



30 October 2025

Ms Anna Collyer  
Chair  
Australian Energy Market Commission  
Level 15, 60 Castlereagh Street  
Sydney NSW 2000

Lodged electronically: <https://www.aemc.gov.au/contact-us/lodge-submission>

Dear Ms Collyer,

**RE: GAS NETWORKS IN TRANSITION – CONSULTATION PAPER**

Origin Energy (Origin) appreciates the opportunity to provide a submission to the Australian Energy Market Commission's (AEMC) Gas networks in transition – consultation paper (GRC0082).

We agree that aspects of the National Gas Rules (NGR) and its associated obligations are no longer fit-for-purpose. The current regulatory framework for gas distribution was developed on the assumption of growing networks with reasonably stable demand and ongoing new connections. These assumptions are no longer relevant - decarbonisation is driving a decline in gas demand in many jurisdictions and as households increasingly electrify, the size of gas distribution networks is expected to decline over coming decades raising risks associated with asset stranding, cost recovery for network owners, and equity concerns for consumers remaining on gas networks.

To reflect the changing environment, we agree that amendments to the NGR are required. The capital expenditure (capex) criteria should be amended to better reflect the uncertainty in future gas demand, and a realistic assessment of asset lives and utilisation levels. Doing so would ensure that capex is better aligned to future network utilisation and reduce the risk of future asset stranding. Similarly, in an environment of declining demand and potential asset stranding, the NRG should provide more guidance on the use of accelerated depreciation to ensure that costs are appropriately shared between current and future customers and service providers.

Other changes such as extending the outlook period would allow networks, regulators, and stakeholders to better anticipate risks, plan investments, and avoid stranded assets associated with the energy transition. The NGR could also provide more guidance on the use of reference tariff variation mechanisms and how tariffs can be structured to address the allocation of risk between service providers and consumers. Re-opener provisions could also be amended to include transition-related triggers, allowing for a timelier response to changes in demand or policy settings and the current incentive framework could also be amended to encourage efficient use of existing infrastructure and help minimise stranded asset risks.

Our response to selected stakeholder questions is provided at Attachment A.

If you have any questions regarding this submission, please contact Gary Davies in the first instance at [gary.davies@originenergy.com.au](mailto:gary.davies@originenergy.com.au).

Yours sincerely

A handwritten signature in black ink, appearing to read "Sean Greenup".

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**Question 1: What are the issues impacting consumers and gas distributors under the energy transition?**

1. Do stakeholders agree that there is value in considering the additional NGR issues we have identified alongside the issues raised in the rule change requests?
2. Are there any other additional issues that we should consider within the NGR framework? If so, why?
3. Noting the AEMC's role is to consider and make changes to the energy rules, are there changes outside the NGR regulatory framework that are required to address the issues raised in the rule change requests?

The energy transition is driving a reduction in gas demand in many jurisdictions with households increasingly choosing to electrify. Gas bills are expected to increase for consumers remaining on gas networks, raising equity concerns particularly for vulnerable customers and renters who find it difficult or cost-prohibitive to transition to electricity.

In the face of declining demand, gas distributors are expected to earn less revenue and capital recovery is compromised. The accompanying increase in stranded asset risk raises issues in relation to accelerated depreciation, risk allocation and how costs should be shared between consumers and distributors. There is also the potential to blend renewables such as hydrogen and biomethane into existing gas networks although the potential cost-effectiveness of doing so remains unclear. A key consideration for networks is how to manage declining demand while maintaining network safety and reliability.

We support a holistic approach to the development of a regulatory framework to manage the energy transition. Any changes to the framework need to consider the accompanying regulatory burden, cost impacts, and potential unintended cost shifting, particularly on vulnerable customers. The uncertain pace of electrification and the potential development of new technologies means that it is important to keep options open and that the regulatory framework does not impede alternative options. The AEMC may also need to consider how changes to the framework apply to embedded networks and whether existing consumer protections require amendment.

**Question 2: What changes, if any, should be made to the NGR capital expenditure criteria?**

1. Are changes required to the current capital expenditure criteria to better account for uncertainty in future gas demand? If so, would ECA's proposed amendments better account for uncertain demand outlooks than the current criteria?
2. What do you consider would be the benefits and costs of ECA's proposed approach (for consumers, service providers and the regulator)?
3. Are there any alternative, preferable solutions to address the issues identified by ECA with the current capital expenditure criteria?
4. Do you consider changes are required to the rules in relation to advance determinations on capital expenditure in the context of the energy transition (rule 82)? If so, what are your views on the changes proposed by ECA (removing the provision or requiring the regulator to undertake consultation on proposals for advance determinations)?
5. Do you consider that additional types of expenditure may need to be recognised as capital expenditure in the context of the energy transition (e.g. decommissioning expenditure)?

Declining demand for gas together with uncertainty regarding the timing and pace of decline presents different risks associated with capex. We agree with the ECA that changes to the capex criteria are required to better reflect the uncertainty in future gas demand and a realistic assessment of asset lives and utilisation levels. Distributors should account for the impact of declining gas demand on capex forecasts by considering the impact national and jurisdictional targets would have on projected demand for services. The criteria should also be amended to ensure distributors explicitly compare capital-intensive options with non-network, operational, or decommissioning solutions to ensure least-cost outcomes for consumers. Decision making should be transparent and the key focus of any amendment to the capex criteria should be to mitigate the risk of stranded assets and promote least-cost outcomes for consumers, especially those remaining on gas networks.

ECA's proposed approach would potentially reduce the risk of asset stranding and reduce costs for consumers, including reducing disproportionate costs assigned to those customers remaining on gas networks. More refined capex forecasts would potentially result in less risk exposure for networks, improving their ability to recoup investments. While the increased sophistication of forecasts could potentially improve networks' ability to demonstrate prudence of investments it would likely increase costs to forecast for networks. The increased complexity of forecasts may also make it more difficult for the AER to assess forecasts. In addition, service quality and/or reliability may be adversely impacted if networks under-forecast capex requirements.

While rule 80 of the NGR (advanced determinations on capital expenditure) is rarely used, we agree that it should be amended. Given current demand uncertainty, investment decisions increasingly require flexibility. Advanced determinations could risk locking in capex that becomes unnecessary or inefficient in the event demand declines. If not removed, we consider that the AER must at least be required to consult on advanced expenditure proposals before determining that the capital expenditure is conforming.

It is important that transition-related activities such as asset decommissioning are recognised as capex to ensure regulatory clarity and promote effective network management. Doing so would also ensure that costs are shared equitably between current and future gas customers, while allowing the regulator to assess prudence and efficiency through the existing capex framework.

We do not agree that capital expenditure on transitioning to renewable gases should be excluded from reference tariffs. In situations where expenditure is consistent with government policy, we consider it appropriate for inclusion in reference tariffs, subject to AER assessment.

**Question 3: Are any changes required for operating expenditure?**

1. Do you consider the current definition of operating expenditure (which includes expenditure for increasing long-term demand for pipeline services) is fit for purpose in the context of the energy transition?
2. Do you consider there are additional types of operating expenditure that may need to be recognised in the context of the energy transition?
3. Do you consider the regulatory framework appropriately balances the incentives between capital intensive solutions and asset management/maintenance solutions so that service providers have incentives to consider the most efficient options to address network needs? If not, what changes would be required to balance these incentives?

We consider that the definition of operating expenditure (opex) may require change in the face of declining demand and to accommodate transition planning and asset decommissioning. It is important that the opex framework recognise these activities as legitimate opex costs to help distributors manage declining demand. The opex framework should focus on supporting efficient utilisation, safe disconnection, and managing the decline in network use. Given declining demand, we consider the NGR could be updated to remove references to "increasing long-term demand" and instead focus on supporting efficient utilisation and safe operation of networks.

The existing regulatory framework provides a bias toward capex. It is important that the framework promote the most efficient expenditure mix to deliver services during the transition. The AEMC may need to consider whether incentives are required to deliver opex solutions.

**Question 4: Does the current framework effectively manage and allocate risk and costs between consumers and network service providers in the context of uncertain demand?**

1. Do you agree with ECA and JEC that the current rules do not provide for appropriate consideration and management of assets at risk of becoming increasingly underutilised in the context of the energy transition, including consideration of how risk and costs are allocated between network service providers and consumers (including present and future consumers)?

2. Are there alternative solutions to those proposed in the ECA and JEC's rule change request that would more effectively address cost recovery risks for efficient past and future investments?

The current framework was designed for a relatively stable or growing demand environment, not for the structural decline in gas use expected under the energy transition. As a result, consumers are exposed to the risk of paying for underutilised or stranded assets. As electrification increases, network costs are spread over few customers with costs for remaining gas customers increasing. The framework does not clearly define how the costs of underutilised or stranded assets should be shared between current and future consumers versus service providers or provide sufficient guidance on the use of tools to address demand risk e.g. accelerated depreciation.

We consider that clear guidance is needed on how to allocate these risks and manage declining utilisation efficiently. This could include specific guidance on depreciation and redundancy arrangements and requiring transparent risk assessments in access arrangement proposals.

**Question 5: How does ECA's proposal impact the recovery of capital costs for new and existing assets?**

1. Do you consider changes are required to the depreciation provisions in the context of the uncertain outlook for gas demand (in terms of limiting variations to the rate of cost recovery and changes to asset lives)?
2. What do you consider would be the benefits and costs of ECA's proposed approach to restrict the use of accelerated depreciation through variations to the rate of cost recovery and changes to asset lives (for consumers, service providers and the regulator)?
3. What are your views on ECA's alternative solution of prohibiting the regulator from varying the depreciation rates for existing assets?

The uncertainty in future gas demand raises issues in terms of the allocation of risk and intergenerational equity associated with underutilised or stranded assets. We consider that the rules should be amended to include clear principles and transparency requirements for when and how depreciation variations can occur. This would allow the AER to respond to declining demand or asset stranding and provide predictability for distributors and stakeholders. Any rule change would include consideration of the allocation of risk between current and future customers and service providers.

ECA proposes that the application of accelerated depreciation be confined to where it can clearly be demonstrated to be in the long-term interest of customers and does not result in an inefficient shift in risks from the networks to customers. We support this proposal. Restricting accelerated depreciation increases predictability and reduces short-term cost spikes for customers. It would also improve intergenerational equity by spreading costs over the life of assets rather than front-loading capital recovery as under the current accelerated depreciation approach.

For service providers, the proposed approach provides greater clarity on the application of depreciation under declining demand and encourages greater scrutiny of demand trends but is likely to reduce service providers' ability to manage risks associated with stranded or underutilised assets. The proposed approach would provide more structure for regulatory assessment but conversely limits the ability to adjust recovery when demand falls sharply or assets become redundant.

ECA's alternative proposal to prohibit the regulator from varying the depreciation rates for existing assets reduces the flexibility to manage transition risks. As gas demand declines, the ability to adjust depreciation to reflect shorter asset lives is essential to avoid stranded assets and unfair cost allocation to future consumers. Rather than prohibit the regulator from varying the depreciation rates, we consider the AER should retain the discretion to vary depreciation where necessary.

**Question 6: How does JEC's proposal impact the recovery of capital costs?**

1. Do you consider changes are required to the capital redundancy provisions in the context of the energy transition and an uncertain gas demand outlook? If so, what amendments do you consider are necessary?
2. Do you consider the definition of redundant assets should be amended as proposed by JEC to include:
  - a. assets that are economically inefficient to use?
  - b. anticipated redundant assets?
3. Do you agree with JEC's proposal that service providers and the regulator should use accelerated depreciation in conjunction with the redundant asset provisions only if used to address capital cost recovery risks or redundancy?
4. What do you consider would be the benefits and costs (for consumers, service providers and the regulator) of JEC's proposed approach to:
  - defining and assessing asset redundancy, and
  - allowing for accelerated depreciation to address capital cost recovery risks only in conjunction with the redundant asset provisions?
5. What are your views on JEC's alternative solution to outright prohibit the use of accelerated depreciation?

We agree that capital redundancy provisions should be amended. Under the NGR, the redundant capital provisions (rule 85) allow the regulator to remove the value of assets from the regulated asset base (RAB) if they cease to contribute in any way to the delivery of pipeline services – it does not contemplate partial redundancy. Uncertain future gas demand increases the risk that some assets may become partially or fully redundant before the end of their economic lives. Amendments could allow for partial adjustments to the regulated asset base where assets are no longer fully utilised.

Changing the definition of redundant assets to capture assets that are economically inefficient could introduce subjectivity and increase the risk of premature write-downs. Similarly, identifying anticipated redundant assets can also be subjective since it involves forecasting future demand. These changes could lead to regulatory errors or provide incentives for service providers to pre-emptively declare assets redundant to accelerate cost recovery. We consider it preferable to retain current definitions around redundancy but allow the AER to utilise economic inefficiency and forecast redundancy as part of its regulatory assessment of network proposals.

Accelerated depreciation should only be applied in conjunction with the redundant asset provisions to manage capital cost recovery risks or genuine redundancy. Limiting accelerated depreciation to underutilised or redundant assets ensures cost recovery aligns with economic use and reduces stranded asset risk. The AER should require demonstrable evidence of redundancy or material underutilisation before approving accelerated depreciation.

Restricting accelerated depreciation to situations where it addresses capital cost recovery risks in conjunction with redundant asset provisions would provide consumers with clearer protections against paying for redundant or uneconomic assets. It would also provide service providers and the regulator with defined criteria for assessing redundancy and approving accelerated depreciation. The approach would provide price stability for customers and regulatory certainty for stakeholders.

JEC's proposal to outright prohibit the use of accelerated depreciation would provide short-term price stability and regulatory simplicity but would limit the AER's ability to proactively address declining demand or stranded asset risks, potentially increasing costs for future consumers and discouraging efficient investment for fear of not being able to recover investments. We do not support a prohibition on the use of accelerated depreciation.

**Question 7: Are new planning requirements necessary?**

1. Do you consider new planning-related reporting obligations for network service providers are required in the NGR to support more efficient decision-making by stakeholders? If so,

- a. what information should be reported and for what purpose?
  - b. what should be the reporting frequency?
  - c. what pipelines should the requirements apply to,; scheme, non-scheme, distribution, transmission?
2. What do you consider would be the benefits and costs of ECA's proposed reporting requirements (for consumers, industry, gas and electricity network businesses and the regulator)?
  3. Do you consider that any alternative solution would better promote the long-term interest of consumers?

Current planning obligations focus on growth and capacity expansion, not managing declining gas demand, repurposing, or decommissioning assets. New or updated reporting requirements are warranted to reflect the gas transition. Improved reporting obligations would support efficient regulatory decisions by providing evidence on utilisation, cost recovery, and transition planning. It would also enable consumers to better understand how networks are managing transition costs and risks.

New planning-related reporting information should include: demand forecasts and transition scenarios; asset utilisation and redundancy risk indicators; decommissioning and repurposing plans; and capital and operating expenditure by function (transition-related, maintenance, decommissioning etc). Reports should be provided annually with comprehensive reporting every 5 years and should be applicable to scheme distribution pipelines.

The revised reporting would provide consumers with more confidence that networks are managing transition and redundancy risks efficiently, while industry participants would have improved visibility of network planning. For the AER, the data would aid expenditure assessments. The added reporting is likely to increase regulatory reporting costs for distributors.

**Question 8: Would a longer-term outlook on the gas transition support better regulatory decision-making?**

What do you consider would be the costs and benefits of requiring service providers to provide demand and expenditure forecasts over a longer period than the relevant access arrangement period? What would be an appropriate longer-term period (e.g. 10, 15 or 25 years)?

We consider that a longer-term outlook would support better regulatory decision-making by allowing networks, regulators, and stakeholders to better anticipate risks, plan investments, and avoid stranded assets. Networks would be able to align capex and opex with expected long-term demand incorporating developments over the transition period and reduce the prospect of stranded assets. Ideally, this would reduce price variability for consumers and reduce long-term costs. It may also facilitate better coordination and system planning with electrification and decarbonisation policies.

We consider that 10-year demand and expenditure forecasts would provide an enhanced view of future asset utilisation and cost recovery options. Longer-term outlooks could also be trialled, but these are likely to introduce greater uncertainty and may prove less useful.

**Question 9: Are changes to reference tariff variation mechanisms necessary?**

1. Do you consider the NGR should provide more guidance to the regulator on when different reference tariff variation mechanisms (e.g. revenue cap vs price cap) should be used by service providers to appropriately allocate intra-period demand risk between the service provider and users?
2. If so, what would be the costs and benefits to consumers, service providers and regulators of providing more guidance in the NGR and/or bringing forward the regulator's decision on the applicable reference tariff variation mechanism?

Current tariff variation mechanisms typically assume relatively stable or slowly growing demand and do not account for structural demand decline, application of accelerated depreciation, or stranded assets caused

by increased electrification. In an environment of declining demand, the current mechanisms may result in inefficient or inequitable cost allocation between current and future consumers and service providers.

The NGR should provide more guidance on selecting reference tariff variation mechanisms to ensure efficient allocation of demand risk during the regulatory period. Guidance could be provided for when to use revenue caps versus price caps to address the allocation of risk between service providers and consumers. Guidance could include factors such as the degree of demand volatility, identifying asset redundancy risk, and options for cost allocation.

Providing more guidance on reference tariff variation mechanisms, and potentially bringing forward the regulator's decision, would potentially provide consumers with greater protection from tariff volatility and a clearer understanding of how demand risks are allocated. Early certainty on the applicable mechanism would allow service providers to better plan investments and would reducing regulatory disputes over the allocation of risks.

**Question 10: Are changes to the tariff rules necessary?**

Do you consider the NGR should include more or different guidance to service providers on how reference tariffs should be structured in the context of the energy transition?

Current NGR guidance on reference tariffs is principles-based and does not provide guidance to service providers in the context of the energy transition e.g. declining demand, asset redundancy etc. Declining gas demand and potential asset redundancy create risks of inequitable pricing. Tariff guidance could be provided to promote efficient and equitable cost recovery in an environment of declining demand.

Clearer principles should be developed to help service providers and the AER design tariffs that balance fixed and variable components, adapt to declining gas demand, maintain efficient price signals and promote equitable cost recovery. Guidance should clarify principles for allocating costs between fixed and volumetric charges, noting for example that increasing the fixed component reduces per-unit price volatility but raises bills for low-use (potentially vulnerable) customers.

Guidance should also promote fairness by avoiding cost-shifting to remaining customers, support flexibility to adjust as utilisation falls, and improve transparency so consumers understand changes. Explicitly requiring the AER to consider transition impacts when approving tariff structures would help maintain efficiency, equity, and consumer confidence as the gas market evolves.

**Question 11: Should the regulator be able to require shorter or longer access arrangement (AA) periods?**

1. Do you consider the regulator should have more discretion to require a shorter or longer AA period than that proposed by the service provider? If so, what should be the criteria/principles to guide a regulator's decision on requiring a different AA period?
2. What do you consider would be the benefits and costs of aligning the timing of electricity and gas distribution decisions in relevant jurisdictions? What impacts would the alignment of the timing of these decisions have on regulators, service providers and stakeholders engaging in these processes?

Shorter or longer access arrangement periods would allow the regulator to better manage transition-related risks and uncertainty. While longer AA periods promote regulatory certainty, shorter periods are better able to address demand uncertainty and protect against over-recovery. Providing the regulator discretion to determine the AA period would allow the regulator to tailor arrangements to network-specific conditions, balancing cost recovery and consumer impacts during the energy transition. The AEMC would need to establish clear criteria for the application of the period, incorporating issues such as forecast demand uncertainty. Service providers would require adequate notice of the AA period in order to prepare regulatory proposals.

Aligning the timing of electricity and gas distribution determinations in relevant jurisdictions could improve coordination, integrated energy system planning, and cost efficiency particularly where electrification impacts gas demand. Alignment would potentially reduce costs for consumers as service providers are able to coordinate investments and regulators benefit from improved efficiency and integration of cross-industry impacts into decision-making.

**Question 12: Are changes required to the re-opener provisions?**

1. Do you consider changes are required to the current re-opener provisions? If so, what changes do you consider are appropriate in the context of the energy transition?
2. What would be the costs and benefits of making changes to the re-opener provisions?

Re-opener provisions allow regulators and service providers to adjust access arrangements within-period in response to material, unforeseen events. The existing provisions do not explicitly account for declining gas demand, asset redundancy, or accelerated depreciation. We consider there is benefit in revisiting the provisions to include transition-related triggers to allow service providers to recover costs in a timely manner and promote appropriate cost allocation for customers (by allowing costs to be recovered as they are incurred). Revised re-opener provisions would need to clarify the circumstances under which a re-opening would be considered, including the materiality, the application process and the consultation process.

Amending the re-opener provisions could deliver benefits by improving flexibility and responsiveness in managing uncertainty arising from the energy transition. Clearly defined triggers would enable timely adjustments to AAs when demand, costs, or policy settings materially change. Adjustments to the AA would allow earlier adjustment of tariffs when circumstances materially change and improve intergenerational equity as costs are more closely aligned to the consumers benefiting from current network use. It would also reduce investment risk for service providers by facilitating timely cost recovery and would allow the regulator to respond to changing circumstance in a timely manner without a full AA review. Conversely, more re-openers could lead to more frequent tariff adjustments and increase compliance costs for service providers and an increased workload for the regulator.

**Question 13: Should there be changes to the existing or additional incentive mechanisms?**

Do you consider modified or additional incentive mechanisms should apply to service providers in the context of the energy transition?

Existing incentive schemes focus mainly on opex and service performance, with limited flexibility to address transition-related issues such as declining demand, underutilisation and decommissioning. Incentive mechanisms should be more targeted to issues arising from the energy transition. Incentives could reward networks for deferring unnecessary capital expenditure, consolidating or decommissioning redundant assets, and finding innovative ways to use existing infrastructure more efficiently. By focusing on efficient use of existing infrastructure rather than asset expansion, the framework would help minimise stranded asset risks, improve cost recovery efficiency, and deliver better long-term value for consumers. Without reform, distributors may lack motivation to decommission, repurpose assets or to avoid asset stranding.

**Question 14: Could the proposed changes inefficiently incentivise pipeline elections?**

Would any of the changes considered in this consultation paper alter the incentive for non- scheme pipelines to elect to become scheme pipelines?

If the revised rules provide more favourable cost recovery, accelerated depreciation, or revenue stability for scheme pipelines, some non-scheme operators may be encouraged to elect to become scheme pipelines to gain these advantages. To mitigate the risk of inappropriate scheme elections, the NGR should ensure that cost recovery principles remain neutral across regulatory categories, clarify the criteria for scheme election, and require evidence that elections are in the long-term interests of consumers.

**Question 16: Assessment framework**

Do you agree with the proposed assessment criteria? Are there criteria that you consider are not directly relevant to the issues raised in the rule change requests and the proposed solutions?

We consider the assessment criteria are appropriate for assessing the proposed rule changes.