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EnergyAustralia
LIGHT THE WAY

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Capacity Investment Scheme — public consultation paper — 4 August 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.

EnergyAustralia appreciates the opportunity to provide feedback on the Department's consideration of the Capacity Investment Scheme (CIS). We have consistently supported the need for additional investment signals to supplement those in the National Electricity Market's (NEM) energy-only design. EnergyAustralia's current asset portfolio and project pipeline is heavily geared towards dispatchable, flexible capacity. These technologies will be vital maintaining reliable electricity supply for all customers, and at least cost, as we transition to a renewables-dominant energy system. More information on our plans for investment and reducing our own emissions is contained in our inaugural Climate Transition Action Plan.[1]

To keep the lights on and minimise price shocks as part of an orderly transition, we must build the new system before the old one closes. The CIS, by supporting new investment, must be coupled with a mechanism that provides certainty on the timing of coal generator retirements. We acknowledge the political sensitivities in accommodating exiting coal generators within a capacity mechanism that arose in the Energy Security Board's (ESB) deliberations last year. Work on 'orderly exit management contracts' was also part of the ESB's Resource Adequacy workstream, and this has been carried forward by the NSW Government in some form.[2] Recent developments in Victoria[3] and Queensland[4], and recommendations in NSW[5], underline the merits of government intervention via direct ownership or underwriting agreements to provide certainty around aging coal generators. A NEM-wide closure mechanism should form part of an integrated

[1] 79048_Energy-Australia_Climate-Transition-Action-Plan_2023_V14_DIGITAL-RGB.pdf (energyaustralia.com.au)
[2] https://www.energy.gov.au/sites/default/files/2023-02/ECMC%20Communique%20-%2024%20February%202023.docx
[3] Agreement Secures Transition For Loy Yang A | Lily D'Ambrosio (lilydambrosio.com.au); 210310 - Statement From The Minister For Energy .pdf (premier.vic.gov.au)
[4] Queensland Energy and Jobs Plan (epw.qld.gov.au)
[5] Eraring power station: NSW government review recommends life extension (smh.com.au)

policy framework that methodically deals with value for money, expected reliability outcomes and consistency with emissions reduction targets. The systematic treatment of generator exits would complement the CIS by providing stakeholders a high degree of comfort that risks of supply outages and associated price volatility are being properly managed. It would also provide certainty and reduced risk for investors in new technologies, thus lowering total system costs that are borne by customers and taxpayers.

Our responses to the questions posed in the Department's consultation paper are attached. Our summary responses are as follows.

Investment targets for each tender round must correspond to genuine reliability gaps as per AEMO's Electricity Statement of Opportunities (ESOO) or similar independent and robust analysis, which has explicit regard to the NEM's Reliability Standard. If there is no predictability in how investment targets are formulated (including expectations for the role of different technology types) then this will undermine investment certainty. In this context we see risks arising due to government budget constraints (including allocations to specific jurisdictions) and preferences of governments to depart from NEM reliability settings. Targeting a level of investment that generally does not correspond to system needs will have further distortionary effects on the market, leading to higher costs for customers in addition to being poor value for money for taxpayers.

We accept the Department **initially taking a more prescriptive approach regarding technology eligibility** including a minimum duration requirement for storage, provided these choices are transparently justified. More sophisticated approaches and modelling improvements can be introduced over time such that blunt eligibility requirements can give way to directly valuing the reliability contribution of different technologies. We acknowledge the concerns of some jurisdictions around the **inclusion of gas generation**, which will play a limited but critical role in supporting higher rates of renewables penetration.

We expect the CIS may be insufficient to **support pumped hydro storage** given higher capital intensity, early development risk and lead times. The extent of this problem and potential solutions can be informed via deeper analysis of reliability needs and market responses to initial tender rounds. Additionally, the assessment framework for projects in their development phases and eligibility criteria need to be specified with an element of flexibility to adapt to the wide range of available short, medium and long-duration storage solutions that could be made available under the scheme while acknowledging the market capacity to deliver. For example, local content requirements should be set with a degree of flexibility ensuring the incentive to maximise local supply chain capability while not necessarily eroding value for money or impacting timely delivery of reliable capacity.

We support **contract incentive designs that expose participants to the full extent of merchant risk**. The Department should avoid the temptation to bring new investment into the system by allowing developers to transfer significant risk to taxpayers. An example alternative contact design could involve the payment of fixed dollar amounts. If the CIS does involve the use of 'soft' revenue floors and ceilings, bidding parameters should allow for, and favour, developers seeking very high levels of merchant risk exposure. Contracts that provide for this would have a number of benefits:

- stronger incentives for participants to maximise revenues via selling hedge contracts and seeking offtakes, thereby preserving market liquidity, retail market competition and associated positive outcomes for end use customers

- assurances that plant operators will 'show up' to defend contracts or earn spot revenues during scarcity events, thus preventing supply outages, without the need for administrative oversight of bidding and operational behaviour

- minimising the risk and financial burden ultimately worn by taxpayers, as well as providing certainty of government budgetary commitments

- simple to administer, transparent in terms of comparing value for money across bidders, and less susceptible to gaming than contracts requiring ex post validation of costs and revenues

- would still provide the necessary 'top-up' to investors above other revenue sources, as revealed in bid outcomes, thus encouraging new firming investment.

The CIS will have potential impacts on the viability of existing generators by providing a competitive advantage to new entrants, and to the extent it encourages more resources into the market than necessary to plug anticipated supply gaps. The effect of the CIS will also depend on its integration with market and policy changes including evolution of the NSW Electricity Infrastructure Roadmap, establishment of public entities like the State Electricity Commission of Victoria, Victorian storage targets and ongoing coal closure announcements. Stakeholders should have clarity in the **likely boundaries of the CIS design parameters** to accommodate these and other developments, as well as any expectations for **a fulsome capacity market in the NEM from 2030**, which will provide additional certainty for prospective investors and may need to be accommodated into the current CIS design.

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

Regards

Lawrence Irlam
Regulatory Affairs Lead

Responses to questions in the Department's consultation paper

The Department is seeking feedback on what other implications the CIS might have on the energy market, and how the CIS can be designed to mitigate risks while delivering on key policy objectives.

Overall we expect the CIS will have a positive impact on the market and for customers given the need to incentivise new flexible capacity, which will be critical in supporting much higher volumes of clean variable renewable energy sources.

There are various elements of the CIS that will inevitably distort the market and moreso unless it is carefully implemented. Many of these issues were considered by stakeholders at length during the ESB's consultation on a capacity mechanism. We acknowledge the complexities and political challenges that arose for the ESB that led to ministerial intervention. Further delays and political debates around how to encourage new investment will jeopardise an orderly transition. The CIS, however, is inherently likely to be more distortionary than a broader capacity market as it is intended to be an interim solution, is limited by federal government budget outlays and appears to accommodate as yet unknown jurisdictional preferences. These elements will need to be properly dealt with to ensure that reliability is effectively targeted and costs are minimised.

The consultation paper appropriately identifies key design features and objectives in light of unintended consequences. Problems and potential solutions from our perspective are expanded in further responses. In summary:

- negative effects on contract markets will be avoided by maximising developers' exposure to price risk in the contract incentive design
- negative effects on existing firming resources would be assisted by implementing a complementary closure mechanism for retiring coal generation
- lack of predictability and transparency on the operation of the CIS, all affecting investor sentiment and perceptions of policy risk, would be helped by:
    - designing the CIS to accommodate uncertain changes in markets and other policy support with increasing climate ambition or system needs
    - integrating the CIS with existing NEM-wide reliability frameworks and features like the Reliability Standard
    - recognising and channelling the desire of jurisdictional governments to impose their own preferences by complementing jurisdictional funding pools and investment targets
    - establishing principles that reward the reliability contribution of different technologies and projects rather than imposing blunt eligibility and merit criteria that deter bidder participation.

The Department is seeking feedback on WA implementation of the CIS, including interaction with the existing Reserve Capacity Mechanism. This will be further canvassed in a WA-specific consultation paper.

We do not have a direct stake in the WEM, and will be interested in the Department's further consultation on this, but question whether the CIS is required in WA. The WEM already has a Reserve Capacity Mechanism, which has been the subject of considerable review and ongoing reform.[6] It seems inopportune to apply the CIS alongside the Reserve Capacity Mechanism at this time, which would be a complex undertaking in any case. Generally the inclusion of WA within the scope of the CIS appears to reflect jurisdictional preferences and fiscal relations, rather than proper policy design that corrects market or regulatory failure.

What minimum storage duration should be required for tender eligibility, to achieve CIS policy objectives?

The choice of technology mix and capabilities should reflect a robust assessment of value for money in how each project addresses reliability risk. This would include different scenario or sensitivity assessments that explore behavioural assumptions, operational flexibility or other uncertain characteristics for which there is yet insufficient market data.

We understand that a 4 hour minimum duration is partly intended to correct for potential shortcomings in encouraging too much shorter duration technologies, whose capabilities may be overvalued in modelling that relies on perfect foresight and optimisation from a system perspective. AEMO has made several derating adjustments to storage units with less than 7.5 hour duration in its 2023 ESOO modelling. These sort of adjustments could be adopted in setting CIS targets and in evaluating bids. It is not clear that setting minimum durations for tender eligibility to correct for any modelling biases is necessary, and restricting eligible projects may be detrimental overall.

If the Department is minded to set a minimum duration requirement, this should be validated by publishing illustrative market modelling of jurisdictions with different reliability risks out to 2030, and relative to the Reliability Standard. For example, unserved energy events for the near term are likely to be shorter duration temperature driven events. Over the medium to long term there appears to be a growing concern about longer duration events arising from renewables droughts. Other situations might require high ramp rates or other system capabilities with limited advance notice that further illustrate the need to trade off duration and capacity. The probability and impacts of different risk events should be carefully examined. Some events might be very high cost to mitigate, or very low probability, thus not worth reflecting in CIS targets.

What methodology for modelling and measuring duration requirements for various technology durations would be appropriate?

Our reading of the various steps mentioned in sections 3.1 and 3.2 of the consultation paper is as follows:

- The Commonwealth has determined a total CIS cap of 6GW of "clean dispatchable capacity" to be operational in Australia by 2030, as set out in the 2022 ISP Step Change Scenario and we assume the WA's Whole of System Plan (although this is not

[6] Reserve Capacity Mechanism Review (www.wa.gov.au)

stated). While not possible to reconcile to specific publications or data, we note that the 2022 ISP projected the addition of 12.5GW of dispatchable capacity (excluding gas) in the NEM by 2030-31, including around 4GW of coordinated distributed storage and 2GW from Snowy 2.0 by 2030. The 2022 WA Whole of System Plan foresees up to 0.6GW of new storage and demand side capacity to 2030 across most of its scenarios.

- "Reliability targets" will be derived from bespoke modelling, with some reliance on the latest ISP and ESOO. These will be expressed in terms of 4 hour duration equivalent MW of capacity to be built in each year for each jurisdiction.

- The 6GW capacity cap or budget will be allocated to jurisdictions using an ISP type approach, with capacity gaps identified in the ESOO possibly used as a confirmatory step. Additional jurisdictional reliability modelling will also inform the setting of reliability targets.

- To the extent that the 6GW cap is insufficient to meet the modelled capacity to meet reliability needs, the capacity volumes for each jurisdiction and in each year will be adjusted down in proportion to each jurisdiction's requirement.

- Reliability "build" targets will be converted into "buy" targets reflecting lead times, assumed to be 2 years for batteries and 5 years for pumped hydro. These "buy" targets will be communicated to the market in terms of an indicative MW range.

- Tender processes will determine total rated capacity for each project and their contribution to reliability targets.

The identification of reliability needs and associated tender targets underpins the credibility and effectiveness of the CIS, in terms of demonstrating value for money and providing certainty for investors, including those in the wider market that are not participating in tenders. Hence the identification of reliability needs throughout this process and the awarding of contracts to specific bidders will need to transparently demonstrate:

- how the 6GW cap was derived and how wedded the Commonwealth is to any associated aggregate budgetary allocations. This will be important given each ISP will become outdated or potentially disputed, bringing pressure for change as it relates to the CIS. The projections of capacity needs from the 2022 ISP are based on costs that are around 20 to 30% lower than most recent estimates.[7] Further or sustained increases in project costs would presumably mean any finite budget allocation could no longer deliver 6GW of capacity.

- how the 2030 cap is to translated into annual needs, and for each jurisdiction, including where budget constraints bind and the underlying reliability target cannot be met via the CIS. The paper suggests this will be in proportion to jurisdictions' needs. This could be in terms of severity of reliability risk or other discrete factors like coal closure timings. Arguably the budget allocations should reflect maximising value for taxpayer money, which could mean some or most jurisdictions are not offered support under the CIS.

- any departures from ISP and ESOO assumptions and analysis. ISP modelling does not involve comprehensive reliability assessments. The reliability gaps formally identified in

[7] GenCost: annual electricity cost estimates for Australia - CSIRO; AEMO, *2023 Inputs Assumptions and Scenarios Report*, July 2023, p. 105.

the ESOO reflect committed projects, so do not immediately signal what the market cannot deliver nor the capacity that should be within the scope of the CIS.

- how the conversion of forecast reliability gaps into tender schedules and MW targets accommodates different technology lead times. The lead times for pumped hydro storage and emerging long duration technologies suggest that developers require certainty now of all CIS tender schedules out to 2027. Assuming a 5 year lead time and the CIS supporting project commissioning out to 2030, the last eligible tender round for pumped hydro will be in 2024 or 2025, leaving very little time now for projects to satisfy eligibility requirements.

- that the assessment of reliability needs will reflect or be consistent with the NEM's Reliability Standard. Departures from this will likely be challenged by a range of stakeholders.

- clarity on the role of jurisdictional modelling and other government preferences. This step in the process invites political risk and seems likely to introduce factors that detract from delivering system needs at least cost.

The setting of investment targets and evaluation of tenders in terms of reliability outcomes will need to account for interstate power flows. This is not mentioned in the consultation paper, which appears to presume reliability assessments would occur for each jurisdiction in isolation. Network flows are mentioned in the context of modelling constraints at the time of applying deratings for tender evaluation purposes. The treatment of flows via interconnectors was one of many design issues being dealt with by the ESB and we encourage the Department to consider its earlier consultation materials.

Generally we would discourage the Department, AEMO Services Limited (ASL) and jurisdictions from introducing bespoke modelling analyses. The publication of conflicting reliability assessments for the CIS and by AEMO in its ESOO publications will potentially undermine investment signals and detract from a rational public discussion of reliability risk. ASL already publishes separate assessments against NSW specific reliability settings (including the NSW Energy Security Target) hence further CIS publications for NSW are not necessary. Generally if jurisdictions consider there to be deficiencies in how reliability risk and investment needs are signalled in the NEM, their views should be transparently presented in processes administered by the independent Reliability Panel[8], AEMO[9] and the AER[10].

How could the CIS eligibility criteria and assessment methodology change and adapt over time?

As noted above the framework should reward assets in proportion to how they address reliability gaps, thus eliminating the need to impose and revisit eligibility criteria. It will be important for market participants and taxpayers to have clarity on the relative value of projects that receive support under the CIS. A standardised, transparent and predictable approach to valuing capacity and duration contributions should be applied across all assessments.

[8] Review of the form of the reliability standard and APC | AEMC
[9] AEMO | NEM Reliability Forecasting Guidelines and Methodology Consultation
[10] Values of customer reliability | Australian Energy Regulator (aer.gov.au)

What methodology for considering a project's contribution to zero scope 1 emissions would be appropriate?

We support a prescriptive approach for initial tender rounds. The approach outlined in the consultation paper appears appropriate. By definition, storage has zero scope one emissions. Eligible generation will have measured or deemed scope one emissions per the National Greenhouse and Energy Reporting. The consultation paper makes seemingly contradictory statements on the eligibility of co-located storage however we understand the Department's intent is that this will be eligible.

Views about technology eligibility that emanate from, or serve, political debates are likely to hinder the appropriate design of the CIS. Ministerial announcements of the CIS refer to it as encouraging "firmed renewables"[11] which is a vague concept. We appreciate the Department has stepped back from its initial suggestion that storage must be co-located with renewables, be synchronised with renewable generation within a portfolio, or require LGC purchases in proportion to its charged energy. The industry reaction to these 'renewables' requirements for storage, as well as earlier 'coalkeeper' criticisms levelled at the ESB, highlight the need for a systematic and separate policy treatment of emissions from the NEM as a whole. Excluding gas generation from the CIS is proportionally at odds with the critical role it will play[12] in underpinning reliability and complementing higher renewables penetration. It is also contrary with the inclusion of gas generation within NSW 'firming' tender rounds, noting that the NSW Roadmap has separate targets for storage and renewables as part of an integrated plan to deliver emissions reduction. Excluding gas in-principle given concerns around emissions impacts would seem to place some additional reliance on existing coal generation to provide increasingly flexible backup, with higher emissions, reliability risk and costs for customers.

Attempts to achieve emissions and reliability objectives in a single investment mechanism will deliver sub-optimal outcomes. The ESB's experience demonstrates that ministers cannot side-step this issue by tasking departments or market bodies with designing such a mechanism.

How could this criteria and assessment methodology adapt as technology matures over time?

Appropriately designed mechanisms that separately target reliability and emissions, rather than technologies, would be neutral to any changes in technology.

It may be possible to scale the relative value of projects according to their emissions intensity rather than exclude certain technologies outright. For example, if carbon emissions and externalities are explicitly valued as a result of amendments to the national energy law objectives[13], this could enable a fair value comparison between fossil fuel and other technologies that captures cost as well as reliability.

Developers of maturing technologies require long term certainty of the extent of policy support. The final tender rounds of the CIS, expected in 2027 would likely be too short a timeframe for this. The Department should eventually provide certainty on any intentions for an enduring capacity mechanism to apply beyond the CIS.

[11] Joint media release: Capacity Investment Scheme to power NSW with clean, cheap, reliable energy | Ministers (dcceew.gov.au); Joint media release: Capacity Investment Scheme to power Victoria and South Australia with more cleaner, cheaper, reliable energy | Ministers (dcceew.gov.au)

[12] AEMO, *2022 Integrated System Plan*, pp. 57-58 and Appendix A4.2.8; Go for net zero: A practical plan for reliable, affordable, low-emissions electricity (grattan.edu.au)

[13] Statutes Amendment (National Energy Laws) (Emissions ReductionObjectives) Bill 2023 (legislation.sa.gov.au)

What types of demand response would be consistent or inconsistent with the CIS objectives?

Any demand that can be scheduled should be eligible to participate. Smaller demand response and aggregated loads will likely choose to not participate given high administrative costs and non-performance penalties. Barriers to market participation of this nature are currently being considered by the AEMC under AEMO's 'scheduled lite' rule change proposal.

How can the CIS design be future-proofed for an evolving/changing technology mix?

A mechanism that transparently targets reliability outcomes and delivers this need through tender assessments would be able to accommodate changes in the system's technology mix.

The Department is seeking feedback on the eligibility requirement of projects in the NEM for equal to or greater than 30MW registered capacity.

A 30MW registration requirement seems appropriate. As noted above there will likely be administrative costs of the CIS that can only be overcome by participants of a certain scale.

The Department is seeking feedback on each of the eligibility requirements including:

- *the focus on a base level of development status of land tenure, planning and connection approvals.*
- *the impact of participation in other government schemes on CIS eligibility.*
- *the eligibility of existing projects to bid into the CIS, and questions of CIS additionality that result from this approach.*
- *the technology risk appetite of the CIS*

Without commenting on the appropriateness of combining CIS with other funding sources, provided there are no barriers to participating in tenders, bidders in receipt of other support should reflect this in lower bids, all else being equal. This illustrates the need for eligibility to be wide enough to encourage a high number of competitors for each tender round. Non-CIS funding contributions may reflect an intent to compensate for specific technology risk rather than be seen as providing an unfair competitive advantage or not providing additionality.

Projects should be subject to suitable pre-screening processes. Further consideration should be given to the treatment of pumped hydro storage projects and others with longer lead times. See our further responses on pumped hydro storage below.

The Department is seeking feedback on the evaluation criteria, on the appropriate structure to assess a project's contribution to system reliability and feedback on the potential development and application of de-rating factors

The application of derating factors in the assessment of bids is likely to be questioned and there should be opportunity for stakeholders to provide information to inform this assessment. This was the case in ASL's firming tender round and the application of locational contribution factors.[14]

[14] 225009-market-briefing-note-firming-infrastructure-eligibility-con2.pdf (aemoservices.com.au)

In theory there should be alignment throughout the CIS framework such that deratings used in determining reliability targets should flow through to tender assessments, as well as in performance obligations. The Department proposes to set a default 97% availability requirement annually, as well as a minimum 50% availability during LOR3 events. Repayments and penalties for non performance need to be calibrated towards these outcomes across a range of technologies. Hence the application of uniform availability parameters could produce unintended bidding outcomes. It also seems unlikely that these levels of availability would correspond to price signals provided by the market, and such signals will be muted by the proposed revenue floor and ceiling payment design. Developers would be able to nominate the proportion of their nameplate rating covered by CIS obligations which provides some scope for them to effectively derate their plant according to their own view of performance risks and contract incentives. Developer bid parameters would also be affected and should be assessed with this in mind.

The Department is seeking feedback on the appropriate structure and sizing of performance requirements necessary to deliver on the policy objectives of the CIS without distorting storage market participation.

We appreciate the desire to capture LOR3 events within performance incentives. However we consider that high market prices are the best signal to encourage asset operators to 'show up' and address supply scarcity. Thus the CIS incentive design should maximise exposure to full price risk, rather than rely on compliance with performance requirements. The proposed LOR3 requirement is essentially creates a reserve role at short notice where storage operators would need to charge units ahead of these events. This would seem to add to the problem of supply scarcity.

The Department is seeking feedback on all aspects of the high-level commercial model including:

- *the floor price support mechanism*
- *the use of a single net revenue floor for both VRE and scheduled generators (including storage)*
- *the term of the contract, including financing requirements around revenue tenor*
- *the performance requirements, including the LOR3 performance requirements*
- *the milestone requirements, penalty provisions and termination provisions*
- *A contract structure that divides development/construction and operating periods into two contracts, similar to the NSW Project Development Agreement and LTESA division*

We support proponents being exposed to full price risk. At one extreme, this would be in the form of a fixed annuity payment, as per other capacity markets. We note that ministers appear to prefer a hybrid contracting structure. The paper suggests a prescribed floor sharing ratio of 90% (i.e. governments protect 90% of downside risk) and we understand the Department is considering a similarly high (e.g. 75%) sharing ratio for revenues above the ceiling. These values would provide weak operational incentives. If the Department is minded to continue with a floor and ceiling arrangement, it is critical that repayment ratios be bid variables rather than prescribed.

Conceptually, payments in relation to the revenue floor should act as a top up each year, to reflect the shortfall of expected market net revenue relative to the minimum revenue required to meet investment hurdles. The "floor payment" in any period would be fixed and be a key bid

variable in the tender process. This would ensure optimal outcomes for consumers, allowing participants to compete and bid for the lowest floor payment, while also ensuring they respond to market signals. Additionally, having a soft ceiling or a high benefit sharing threshold prescribed in the tender process limits potential up-side returns to investors, who would likely respond by bidding a higher revenue floor. This also negates incentives to operate according to market signals above an arbitrary point and invest in return-enhancing improvements to the asset. It would also require high degrees of oversight and performance penalties to ensure that the asset operates in the best interests of consumers. Any administrative oversight of revenues and of operators' behaviour opens up the CIS to gaming and potentially setting baseline or benchmark outcomes, which would also be difficult to administer.

Other options to retain operational incentives on the proponent while sharing benefits with the government and taxpayers could involve using multiple sharing factors that increase in proportion to higher revenue bands above the ceiling, or by limiting the sharing to recoup previous floor payments. Such a mechanism would be consistent with LTESA arrangements under the NSW Roadmap.

We would be cautious about jurisdictions placing locational restrictions on eligibility. Generally if projects can satisfy planning criteria, value for money, social licence and other merit criteria, then they should be allowed to participate in CIS tenders. If locations within Renewable Energy Zones are superior in these respects, this would be borne out through tender evaluations.

The Department is seeking feedback on the commercial model's applicability to pumped hydro energy systems

We expect this will be a particular challenge and note experiences with the recent NSW tender round for long duration storage. The NSW Government also provided additional financial support for pumped hydro via recoverable grants. These issues are compounded by the long lead times for pumped hydro compared with the relatively shorter target periods for the CIS (up to 2030 commissioning). The length of CIS contracts and tender evaluations would need to accommodate the relatively long lives of pumped hydro relative to batteries and contribution to reliability outcomes over this time.