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1. Reduce the cost of meeting carbon targets

1. What could be done to improve the cost-effectiveness and alignment of policies to reduce emissions across the industrial, electricity and transport sectors?

The energy industry (and transmission in particular) relies on integrated whole-of-system planning to understand and implement emissions reduction signals, which are determined and informed by Government policy at the State and Federal level. Most notably, these emissions reduction targets are integrated into the development of AEMO's bi-annual Integrated System Plan via 'hardcoded' constraints which must be met the model. By taking into account these emissions policy targets and other techno-economic constraints, the Integrated System Plan (ISP) provides companies within the energy industry an 'optimal' pathway for energy system development and simultaneously achieve emissions-reduction targets. For example, the 'actionability' of significant transmission projects is determined through this process.

The multi-scenario approach employed by the ISP also gives rise to the conditions in which the energy system must evolve to support the decarbonisation of sectors such as transport and industry. Relevant Government policies relating to these Sectors are also incorporated into the ISP.

Despite the myriad benefits of this general approach, some issues arise:

- There can arise instances such that there is misalignment between the ISP's model's outputs and what is achieved by the energy industry.
- There are instances of divergence of Federal and State Government emissions policy, which can cause elements of discord in the implementation of these investment and emissions reduction signals.
- Emissions reduction signals and confidence can be weakened through change in energy policy and direction, which can in turn cause inefficiencies to arise. This can be exacerbated through the divergence and/or derogation of jurisdictions from centralised NEM planning frameworks.
- Interplay and relationships of emissions policy settings on industrial, electricity and transport sectors can be fragmented and not understood or sufficiently applied in a cross-sectoral capacity.

RECOMMENDATIONS: Continue to drive consistency, clarity and transparency in emissions policies across policy frameworks, Federal and Jurisdictional arrangements and planning framework integration. Consider how emissions-reduction policies can be applied cross-sector to drive optimal outcomes.

Incorporation of emissions imperative into National Electricity Objectives (NEO)

In 2024, an emissions reduction objective was incorporated into the NEO. This aimed to integrate emissions reduction and energy policy. As part of this change, an interim Value of Emissions Reduction (VER) was published to value emissions reductions within regulatory processes (with a value set at \$33/tCO₂-e in 2024, with an escalation applied each year to 2050). The market is anticipating the development of a Final VER, which will either supersede or confirm the interim value by 30 June 2026.

The regulatory change enacted by the Australian Energy Market Commission (AEMC),

Australian Energy Market Operator (AEMO) and the Australian Energy Regulator (AER) to integrate this objective was expected to have direct impacts on how TNSPs plan, build, operate and manage their electricity transmission networks, including the criteria used to select / plan / approve transmission infrastructure projects (e.g. cost benefit analysis (CBA) / Regulatory Investment Test for Transmission (RIT-T) and funding for base business operations (e.g. AER Revenue Determinations).

The intended outcomes of incorporating emissions into the NEO was ostensibly to incentivise energy market participants, including TNSPs, to invest in lower-emissions projects, infrastructure, assets and practices, where it is prudent and efficient to do so. However, there are some potential issues which may cause a disconnect between intended and resulting outcomes, for example:

- The Interim VER is lower than many international jurisdictions' carbon price, particularly in the period before 2036. It is also far below the UK's traded carbon values (and forecast), indicating that emissions may be unvalued in terms of the cost of achieving legislated targets.
- The treatment and implementation of the VER into regulated electricity networks' 5-year AER Regulatory Determinations is under review. Before this is finalised, it may be challenging for Network Service Providers (NSP) to understand how to best implement emissions reduction strategies and capabilities into their base businesses.
- The magnitude of the Interim VER is unlikely to drive changes to operational practices and investment behaviour in the short-medium term, particularly for hard-to-abate emissions sources. This is due to
 - the currently high cost differential between legacy technology options and emerging alternative (e.g. SF6 alternatives, green steel, etc.).
 - The emissions boundary applied within the NEO only captures changes to Australia's greenhouse gas emissions, excluding emissions associated with construction material and equipment procured in other federal jurisdictions. In the absence of an agreed Carbon Border Adjustment Mechanism within the Australian jurisdiction, this may result in decisions that favour carbon leakage and don't account for the full embodied emissions associated with an investment decision.
 - Despite the incorporation of emissions into regulatory investment tests for transmission infrastructure projects, at this very early stage, it is presently unclear if this will result in consistently positive market emissions benefits within transmission project modelling. The timely approval and completion of transmission projects is vital to deliver the energy transition, including enabling NSW's retirement of coal generation and achievement of the State's net zero targets.

RECOMMENDATIONS: Review and develop a Final VER in FY 2026 and provide clarity on applicability within AER Regulatory Determinations. Ensure the magnitude and application of the VER drives intended emissions reduction behaviour for entities within the energy sector whilst balancing electricity consumer outcomes of cost efficiency and investment prudence.

2. Are there gaps in the emissions-reduction policies in the industrial, electricity and transport sectors which should be addressed?

This is addressed in the section above.

3. Are there any duplicative emissions-reduction policies in the industrial, electricity and transport sectors which could be streamlined?

No response

2. Speed up approvals for new energy infrastructure

1. Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

Transgrid is currently in the process of constructing three major new transmission lines (Project EnergyConnect, HumeLink and Victoria-NSW Interconnector (VNI) West, in order of current progress) as well as multiple other smaller projects to ensure the stability and reliability of the NSW transmission system.

There are several barriers in the regulatory landscape to the completion of projects with the absolute urgency with which they are required (according to the ISP). Each of these barriers is discussed below.

Overlapping and competing frameworks

TNSPs must operate within multiple regulatory frameworks, including national regulation led by the AER, AEMO's ISP and the NSW Electricity Infrastructure Roadmap. There is also the declaration of projects under the Critical State Significant Infrastructure (CSSI) initiative in NSW.

Each of the current participants plays a significant role, but there is a clear opportunity to streamline overlapping responsibilities and remove unnecessary duplication, which imposes cost burdens on

consumers. The overlapping and competing frameworks create uncertainty around the allocation of responsibilities. TNSPs would like to see greater certainty regarding who is the responsible provider, particularly in cases of ISP projects, with firm delivery dates, so that these projects can be delivered as soon as possible. The frameworks must also be flexible in the context of rising supply prices.

Transgrid supports the establishment of transparent criteria or tests to determine whether a proposed augmentation project should proceed under the National Electricity Rules (NER) or the Electricity Infrastructure Investment (EII) Act framework. Clear decision rules will enhance planning certainty and regulatory alignment.

RECOMMENDATIONS – National and state regulators provide greater certainty regarding who is the responsible provider, particularly in cases of ISP projects, with firm delivery dates, so that these projects can be delivered as soon as possible.

Appropriate returns for major greenfield investments

The NEM transmission network is experiencing a period of rapid growth and investment, as part of the realignment to enable thermal generation to be replaced with wind and solar, firmed with storage. NSW is at the centre of the NEM and is the location of multiple current major projects. The development of these multi-billion-dollar greenfield projects represents a fundamentally riskier investment proposition to the simpler task of maintaining and operating a largely existing network. In particular, the myriad of possible delays associated with greenfield projects can pose significant risks of cost escalation.

Further measures are currently required to bolster investor confidence to support the development of critical new projects. Transgrid would like to see the Australian Energy Regulator's (AER) Rate of Return Instrument take account of the clear difference between the risk a TNSP faces in undertaking major greenfield projects, compared to 'business as usual' projects, with investors compensated accordingly.

In the absence of a higher regulated rate of return, major greenfield transmission projects are likely to continue to require support from Government (as has been provided for HumeLink, VNI West and Project EnergyConnect via the Rewiring the Nation fund). Other recent initiatives, including provision for changes to depreciation schedules and improvements to cost pass through rules have made some improvement to investment conditions for TNSPs. However, more significant changes are required to ensure that major projects essential for the energy transition are delivered as quickly as possible by attracting the appropriate investment.

In March 2025, the AER commenced its review of the 2026 Rate of Return Instrument (RORI). The RORI highlights the rate of return an energy network business receives on its regulatory asset base, known as the return on capital. This is a key driver of the total amount of revenue the business derives from network revenue determinations made by the AER. The rate of return provides a network business with money to pay interest that accrues on its loans and provide shareholders a return on their equity investment.

Transgrid believes that that:

- The methodology of using a simple trailing average is outdated. A weighted trailing average approach to the return on debt in certain circumstances should be considered.
- More research should be undertaken regarding the equity beta, particularly given the reduction in the number of listed Australian comparator firms in recent times and the appropriateness of using international comparator firms to inform the AER's work going forward.

RECOMMENDATION – There needs to be appropriate compensation for private investors for the risk associated with large scale investments. This will ensure that the right level of equity is attracted in order for the energy transition to proceed.

Risk of penalties for capex overspends

Transgrid acknowledges that the AEMC made a recent rule change which goes some way to improving the balance of opportunities and risks presented to NSPs by the CESS. The new regime allows the CESS to be applied to ISP projects, including specific ex post assessments of whether expenditure is prudent and efficient. The AER has the power to amend a CESS following an ex post assessment if expenditure, including an overspend, is prudent and efficient. However, any change remains at the AER's discretion. This means that it is still within the rules for an NSP to experience a capex overspend on a project, which an ex post assessment by the AER finds to be prudent and efficient, but the TNSP still be subject to a CESS penalty. For investors choosing investments from across the globe and assessing regulatory risk, such discretion presents a material consideration. This will impose a risk to funding as the scheme in its current form will not attract project funding, which is essential to meeting the National Electricity Objective for the benefit of consumers. Transgrid will continue to advocate CESS arrangements that minimises uncertainty for investors about penalties for

overspends of capex allowances that are subsequently found to be prudent and efficient.

RECOMMENDATION – There should be no CESS penalties where the ex-post review finds an overspend amount to be prudent and efficient. This will ensure that investors are attracted to invest in the energy market in Australia.

Increase RIT-T threshold

In January 2025, the AER recently increased the RIT-T threshold from \$7 million to \$8 million. However, this does not reflect of cost increases nor represents the level that stakeholders have interest in.

The low RIT-T threshold is costing consumers collectively a substantially large amount of money with no clear benefits, and delays projects which has a cascading effects on the network and therefore the transition to net zero target. The lack of submissions shows that the public does not want to be involved.

RECOMMENDATION – Increase the RIT-T threshold to \$45 million. This will allow TNSPs to allocate resources appropriately rather than dedicate considerable resources on numerous regulatory documents required to complete the RIT-T process which are not used or viewed by external stakeholders.

Social licence

Social licence is critical to the successful delivery of major transmission projects and public acceptance of the broader energy transition. We recognise the Australian Energy Regulator's updated Cost Benefit Analysis guidelines, which reflect its directions paper on social licence for electricity transmission projects.

Engagement is a critical component of social licence, which helps build trust and gain community acceptance of our projects in early concept and planning. It helps us demonstrate opportunities to codesign project elections such as route selection, workers accommodation sites, and modifications in proposed construction methodology. We acknowledge the AER is increasingly recognising the importance of social licence in its revenue determinations, of which engagement forms a vital component.

RECOMMENDATION - We would welcome further opportunities for collaboration between TNSPs and the Australian Government to improve social licence so that the energy transition objectives are met.

2. How can planning and approvals processes be sped up without unduly compromising regulatory standards?

TNSPs works collaboratively with the AER and key stakeholders through several processes. We believe regulatory standards are maintained through the following:

- There is detailed analysis and engagement undertaken by the AER on expenditure and capital projects through the AER 5 year revenue determination process.
- Incentive framework – including the EBSS and CESS.
- Transgrid's annual Transmission Annual Planning Report (TAPR) provides a comprehensive list of planned projects which stakeholders could seek further clarity on.
- Transgrid undertakes various engagement processes with key stakeholders include Transgrid's Advisory Council (TAC), industry forums, one on one meetings with industry peers.
- Annual reporting documentation such as the Regulatory Information Notices (RIN) and others play an important role in the governance process.

3. Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

No response

4. What can be done to build local community support for new energy infrastructure projects?

It is important that stakeholder and community mapping on project study area is conducted to identify sensitive areas and community assets. Several important factors to consider include:

- Demonstrating transparent consultation - early engagement on the ground to discuss the project as a concept and gather local / place-based knowledge to inform project concept and mitigation strategies. Inform community on how the proponent will move from concept to final alignment phase, providing the transparency of the process including when community feedback will be sought. It is important to demonstrate how community feedback has influenced the project alignment and advise why community suggestions cannot be adopted.
 - Being visible in community, meeting with local stakeholders as early as practical, promote participation in community grants program to build a foundation for long term relationships
 - Social impact mapping and community intelligence to identify and assess potential social impacts of proposed energy infrastructure project with local communities
 - Engage local agencies and councils to get assessments on community needs
- Develop local employment, workforce development and training strategies and identify early opportunities for local procurement and industry engagement.

RECOMMENDATION – We recommend:

1. Continue to refine the process of how projects will be developed from concept to final design and explain how and when community feedback will be incorporated and used during project development.
2. Establish a regular forum to engage with key community representatives.
3. Co-design community benefit sharing with community and key local stakeholders.

5. Please outline any evidence showing the productivity benefits of faster approvals for energy projects.

no response

3. Encourage adaptation by addressing barriers to private investment

1. What are the barriers and enablers impacting decisions by owner-occupiers, landlords and developers about how housing is built and updated over time so that it is resilient to the effects of climate change?

The participant did not respond to this question.

2. What information do people need to make decisions about where to live, how to build and how to upgrade their homes to appropriately factor in climate change?

The participant did not respond to this question.

3. What are the most cost-effective retrofitting options for improving the resilience of Australia's existing housing stock? What are their costs and benefits?

The participant did not respond to this question.

4. What role might minimum standards play in ensuring the resilience of Australia's housing stock?

The participant did not respond to this question.

5. The impacts of climate change are being factored into the regulation of where and how houses are built in different ways around Australia. What does leading practice look like? Where is there room for improvement? Are there lessons we can learn from other countries?

The participant did not respond to this question.