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Dear Commissioners



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Harmonising network expenditure and planning rules with updated national energy objectives – Consultation Paper – 20 July 2023

EnergyAustralia is one of Australia's largest energy companies with around 2.4 million electricity and gas accounts across eastern Australia. We also own, operate and contract a diversified energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 5,000MW of generation capacity.

We are supportive of changes to regulatory arrangements that accelerate the transition. Market bodies will soon be required to have explicit regard to emissions reduction targets alongside price and other factors where the law objectives affect their decision making. The decisions of market bodies already reflect the need to transition to a net zero energy system, as embodied in various government targets, legislation and supportive policies. In drafting rule amendments, it will be important to ensure that these practices are continued and enhanced, rather than hindered through undue prescription, political interference and administrative complexity.

Amendments to the energy law objectives will allow the Commission to make targeted rule changes that genuinely deliver emission reduction. This goes beyond merely 'harmonising' the rules with the new objectives. The Commission should also conduct a review of all rules if it wishes to address legal risk of any inconsistencies.

We strongly support the setting of a value of emissions reduction and reflecting this in all decisions that are based on quantitative assessments. The rule changes giving effect to this must be carefully drafted if the policy intent is to allow emissions reduction to be weighed against price, reliability, safety or security of the energy system. We foresee challenges in drafting rules that accommodate both emission reduction targets and a value of emission reduction, particularly as the latter will tend to be prescriptive. The Commission should take a leading role in managing any political sensitivities in what might be regarded as a price on carbon in the Australian context. It should also carefully manage expectations around how these changes will affect the timing and cost of critical network investments that enable the transition. Stakeholders and policy makers seem to have some preconceptions and high expectations. If these are not met, it could lead to pressure for further rounds of reform and ongoing uncertainty for market participants.

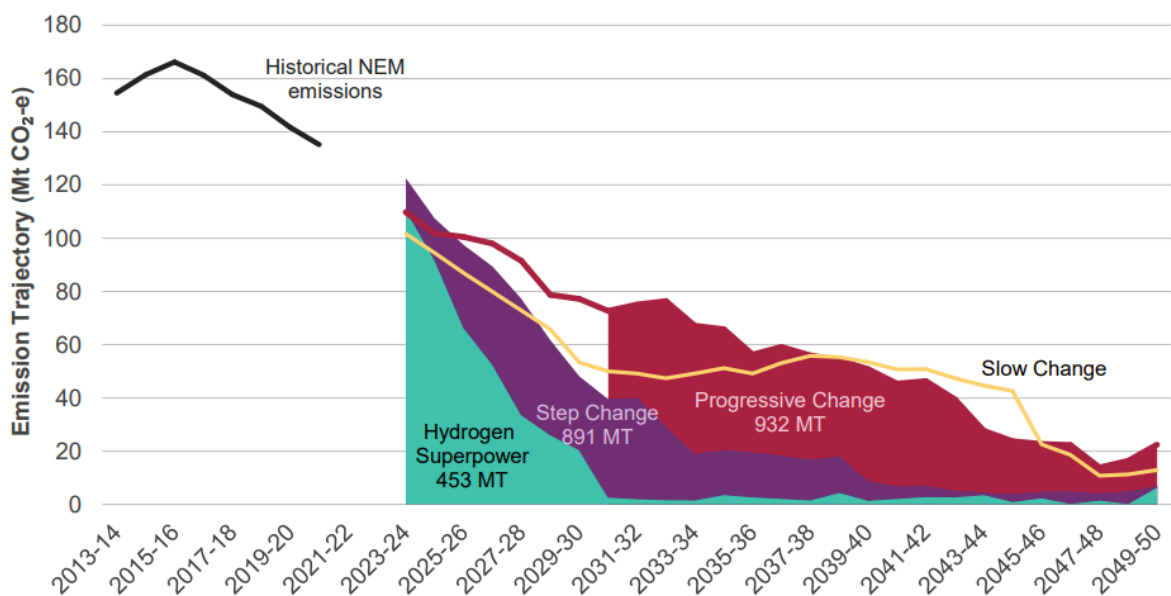
We should be focused on the problems with the current framework

Identifying the nature and significance of the problems with the current regulatory framework will be important in determining which rules should be amended as a priority, and how.

The current law objectives and various rules do not consistently or explicitly require consideration of emission reduction targets, or for emissions reduction to be valued. However market bodies are already accommodating these factors in their decision making to varying degrees. For example:

- the Commission, in having regard to state and commonwealth commitments to net zero by 2050, and climate change generally¹
- the AER's recent gas access arrangement determinations have assessed capital spending and accelerated depreciation in the face of potential asset stranding, balancing this against safety, reliability and price outcomes for customers²
- AEMO's Integrated System Plan (ISP) has scenarios reflecting economy-wide pathways towards net zero in line with legislated targets and agreements (see reproduced figure 8 below from the 2022 ISP). AEMO's assumptions include various policies³ that satisfy the requirements of Power System Needs as set out in the National Electricity Rules (NER). These scenarios, assumptions and related modelling boundaries bind the cost benefit assessments of Actionable ISP projects through several requirements in NER clause 5.15A.3.

Figure 8 NEM carbon budgets and the resulting emission trajectories



Source: AEMO

¹ [Guide to our decision making \(aemc.gov.au\)](https://www.aemc.gov.au/guide-to-our-decision-making)

² For example, the AER's assessment of Australian Gas Networks' capital expenditure ([Report template \(aer.gov.au\)](https://www.aer.gov.au/reports-and-publications/report-template) p. 10) and depreciation ([Report template \(aer.gov.au\)](https://www.aer.gov.au/reports-and-publications/report-template) pp. 7-8).

³ [2022-integrated-system-plan-isp.pdf \(aemo.com.au\)](https://www.aemo.com.au/integrated-system-plan-isp.pdf) pp. 23-4.

The amended law objectives provide a new and important means to reconsider current practices and make targeted rule changes that drive faster and more effective sectoral decarbonisation.

Rather than take this approach, the rule change proposals appear to be largely administrative, in that they are concerned with rules that may be inconsistent with the amended energy law objectives:

Any discord between the energy laws and the rules could create administrative costs for the market bodies and industry in applying the rules, and potentially create a legal risk by leaving the market bodies' decisions open to challenge. It also poses the risk of creating unintended consequences that do not align with the policy intent in the application of the Rules in the areas of transmission planning.⁴

The proposals briefly comment on network expenditure and planning rules, which are to be the subject of priority rule changes:

The rule changes may also support regulated electricity distribution and transmission providers considering and potentially undertaking investments which under the unamended energy objectives would not be considered economically efficient, but which with the recognition of emissions reduction benefits may be supported under the updated framework.⁵

We understand these elements of the rules were the subject of stakeholder comment during consultation on law amendments.⁶ The proponent requests the Commission to consider additional rules that may require amendment:

The specific clauses identified in this request have been provided to assist the AEMC in understanding the key areas of the rules where the priority rule changes sit, and which processes they relate to. Energy Ministers would welcome AEMC's consideration of additional or consequential rule changes to support the implementation of the emissions component of the objectives. Any rules which should be changed as a priority should be identified as part of the AEMC's rule change process, which it is recognised will be informed by stakeholder consultation processes.⁷

The proposals do not identify examples where current practices or rule provisions have been detrimental from an emissions reduction perspective. Neither do the consultation materials and other statements relating to the law amendments. The second reading speech for the laws amendment bill outlined the intended impact of changes to the objectives:

Changing this will send a clear signal to wider industry, market participants, investors and the public of all Australian governments' commitments to achieve a decarbonised, modern and reliable energy system that contributes to the achievement of Australia's emissions targets...

...these changes are intended to ensure the transition is managed in the long-term interests of consumers—in respect of not just emissions reduction but also price, quality, safety, reliability and security.

⁴ DCCEEW, Rule change request one (network expenditures), pp. 6-7.

⁵ *ibid.*, p. 7.

⁶ [Incorporating an emissions reduction objective into the national energy objectives - Information Paper.pdf](#) – see section 3.8.

⁷ DCCEEW, p. 6.

...The intent of this wording is to allow energy market bodies the discretion to consider appropriate targets relevant to a matter under consideration. This reform is groundbreaking. This reform ends the climate wars.⁸

This suggests that market bodies and participants have not had clarity on government decarbonisation commitments, or that such commitments have been excluded from decision making that affects energy markets. The earlier consultation paper from senior officials makes similar general statements on providing signals to stakeholders on governments' commitments and expectations that the changes would support the transition:

The focus of the amendments is to provide greater clarity to Australia's three energy market bodies... to explicitly consider emissions reduction in how each market body undertakes its respective powers and functions. The amendment will also send a clear signal to wider industry, market participants, investors and the public, of governments' commitment to work together to manage the transformation of the energy sector to achieve a decarbonised, modern and reliable grid...

The proposed reform is intended to support a managed transition to an energy system with a higher proportion of firmed renewables, which will serve the long-term interests of consumers with regard to price, quality, safety reliability and security.⁹

As noted above there does not seem to be any barrier in the legal framework in reflecting government commitments or policies. The problem seems to be that such commitments have been insufficient to drive the rate of decarbonisation that stakeholders anticipate or desire.

In terms of problems with the regulatory framework, observers have cited¹⁰ the 'Maintaining reliability supply to Broken Hill' Regulatory Investment Test for transmission (RIT-T)¹¹ as an instance where emission reduction outcomes were not given adequate consideration. During this RIT-T assessment, Transgrid proposed diesel generation as a preferred solution. The AER appears to have made no decisions in light of NER requirements, for example, via disputes that could have been lodged by stakeholders, noting that the diesel solution was not ultimately implemented. As the Commission is aware, NER clause 5.15A.2(b)(4)(x) provides for RIT-T proponents and the AER to agree to include other classes of market benefit, which might have captured emissions reduction in this instance. A similar provision exists for RIT-Ds under clause 5.17.1(c)(4)(viii). We are not aware of any RIT proponent attempting to invoke these provisions to recognise emissions reduction benefits. The term "market benefit" is not a NER defined term such that environmental externalities would be excluded. We note the Commission's comments that other NER provisions define "net economic benefit" in a potentially narrow way and these warrant further consideration and possible amendment.¹² As noted below there seem to be cases where Actionable ISP projects enable higher emissions through modelling their effects on generation dispatch, hence simply recognising emissions as a market benefit may not produce the expected outcomes of the proposed rule changes. In the case of the Broken Hill RIT-T, Transgrid noted that the candidate option involving diesel generation would have been inconsistent

⁸ [Hansard Daily: House of Assembly - Wednesday, June 14 2023 \(parliament.sa.gov.au\)](https://www.parliament.sa.gov.au/Hansard-Daily-House-of-Assembly-Wednesday-June-14-2023)

⁹ [ESOM OOS Nov 22 ATT B\(a\) - Consultation paper - incorporating an emissions reduction objective in the national energy objectives.pdf](#) p. 1.

¹⁰ [Regulatory madness promotes dirty diesel over renewable mini grid at Broken Hill | RenewEconomy](#); [Historic new deal puts emissions reduction at the heart of Australia's energy sector \(theconversation.com\)](#); ["Landmark decision:" Energy bodies figure out how to put environment back into market | RenewEconomy](#)

¹¹ [Final stage of Broken Hill's RIT-T Completed | Transgrid](#)

¹² [Transmission planning and investment review, Stage 3, Final report \(aemc.gov.au\)](#), p. 31.

with the Sustainability Strategy of Broken Hill City Council.¹³ It seems questionable that this strategy would have been captured in the targets statement under the amended energy law objectives. It is also worth exploring whether the valuation of emissions in this RIT-T would have affected the preferred option, given the material impact of the treatment of network support payments versus the system costs of solutions.

The Commission should seek out and carefully explore other examples of known or alleged deficiencies in the rules to ensure that specific drafting amendments address actual problems and deliver intended outcomes.

As we raised during consultation on the law amendments¹⁴, there is scope for the National Gas Rules (NGR) to provide explicit guidance around the regulation of gas networks in the face of stranding risk. This reflects the consideration of spending on long lived gas assets, depreciation and pricing structures. These matters have been identified by the AER¹⁵ and have likely rules implications beyond expenditure assessments. The AER's decisions in relation to gas networks have been dependent on the strength of government commitments on emissions reduction, electrification and related matters. New references to a targets statement would simply restate known government commitments, however the introduction of a value of emission reduction in these assessments may produce different outcomes.

Regarding the general matter of inconsistencies between the laws and rules, and the risk of legal challenges, a fulsome examination of all rule provisions appears necessary, not just those for network expenditure and planning. We expect this would be a large undertaking. However making priority amendments to some rules and not others would seem to increase the risk of legal challenge, as rules may not operate in isolation. For example, assessing network expenditures against long term emissions reduction targets, but not demand forecasts (which form an input to expenditure needs) would seem to create an inconsistency. Another example being dealt with by the AER is that the rules governing gas pricing structures tend to encourage higher usage, which might conflict with any narrow assessment of expenditures in line with the amended law objectives.

The emissions reduction limb of the objectives will not be a broad concept

We are supportive of the intent of the rule change proposals and addressing risks arising from rule inconsistencies. The proposals and associated consultation materials appear to oversimplify how rule amendments could capture "emissions reduction". This is not a general concept like price or reliability in the current law objectives. The amendments provide for two specific items:

- the Commission's "targets statement". What constitutes a target is potentially broad however must relate to greenhouse gas emission reduction or contribute to this. The existence of a statement potentially changes the scope of government policies that are not already accounted for in exercises like the ISP. Ministers can direct AEMO to consider policies as power system needs under NER 5.22.3(b)(5), provided such a policy is "sufficiently developed". The new targets statement will broaden this ministerial power to all decisions affected by the law objectives.

¹³ [Maintaining reliable supply to Broken Hill \(transgrid.com.au\)](https://transgrid.com.au), pp. 7, 49.

¹⁴ [EnergyAustralia Emissions in the national energy objectives 7 February 2023 \(1\).pdf](#)

¹⁵ [Regulating gas pipelines under uncertainty - Information paper | Australian Energy Regulator \(aer.gov.au\); Gas distribution network tariffs review 2023 | Australian Energy Regulator \(aer.gov.au\)](#)

- the valuation of emissions reduction. A value or method of calculation will be set transitionally by ministers and under regulations or rules on an ongoing basis. The transitional requirements “must be complied with... in considering or applying the amended objective” and we expect will be mechanistically applied in quantitative assessments under the rules. RIT assessments are specifically mentioned in the National Electricity Law amendments.

The interaction between these two elements will be important to consider from an operational as well as a rule drafting perspective. As expanded on below, the proponent for these rule changes appears to take a mixed approach to potential amendments that would give effect to these two different elements.

The Commission’s intention for its own decisions¹⁶ appears to be to convert government policy targets into volumes of emission reduction for use in quantitative assessments. This approach would provide high levels of transparency and consistency in decision making and should be considered for rule amendments generally. As per the approach used by AEMO’s ISP, policies could be reflected as a finite carbon budget, including for adjacent sectors like transport. Policies that jointly affect gas and electricity sector emissions could also be quantified in terms of different sectoral effects. Where policies and their expected impacts are also costed, they could be expressed as marginal abatement costs, thus bearing some relationship to the value of emission reduction.

The policy intent in introducing an emission limb to the energy law objectives is to ensure appropriate trade-offs between different elements. Prescribing a value of emissions reduction into cost benefit assessments under the rules, while reflecting standard economic practice by capturing externalities, potentially removes this discretion. Hence making appropriate trade-offs between emissions reduction and other factors depends heavily on getting the value of emission reduction ‘right’, including in the sense that it would apply uniformly to all affected decisions under the energy laws. Setting a very high (or low) value of emissions reduction relative to the ‘strength’ of government policy targets could see excessive (insufficient) weight placed on emissions reduction where this value is used in some assessments but not others. Such an inconsistency could create challenges for decision makers if both the targets statement and value of emissions reduction must be considered. It could also create tensions between market bodies and governments where it highlights deficient policy.

We have some concerns that the creation of a value of emissions reduction could ignite policy debate given the history of pricing carbon in Australia, and the high prices of energy being paid by customers. There also seem to be excessively high expectations placed on certain government policy targets¹⁷ given achieving them depends on a range of uncontrollable factors. Politicisation of these issues would detract from current practice whereby market bodies take net zero and other long term targets into account with minimal government involvement. It may assist public discussion if market bodies pro-actively clarify how any application of emissions reduction values or targets might flow through to end use prices.

¹⁶ [FOR PUBLICATION - Consultation on AEMC guide to applying the emissions component of the national energy objectives.pdf](#) p. 7.

¹⁷ [Australia will fall well short of 82 per cent renewable energy by 2030, analysts predict, as problems mount - ABC News](#)

Application of the targets statement

The creation of a new targets statement seems to largely overlap with the public policy clause in NER 5.22.3(b) relating to power system needs, which sets critical assumptions for the ISP and RIT-Ts for Actionable transmission projects. We do not see any need to amend this clause as it provides appropriate guidance in recognising policies that are “sufficiently developed” to have identifiable impacts on the power system. The law requirement to “have regard to” the targets statement does not appear to constrain AEMO in filtering relevant policies under clause 5.22.3. It also appears to provide for appropriate discretion in all other cases, for example by allowing AEMO to consider relevant policies that not listed in the statement.

As noted above the stated intention of these reforms is to provide a clear signal of all Australian governments' commitments. The targets statement cannot generate additional signals to stakeholders on broad decarbonisation goals beyond the policies and targets that governments generate themselves. Additional stakeholder value may be provided where market bodies are able to communicate how targets will be applied. This may be within the scope of separate guidance, for example that being consulted on by the Commission and the AER in parallel with this rule change.

There is a risk that the targets statement will, at the behest of governments, be broadened beyond AEMO’s current approach under clause 5.22.3. We could therefore see planning and investment decisions for network businesses reflect additional policy commitments for which there is no associated legal or financial incentive on market participants. The ISP and associated transmission investment mandates are already predicated on many such policy gaps across the entire energy supply chain.¹⁸

Application of a value of emissions reduction

We support capturing environmental externalities in all cost benefit assessments under the rules, as well as the Commission’s consideration of rule change proposals. The creation of a value of emissions reduction, via appropriate administrative arrangements, would provide for a high degree of transparency, clarity for stakeholders and consistency across applicable regulatory decisions.

The second reading speech accompanying law amendments suggests that they will “reduce uncertainty and delays to critical investments” which we read in the context of highly visible and discrete Actionable ISP projects.

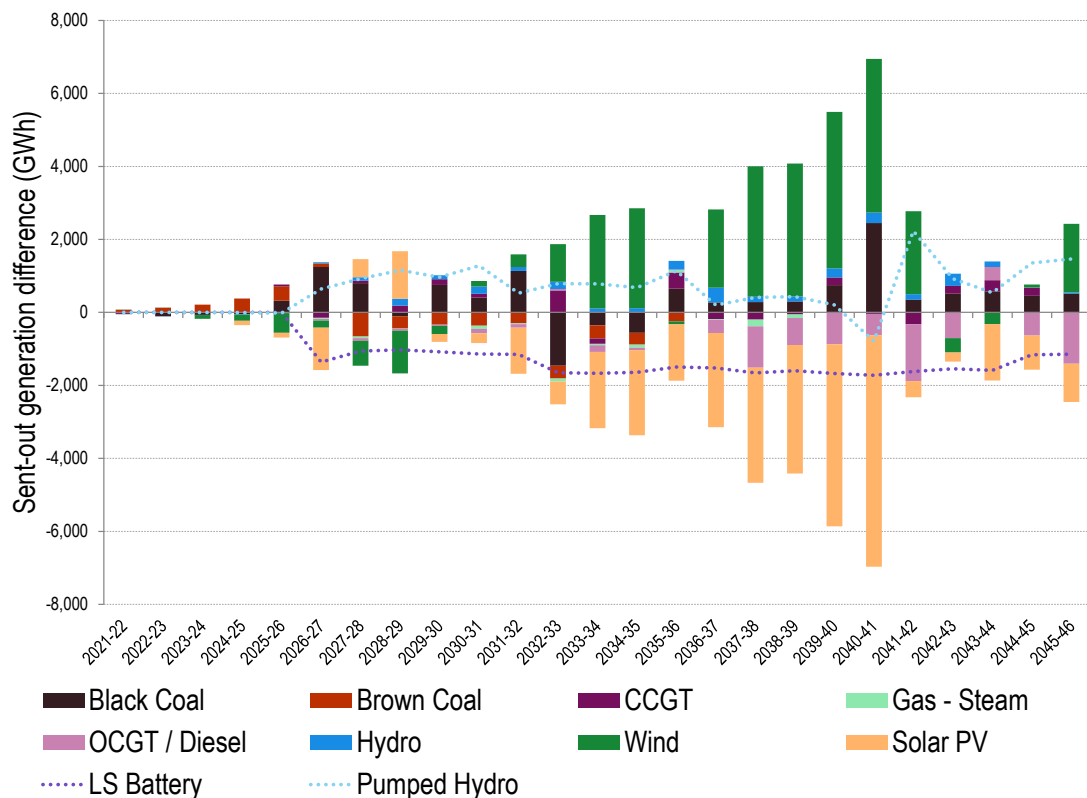
The public discussion of such projects suggests there is limited understanding of how market benefits are calculated under ISP and RIT-T assessments. There appears to be a presumption that “transmission is necessary for the transition”¹⁹ in terms of specific projects being necessary for investment in low carbon generation. The majority of benefits from these projects arises from different power system configurations and better utilisation of renewable generation across diverse geographic regions. The presence of transmission investment avoids higher cost counterfactuals, but these counterfactuals also have high degrees of renewable penetration and are in line with long term emissions reduction targets.

¹⁸ [2022-integrated-system-plan-isp.pdf \(aemo.com.au\)](#) pp. 15-17.

¹⁹ [No Renewables Transition Without Transmission | Transgrid](#)

Examples of different generation and storage dispatch that are enabled by Actionable ISP projects are shown below from the modelling outputs for Humelink²⁰, VNI West²¹ and Marinus Link²². All reflect 'Step Change' scenario outputs for the preferred candidate option. For each, we have calculated the implied change in tonnes of carbon emissions using average emissions intensity factors of fossil fuel generators from the Clean Energy Regulator.²³ These transmission projects result in relatively small net changes in fossil fuel generation and emissions than their 'without transmission investment' counterfactual base cases. Of interest, some of these projects appear to enable increases in carbon emissions over their modelling horizons.

Humelink – increase in NEM emissions to 2045-46 of 45,996 tonnes CO₂ relative to base case



Source: EY

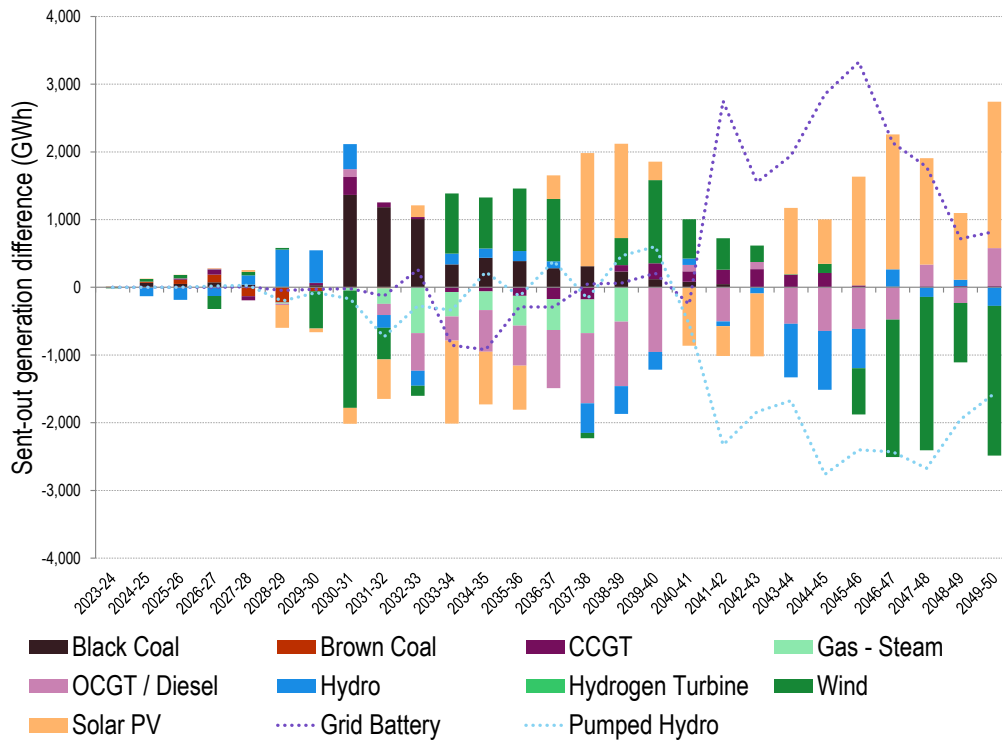
²⁰ <https://www.transgrid.com.au/media/rxbckxuq/humelink-pacr-ey-market-modelling-outputs-step-change-scenario.xlsx>

²¹ https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/victorian_transmission/vni-west-rit-t/reports-and-updates/ey-results-workbook---vni-west-step-change.xlsx?la=en

²² <https://www.marinuslink.com.au/wp-content/uploads/2021/06/EY-results-workbook-Step-Change-scenario-2027-and-2029-1500-MW.xlsx>

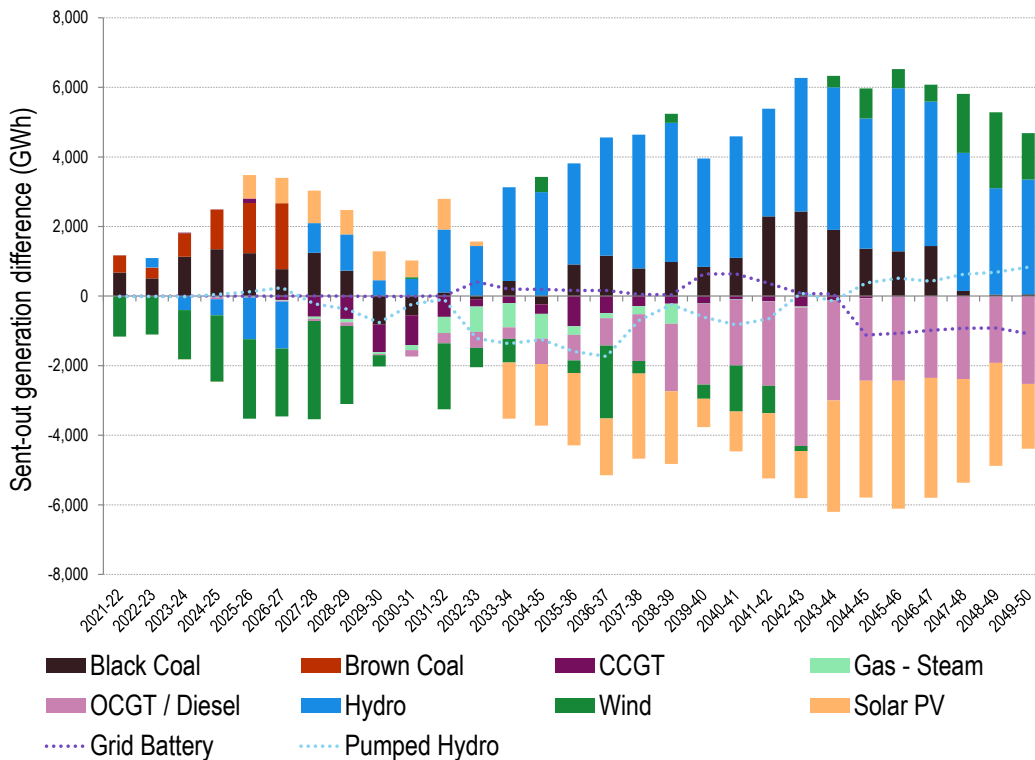
²³ [Electricity sector emissions and generation data 2021-22 \(cleanenergyregulator.gov.au\)](https://www.cleanenergyregulator.gov.au/electricity-sector-emissions-and-generation-data-2021-22)

VNI West – decrease in NEM emissions to 2049-50 of 1,916,072 tonnes CO₂ relative to base case



Source: EY

Marinus Link – increase in NEM emissions to 2047-48 of 1,221,982 tonnes CO₂ relative to base case



Source: EY

We do not present this information to suggest emissions impacts should not be valued. Our concern is that a recognising emissions reduction as a market benefit within existing assessments will not meet political expectations. Opponents of Actionable ISP projects may be incited to highlight minimal or negative emissions benefits. This may invite fundamental changes to how ISP and RIT assessments are conducted. Such changes would be disruptive and prolong approval processes. The prescribed timing for many Actionable ISP projects is now determined as their earliest feasible delivery date. These dates are later than (and so unaffected by) optimal timings that might be brought forward under the improved business cases that stakeholders seem to expect. In summary, rule changes that introduce emissions reduction considerations for Actionable ISP projects seem unwarranted and may be counter-productive.

Other unintended consequences of mechanistically applying an explicit value of emissions reduction could be seen regarding the effects of electrification. Specifically, owners of gas assets argue that electrification should be delayed given the emissions intensity of NEM-wide generation.²⁴ Speculative spending on green hydrogen and biogas blending could also be approved based on emissions benefits, or to satisfy policies for 'renewable gas'²⁵ which could be listed in the targets statement. Again this illustrates our general point that rule changes should be designed to address known problems with the current framework, and simply harmonising rules may bring unintended consequences.

The introduction of a value of emissions reduction may add an additional source of uncertainty for stakeholders if it is frequently changed, not set against stable criteria or subject to political interference. Calibrating the value of emissions reduction against the level of government policy ambition that is reflected in the targets statement, and against other metrics like the Value of Customer Reliability, will be an important exercise.

Specific comments on rules for network expenditure and planning assessments

The proponent suggests RIT assessments could explicitly recognise emissions reduction as a market benefit, via reference to the value of emissions reduction. We support this approach. However as noted above, it will be important to manage stakeholder expectations on how this affects cost benefit assessments.

For the expenditure criteria under NER chapters 6 and 6A, the proponent is less clear on possible rules drafting. The current rules capture price, reliability and security of supply as per the current law objective. In simple terms this could be expanded to ensure regard is had to emissions reduction via the targets statement. However the explicit value of emissions reduction would presumably become embedded in network expenditure proposals and hence AER assessments, thus becoming the primary means of considering emissions impacts. It will be important to provide clarity on how the value of emissions reduction relates to the targets statement, as inconsistencies could give rise to legal challenges on which factor drives expenditures. It may be worth clarifying whether the targets statement is an "applicable regulatory obligation" for regulated networks. This could arise where policies captured in the targets statement have

²⁴ [What to do when electrification will increase emissions | Energy Networks Australia; Gas Infrastructure's Potential Role in Energy Transition - Jemena](#)

²⁵ See for example the NSW Renewable Fuel Scheme, which targets the production of 8,000,000 GJ of green hydrogen by 2030. [Electricity Supply Amendment \(Renewable Fuel Scheme\) Regulation 2021 \(nsw.gov.au\)](#)

compliance obligations for network businesses, or where businesses themselves must refer to the law objectives.

The presence of a prescriptive value of emissions reduction alongside a targets statement also seems to prevent simple amendments to any references to the “long term interests of consumers” such that emissions considerations are “automatically” captured.²⁶

Drafting in the case of the gas rules is again complex and the Commission could take the opportunity to align provisions with the NER. Subclause 79(2)(c) seems to capture expenditure drivers in the same way as equivalent expenditure objectives under the NER. The NGR’s provision for capital expenditures to be present value positive reflects one of several rule elements that tend to encourage network extensions and higher gas use to lower average prices for customers. It also reflects the tendency for proposals to be based on cost benefit assessments, which naturally invite the inclusion of a value of emission reduction.

Comments regarding AER guideline changes

We agree that the AER should be permitted to undertake a streamlined consultation and amendment process for all of its guidelines. The need to accommodate a broad range of guidelines applies to the entirety of the rules in the sense that inconsistencies with the amended objectives and associated legal risk would highly unlikely be limited to network expenditure and planning issues. If the rules associated with any affected AER guidelines are not also changed, this could add to the risk of legal inconsistencies, or prevent certain guidelines being realigned with the law objectives.

If you would like to discuss this submission, please contact me on 03 9060 0612 or Lawrence.irlam@energyaustralia.com.au.

Regards

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²⁶ AEMC, *Updated national energy objectives harmonising rule changes - Consultation paper*, 20 July 2023, pp. 6, 12, 14, 16, 27.