

20 October 2021

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Capacity Commitment Mechanism and Synchronous Services Markets

Directions Paper

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Directions Paper from the Australian Energy Market Commission (the Commission) on the Capacity Commitment Mechanism and Synchronous Services Markets.

Snowy Hydro agrees with the long-term vision for the power system described in the Directions Paper. In particular, in order to maintain a secure and reliable system it is essential to value and price system services in order to provide adequate investment and scarcity signals for participants. Snowy Hydro agrees that the 'explicit procurement and valuation of system services will not only promote the economically efficient entry of these new technologies, but also the efficient exit of thermal synchronous generators'.

Sophisticated market frameworks already exist within the NEM for the valuation of energy and capacity. While these frameworks could be improved by modest adjustments to reliability settings - in particular by an increase in the market price cap and cumulative pricing threshold - by and large they have proved successful in incentivising efficient levels of investment. Unfortunately, as recognised by the Commission, equivalent frameworks do not yet exist for the valuation of essential system services. That is partly because some of those services were historically provided at no cost to energy users as a byproduct of synchronous generation. However, other factors have played a role in the lack of incentives for the provision of system services, in particular recent reforms which address the need for system services by forcibly acquiring the relevant capability from market participants.

Mandatory Primary Frequency Response

The introduction of mandatory primary frequency response requirements, whereby primary frequency capability is appropriated from scheduled generators, has been a particularly concerning development. Forcing generators to hand over expensive system service capability to the market operator for no consideration will, in the long-term, have the opposite effect of what is intended. Accordingly, while Snowy Hydro agrees with the Commission that a lack of markets or other means of valuing the essential system services has resulted in an undersupply of system services, it is important to acknowledge that the deliberate decisions of market bodies have also contributed to this undersupply.

We note that the Commission has made a draft rule¹ designed to improve incentives for the provision of primary frequency control. While Snowy Hydro is hopeful that the rule change will ameliorate impact of mandatory primary frequency response requirements, the the process leading up to the current point in time - a forced, uncompensated

¹ *National Electricity Amendment (Primary Frequency amendment Response Incentive Arrangements) Rule 2021*

acquisition of system services - followed by a later assessment of consideration for service providers, has been unsatisfactory and should not be repeated.

Out-of-Market Resources

For some time Snowy Hydro has been concerned with the growing use of out-of-market resources in the NEM, either through the use of directions or the expansion of AEMO's reserve trader ("RERT") function. We quote with the approval the Commission's assessment of this development:

Although out-of-market, resources that are subject to directions must be compensated. At worst, they are compensated for operating costs, and so this compensation does not provide investment signals nor sufficient revenue to cover fixed costs. This compensation could be considered reflective of cover for missing markets where the services are not compensated as a current ancillary service.....

Market participants need transparent information on potential future cash flows to help them manage risk and to make efficient investment decisions. The current arrangements do not provide transparency on how, or for what reasons, AEMO would use directions in the future in order to allow a participant to position an asset to benefit from them. In addition, the compensation frameworks do not necessarily compensate an asset for fixed costs, which could allow a participant to make an investment to contribute to system requirements currently met through directions. As such, the Commission considers that the directions framework would not allow for participants to make efficient investment and disinvestment decisions, which will lead to increased costs to consumers in the long term.

The NEM is an energy-only market, in which scarcity rents compensate generators for their fixed costs. For peaking generators, scarcity rents are critical in order to fund an adequate level of capital expenditure. However, as the Commission observed, the use of directions, which tend to compensate providers only for their operational costs, will lead to underinvestment and ultimately increase costs for consumers. Similarly, energy dispatched under the RERT has proven more expensive than in-market resources (costing up to \$60,000/MWh) and has distorted investment incentives for NEM participants. Accordingly, the Commission should prefer a market-based approach for the provision of both energy and system services.

Unit Commitment for Security and System Security Mechanism

While Snowy Hydro supports reforms to value system services, we are concerned that proposals for a Unit Commitment for Security (UCS) and System Security Mechanism (SSM) are being unnecessarily characterised as part of and justified by the need for those reforms. The UCS/SSM do not form part of the critical path to creating markets for system services, being primarily a scheduling mechanism designed to address AEMO's lack of confidence in the current dispatch process. UCS/SSM have evolved from and bear many similarities with earlier attempts to introduce an ahead market. As such, these mechanisms should be assessed separately, with any crossover with the Commission's work on system services being addressed on an as-needs basis. Snowy Hydro's position with respect to UCS/SSM proposal is as follows:



- introducing additional 'aheadness' into the dispatch process has not been justified;
- there appears to have been little consideration for how a UCS/SSM would impact and potentially disrupt the contracts market, which underpins long-term investment in the NEM;
- proposals for UCS/SSM wrongly assume that dispatch outcomes can be maximised by market operator interrogating participants' operational and resource costs, rather than having those costs revealed through a competitive bidding processes; and
- any increase in confidence in the current scheduling/dispatch process enjoyed by AEMO would come at the expense of a loss of efficiency and greater risk for market participants. In particular, introducing bidding gates would restrict generators' ability to efficiently respond to developments in the market.

Accordingly, proposals for a UCS/SSM should be assessed independently and on their merits. Attempts to bundle these mechanisms with system service reforms risks further delaying the introduction of missing markets for system services and undermining system security.

The Commission should prioritise arrangements such that system services are provided within energy and FCAS markets, without the need for any other mechanism. AEMO has provided no detail on exactly how the mechanism will function in terms of procuring and activating contracts and how procurement and dispatch will interact with the rules.

System Services Procurement

Snowy Hydro supports the development of a market ancillary services (MAS) approach as a means to value and procure system services. While it is appropriate that a non-market ancillary services (NMAAS) approach is utilised where necessary, it lacks important benefits of a MAS approach, in particular price discovery, efficiency and transparency. A distinguishing feature of the NMAAS approach is that it would not be able to take advantage of scarcity pricing.

While it is correct that prices struck through NMAAS contracts "may provide market participants improved incentives to make efficient investment and disinvestment decisions compared to the status quo", it is not clear that such an approach would incentivise an optimal level of investment. Pricing outcomes may not be visible to third parties and may simply reflect the relative bargaining power of a small number of counterparties, rather than the free interaction of supply and demand.

Snowy Hydro notes that a recent report by Marketwise Solutions for the Australian Energy Council ("MarketWise Report")² found that a market-based approach to procurement is most consistent with the current NEM market design, given that inertia dispatch outcomes are consistent with energy market dispatch outcomes, and can be co-optimised with fast frequency response and fast frequency control ancillary services. Furthermore, spot market prices reflect the economically efficient price of inertia in an operational timeframe.³ In contrast, the MarketWise report highlighted a number of

² MarketWise Solutions, *Inertia Ancillary Service Market Options*, 31 August 2021

³ Ibid, p66

limitations of a non-market approach to procurement, including potential over-procurement (increasing system costs), lack of co-optimisation and lack of a transparent price mechanism.

We note that the Commission has indicated its preference for an NMAS approach, on the basis that this is more likely to result in the efficient scheduling and dispatch of generators, and will provide AEMO with greater confidence that the system will be secure. While Snowy Hydro acknowledges that there are technical challenges that need to be overcome in order to implement a market-based approach to the valuation and procurement of system services, it is critical that design work continues until a viable market-based approach is resolved. Procurement of system services is a long-term, ongoing challenge and must ultimately be addressed by a sustainable solution. Adopting a default NMAS approach to procurement risks entrenching the difficulties associated with out-of-market procurement of energy and should only be used as a last resort.

Finally, the fact that an NMAS approach to procurement is consistent with AEMO's desire for UCS/SSM mechanisms does not justify the use of that approach. As stated, in Snowy Hydro's view, the introduction of UCS/SSM has not been justified, and the fact that it fits more easily with an NMAS approach should not be used as a lever to favour this method of procurement.

About Snowy Hydro

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts (MW) of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy.

Snowy Hydro appreciates the opportunity to respond to the Directions Paper.

Yours sincerely,



Leigh Creswell

Snowy Hydro Limited

