problem arises because of the way revenue is calculated under the regulatory framework. Under the current regulatory framework, revenue is deferred to later in the life of an investment because the forecast indexation on the regulated asset base (**RAB**) is deducted from the depreciation component under the building blocks. This reduces the depreciation component of revenue early in the life of the investment on the expectation that this revenue will be recovered later.

The financeability problem can also be exacerbated where the regulated return is not commensurate with risk. This can occur because the regulated return is below the efficient cost of capital, where the risk is higher than for business as usual investment, or both. The efficient cost of capital and risk can be higher for major projects because of the operation of the regulatory framework. Therefore, these issues are best addressed by changes to the regulatory framework.

The AEMC has an opportunity to ensure that the financeability issue is not contributing to delays or efficient investment in major projects by introducing rule changes that provide certainty and confidence in regulatory processes and guide the AER's exercise of discretion in establishing the regulated return and revenue in determinations.

Why is the financeability challenge greater for major projects?

For major projects, lower revenue in the short term will affect the ability of the notional NSP to achieve the financial ratios associated with the benchmark credit rating. Where the credit rating cannot be maintained, the cost of debt increases or more equity is required resulting in a higher efficient cost of capital. Where compensation is fixed by the regulated return, the incremental

return on the additional equity is effectively capped at the cost of debt, reducing the incentive to invest.

The financeability challenge is greater for major projects because:

- The size of investment is proportionately large compared to the underlying RAB so the consequence to financial ratios of deferring revenue under the regulatory framework is greater.
- Additional equity is usually required, triggering an investment review process that differs from business as usual capital programs.

When a TNSP requires additional equity to fund a transmission project, the investment decision is shifted from management level to investor level investment committees. In assessing projects that require new equity, the investment committees consider whether the returns are commensurate with risk. There are usually internal guidelines that categorise each investment into different risk profiles and asset categories. Once categorised, the investment is compared to benchmark performance across that asset and risk class to maintain consistency of return. There are thresholds that apply to each asset and risk class. These considerations are informed by independent assessments of the value and risk associated with these projects. An investment committee will consider each project on its merits to ensure that it is value accretive to investors. Investment committees are unable under governance guidelines to determine that a new project can be 'subsidised' by other business activities as this reduces returns to shareholders. To be value accretive, a project must be:

- Financeable on the benchmark assumptions – if more equity is required or credit ratings cannot be maintained, the expected return on equity is less than the regulated return on equity resulting in lower returns to shareholders as there is no corresponding upside opportunity to be provided with a higher return than the regulated return in the future.
- Deliverable within the regulatory allowance – if there is a greater risk of incurring more cost than the regulatory allowance, extended periods of delay in recovering costs, and penalties, the expected return on equity is again reduced because there is no future opportunity to recover these costs or earn a higher return to offset the additional risk.

Financeability can be addressed by providing revenue flexibility

The financeability issue can be addressed by providing flexibility in the recovery of revenue over the life of the investment without increasing costs to customers. There are several net present value (**NPV**) neutral options that could be implemented such as removing indexation from the RAB of major projects, providing flexibility in the deprecation profile or revenue smoothing over more than one regulatory period. These options have been used previously under the NER and National Gas Rules (**NGR**). For example, there is more flexibility regarding indexation and depreciation under the NGR, separate RABs are already provided for metering assets, and revenue has been smoothed over more than one regulatory period in cost pass through and remitted decisions. Removing indexation is a mechanical solution requiring less discretion by the TNSP and the regulator. However, providing flexibility in depreciation also enables other factors, such as market conditions and price impacts, to be considered in shaping the revenue profile.

These options may result in small increases in transmission prices in the short term. However, transmission prices are a small component of the total bill, any increases may not be passed on to customers by retailers in the short term and can be mitigated by being smoothed over the regulatory period. If avoiding short term increases in transmission costs regardless of offsetting price reductions elsewhere in the electricity supply chain (e.g., in wholesale generation prices) or

in the future becomes a decision criterion, this will put at risk timely and efficient investment in major transmission projects. Major projects are a necessary precursor to achieving lower total costs by reducing congestion and connecting more lower cost and low emission generation. We also note that no major project will proceed in the first place unless it has a positive NPV benefit to consumers assessed under the regulatory investment test for transmission (**RIT-T**).

A further issue that has been raised in considering solutions to financeability is that bringing forward revenue could impact on intergenerational equity. The impact on intergenerational equity assumes that the current revenue profile is correct, that intergenerational equity is affected by transmission prices alone and that financeability issues do not affect the timing and efficient delivery of major projects. The impact on intergenerational equity because of short term changes in transmission charges and the net impact on total bills should be investigated with and without major projects because these could be impacted by financeability and are required to deliver savings to customers over the longer term. This would be more consistent with the National Electricity Objective that specifically requires consideration of the long term interests of consumers.

Ensure regulated returns are not contributing to financeability issues

The financeability problem is exacerbated by a low regulated return. The AER's own expert[1], AEMO's advisers[2], and market practitioners[3][4] have confirmed that the return on capital set under the rate of return instrument (**RORI**) is lower than the efficient cost of capital. A return that is too low reduces the revenue provided putting further pressure on financial ratios required to sustain the credit rating on which the regulated cost of capital for a benchmark efficient NSP is based. Returns that reflect the efficient cost of capital will better support major transmission projects and are required under the National Electricity Law (**NEL**). However, even if the regulated return appropriately reflects the efficient cost of capital, an NSP may still need revenue flexibility because the deferral of revenue under the regulatory framework can adversely impact the financial ratios required to maintain the benchmark credit rating.

In its review of the 'financeability' rule change, the AEMC concluded that the regulatory framework does not create a barrier to financing investment. However, the focus of this current review is whether changes to the regulatory framework could promote timely and efficient investment in major projects. A regulated TNSP may be able to finance a major project but at a higher cost of capital. Where there is no additional compensation under the regulated return, this reduces the expected equity return. An expected equity return that is lower than the efficient cost of equity does not promote timely and efficient investment.

The AEMC concluded that in a period of investment and expansion, it is likely that network businesses will need to rely more heavily on finance from equity investors relative to the benchmark assumption to maintain the benchmark credit rating. However, the regulatory framework sets the rate of return, and should provide a consistent incentive to invest, regardless of the investment cycle. There is no ability under the current regulatory framework for investors to be provided with a higher return in the future to offset lower returns in the short term. If it is efficient for a regulated network service provider (**NSP**) to change its gearing in a growth phase

1 The Brattle Group, International Approaches to Regulated Rates of Return, September 2020.
2 Synergies Economic Consulting, Discount rates for use in cost benefit analysis of AEMO's 2022 Integrated System Plan, A report prepared for AEMO, July 2021.
3 Morgan Stanley, Utilities Global Lens: Where to invest in Regulated Utilities Amidst Global Macro Environment, April 2021.
4 NSG, Response to AER RORI Omnibus papers, 3 September 2021.

which could reduce the expected return on equity below the regulated return on equity, this should be compensated for somewhere in the regulatory framework.

The AEMC is best placed to address financeability and risk compensation issues under the regulatory framework

The AEMC is best placed to consider how the regulatory framework can be improved to improve financeability and risk compensation because addressing these matters in the rules will maximise regulatory certainty and consistency – and thereby provide confidence to investors. The AER's task is to set the efficient cost of capital that is commensurate with risk. In undertaking this task, the AER has confirmed that it does not need to address financeability because it has no obligation to do so and a notional NSP does not need to be able to achieve financial ratios to maintain the benchmark credit rating.[5]

The lack of a requirement for the AER to consider financeability is not a reason for it to not do so as a matter of good regulatory practice and to provide confidence in the quality of its decisions. However, in the absence of an obligation, there is no certainty that the AER will, or can, take any action to address financeability. The AER has concluded that current returns are sufficient[6] despite evidence to the contrary[7] and financeability does not need to be addressed because the regulated NSP has access to revenue outside the regulated framework. We have addressed the AER's reasons for this conclusion below:

- **Project EnergyConnect receiving support from the Clean Energy Finance Corporation (CEFC) was not found to be evidence of a financeability issue**.[8] The CEFC's role is to make commercial investments that counter market failures and address financing impediments to help achieve its broader public policy objectives to transition to low emission economy.[9] We understand that the AER's conclusions are yet to be tested with the CEFC.
- **It is appropriate for a notional NSP to only be able to retain the benchmark credit rating if a rating agency interprets qualitative criteria favourably**.[10] The AER's estimate of the efficient cost of capital should enable a notional NSP to comfortably achieve the financial ratios. If it does not, it could indicate that the AER's use of discretion in estimating the parameters has resulted in an inaccurate estimate. A financeability assessment provides a safeguard against this outcome.
- **A notional NSP might not be able to maintain benchmark gearing for major projects but should manage its own financeability.**[11] A regulated notional NSP does not have tools available to manage financeability as its revenue and RAB are determined under the regulatory framework. A regulated notional NSP should not be required to draw on additional equity from investors, rely on revenue from unregulated businesses or balance sheet strength of a parent to retain the benchmark credit rating arising as a result in a gap in the regulatory framework.

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5 AER, Rate of Return, Term of the rate of return & Rate of return and cashflows in a low interest rate environment, Final Working Paper, September 2021, p.109.

6 Evidence provided by its own expert (The Brattle Group), market studies, and advisors to AEMO that the regulated return is a low outlier was not found by the AER to be compelling (see p.66 of AER Rate of Return, Final Working Paper, September 2021).

7 AER, Rate of Return, Final Working Paper, September 2021, p.66.

8 Ibid, p.108.

9 See CEFC website and investment policy: cefc-investment-policies-april-2021.pdf

10 AER, Rate of Return, Final Working Paper, September 2021, p. 109.

11 Ibid, p. 109.

- **A negative net profit after tax (NPAT) that results in losses to the notional NSP could occur but should be rectified by a NSP increasing gearing to fund negative cash flows**.[12] This view is akin to suggesting that more should be borrowed to pay a higher mortgage. We do not consider this approach is sustainable or financially responsible. A financeability assessment provides a safeguard against this outcome.
- **It is not clear that market practice in estimating the return on equity is relevant in the regulatory context**.[13] Market practice guides the actual flow of capital. A divergence between the market cost of capital and the regulated return on investment in regulated networks will put efficient investment and benefits to consumers at risk.

We note that the AER's position on these matters is not challengeable under the current NEL which contributes to risk and uncertainty. Therefore, to improve confidence and certainty in the regulatory regime, the AEMC should introduce rules that clarify the obligation on the AER to consider financeability when establishing the efficient cost of capital and in providing revenue allowances in a regulatory period.

Mitigating the higher risk of unrecovered efficient costs and penalties for major projects

There is a greater risk of not recovering efficient costs, expenditure and return on capital under the current regulatory framework for major projects. The AEMC has acknowledged that the uncertainty associated with major transmission projects increases the prospect of cost overruns and therefore penalties under the capital expenditure efficiency scheme (**CESS**) and the risk of ex-post review.[14] This is because major projects require expenditure prior to regulatory approval and are more likely to cost more than the regulatory allowance. Therefore, if the project is not approved, the early works costs will not be recovered and, if the project is approved, there is a higher risk that total costs will be greater than the regulatory allowance. Even if the higher costs incurred during the project are efficient, there is a delay in cost recovery and penalties are applied under the CESS. Further, costs that are greater than allowances expose the TNSP to additional risk of not recovering some costs because of an ex-post review of the entire capital program. Low returns and higher risk of cost overrun on these projects are relevant to the investment decision and the comparisons made by independent valuers and auditors in advice to investment committees.

Proposed rule changes to promote timely and efficient investment in major projects

The following rule changes will promote timely and efficient investment without increasing the cost of the investment to be borne by customers:

- Requiring the regulated return to enable a notional NSP to achieve the benchmark credit rating and gearing on which the return is set. In practice, this would require the AER to ensure that its use of discretion in estimating rate of return parameters does not put at risk the ability of a notional TNSP to meet the financial ratios that match the benchmark credit rating when the benchmark gearing is adopted.
- Enabling the AER to make NPV neutral adjustments to the revenue profile to ensure that a TNSP, adopting the benchmark financing assumptions, can achieve the benchmark credit rating within any regulatory period. This could be achieved by removing the need to index

12 AER, Rate of Return, Final Working Paper, September 2021, p. 110.
13 Ibid, p. 58.
14 AEMC, Consultation Paper, Transmission Planning and Investment Review, 19 August 2021, p.22.

the RAB for a major project, providing greater flexibility with respect to depreciation, and/or allowing revenue smoothing over more than one regulatory period. This will provide a TNSP with an opportunity to recover at least the efficient cost of capital set out in the RORI consistent with the legislative requirements.

- Enabling an NSP to recover the cost of preparatory activities and time critical early works for ISP projects through a cost pass through application prior to a contingent project application (**CPA**) determination for the relevant project. This reduces the risk that these efficient costs will not be recovered.
- Enabling an TNSP to elect whether the CESS applies to a major Integrated System Plan (**ISP**) project (not subject to the AER discretion). This enables the TNSP to choose to mitigate the risk of incurring penalties for efficient investment simply because expenditure is more than the regulatory allowance.
- Exclude major project expenditure from the capital allowance that triggers an ex-post review. This will mitigate the risk that higher efficient costs of a major project do not expose the TNSP to the regulatory process risk on the entire capital program.

These changes ensure that the TNSP remains responsible for managing its financing risk, whilst mitigating the risk that the AER's estimate of the efficient cost of capital or expenditure is too low. Demonstrating the ability to meet financial ratios consistent with benchmark assumptions is an important (and only check) on the AER's discretion.

3. Contestability increases risk and is likely to increase costs to customers

The AEMC has identified that contestability may be a solution to the problem that a regulated TNSP has no obligation to deliver an ISP project because it:

- Enables others to build projects when the TNSP chooses not to.
- Avoids TNSPs inflating forecast cost to cover the potential CESS penalty and ex-post review risk; and
- Reduces the cost of delivering projects because the TNSP tender process transfers risk to the contractor which increases the tender price.

Contestability may enable others to build projects when the TNSP chooses not to, but it will not ensure that the project will get built. A contestable proponent with a single asset is likely to face even greater financeability challenges for a stand-alone project because it may not have access to a larger balance sheet the same size as the TNSP's RAB. Further, the risk of cost overruns is high for major projects and so a contestable proponent is likely to seek to inflate forecast costs to absorb risks. However, under a contestable framework, the risk costs will not be scrutinised by the regulator.

We consider contestability has the potential to significantly increase risk associated with system operation and security, is unlikely to materially reduce the cost of delivering projects and is likely to introduce additional costs.

- **Increased risk** – Contestability will require significant legislative changes to appropriately transfer obligations and responsibilities appropriately between TNSPs, contestable infrastructure providers and AEMO. These changes will increase the risk of system operation and security that could increase over time as significant transmission infrastructure is delivered by multiple parties. This could have a significant and detrimental impact on consumers and the economy.

- **Unlikely cost savings** – TNSPs undertake competitive tender processes to ensure a competitive price for project delivery that aim to allocate risks where it is efficient to do so. This would also be the case for a contestable proponent. Therefore, the project costs savings under a contestable framework would remain limited by the size of the Australian market for delivering major infrastructure projects, and the extent to which the regulated rate of return is above the market cost of capital. The regulated rate of return set in the 2018 RORI is below the regulated rate of return of other regulators and the market cost of capital. Therefore, it is unlikely that a lower cost of capital could be achieved, especially where the constructs of the existing regulatory system are used (i.e., they must be used for comparability purposes). Further, a contestable proponent would also seek to transfer risks to a contractor unless it is able to pass through cost increases.
- **New additional costs –** new costs will be incurred in establishing the framework and to compensate existing TNSPs for the increased risks associated with new obligations and liabilities, as well as regulatory, sovereign and compliance risk.

Monopoly service provision by regulated TNSPs is underpinned by strong policy and economic principles. The economic and technical regulatory frameworks ensure the efficient provision of services supported by high levels of transparency and scrutiny, and effective long standing compliance and enforcement regimes. A TNSP, and its major investments, are subject to comprehensive public processes to consider the need, specification, location, land holder impacts, cost, and service performance of the project. These principles and processes should not be discarded lightly in making changes to the framework for delivering monopoly infrastructure that is critical to the future energy transition.

The risk that a TNSP might choose not to deliver a major project under the regulatory framework can be reduced by addressing financeability and risk issues – these are core issues that several our members have experienced lately. Contestability does not address these issues. Addressing the financing challenges in the regulatory framework would avoid the significant cost of establishing a contestable framework and the significant risk to operation and security of the system that it brings.

If contestability is pursued, it should be as a last resort when a TNSP decides not to invest. However, in the absence of providing more flexibility in relation to returns and revenue, the risk that a project would not proceed remains. If more flexibility is provided, the TNSP should be able to access more favourable revenue, return and risk outcomes available than under the regulatory framework. We note for example, that additional flexibility is provided in the Offshore Transmission regime in the UK where costs are recovered over 20 years (rather than 40 plus years) with no periodic reviews by the regulator, contracted indexed revenues, protection from stranded asset risk, and returns commensurate with risk. [15]

We recommend that the AEMC seek information on the participants, costs, returns and revenue recovery profile for projects that have been subject to contestability, for example in Victoria, and the instances and costs of AEMO intervention to inform the cost and benefit assessment of a contestable framework. This should include the legal and commercial implications under leasing arrangements. These costs and benefits should be compared with options that include addressing issues in the existing regulatory framework and allowing contestability on a limited basis where projects are not pursued by the TNSP under the regulatory framework.

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15 KPMG, Offshore Transmission: An Investor Perspective – Update Report, Prepared for the Gas and Electricity Markets Authority, January 2014.