25 September 2019

Ms Victoria Mollard

Director

Australian Energy Market Commission

PO Box A2449

Sydney NSW 1235

Email

# COGATI Review – AEMC staff paper on hybrid approaches

Dear Ms Mollard,

Energy Networks Australia welcomes the opportunity to respond regarding the hybrid options discussed in the Australian Energy Market Commission's (AEMC) staff paper titled 'Summary of options for how transmission hedges can inform planning'.

This response is on behalf of Energy Networks Australia's transmission members. Nonetheless, we also take this opportunity to remind the AEMC that, as noted in our August 2019 submission into the review, it would be useful if the conceptual design and renewable energy zones papers clarified any impacts on distribution networks, for example the application of distribution connected scheduled generators above 5MW or scheduled aggregated VPP etc.

Energy Networks Australia provide a number of points on the preliminary revised approach and the hybrid approaches below.

## Preliminary revised approach

Energy Networks Australia is supportive of AEMC pursuing a model that does not rely on or assume a direct role for generators to influence overall transmission development. Transmission hedges may have an indirect role in informing overall transmission planning and investment outcomes but it is just one piece of information as input to ISP, TAPR and RIT-Ts.

However, the primary purpose of locational pricing and issue of transmission hedges will be to improve certainty for generators, in locations where they will connect to the network, around access to the wholesale market. TNSPs are key stakeholders in the regime that will emerge, and seek further clarification on how this will be structured, as follows:

» AEMO should undertake the role of managing the short term hedge auction process – this is consistent with the view that wholesale market settlement

residues are used to fund transmission hedge payouts as set out in the AEMC's COGATI directions paper. The governance arrangements associated with inter-regional settlements residue auctions may present a useful model.

- With regards to generators' purchase of transmission hedges in the AEMC's preliminary revised approach (bottom of page 6 of AEMC note):
  - Suggest that available network capacity be sold by auction (i.e. auction of FTRs). The idea of centralised price-setting of transmission hedges should be dropped.
  - Define who should be able to receive these Auction Revenues. Options may include: pass the value onto consumers directly; use it to reduce the TUoS; and pass it to the relevant TNSPs, who then reduce their net regulatory revenue requirement accordingly.
  - Recognise that FTRs cannot be sold or settled on a TNSP-by-TNSP basis: it necessarily must be centralised. This means that the TNSP role is focused on defining available transfer capacity.
  - Move away from the concept that FTRs are only of value to generators. They will be of most value to whoever is willing to pay the most for them. This might be retail supply companies, who also have reason to hedge their risks, or financial intermediaries.
- Energy Networks Australia considers that there are benefits in providing further detail on the process of hedges and how the model is intended to work. It would be useful if the AEMC could clarify the following in its strawman model to be provided in October:
  - The expected relationship between units of transmission capacity and hedges sold and the units of denomination sold;
  - The definition of the RRP at which non-scheduled loads will be settled – the current marginal value at the RRN or average volume weighted price to be adopted;
  - Regularity of hedge auctions, they could be more frequent and occur during the ISP and RIT development, units could also be sold off in tranches closer to the time, see Attachment;
  - It is important to create a liquid market for hedges and the possibility for a secondary market to emerge;
  - Consideration of the interaction of a practical long term hedging arrangement with the ISP, RIT, auction and charging arrangements; and
  - Consideration of information provisions and transparency. For example, a historical series of short term hedge values could be maintained on the AEMO website to enable later assessment of how constraints are valued and whether the final model is working in practice. This type of information for current committed short term hedges would be one of the many inputs into the ISP as would any committed long term hedges.

## Hybrid approaches

Having regard to the preliminary revised approach set out in the staff paper, Energy Networks Australia takes the view that the hybrid approaches discussed may have relevance in the case that a generator, or group of generators wish to directly pursue a specific transmission augmentation to provide market access over and above that which would be delivered via the ISP process. Such action would of course also inform ISP development.

In this context the models provided appear reasonable for further consideration and cover individual generators pursuing opportunities for their business (options 1 and 2) and coordinating amongst generators (options 3 and 4).

Any hybrid approach needs to work with and complement the ISP and RIT while providing a practical way for generators to fully or partially fund transmission development as intended by the AEMC.

Of primary concern for TNSPs is the need to be kept whole, and any model needs to provide reasonable assurance of revenue sufficiency to support the transmission hedges.

Mindful of costs to customers, merely transferring additional costs to generators may not ensure the least cost transition for consumers to a lower emissions economy.

It is noted that under option 2, generators could reach inside projects that failed to pass the RIT-T, and be able to offer to fund shortfalls. It places a lot more weight on every project considered (and the specific values that emerge from the RIT-T assessment), including the ones that failed, and could cause difficult coordination issues. This is not consistent with the purpose of the RIT-T as currently framed or the AER's approach to the current RIT-T where this is merely a transfer between participants and does not change the RIT outcome.

- If generators are directly influencing in these limited circumstances then generators need to provide enduring commitment for payment over the life of the hedge when the bond or subscription process commences to ensure they are committed before transmission investment.
- These long term hedge contracts should be tradeable or the long term hedge sold back into the auction process if the holder no longer requires the hedge.
- Any committed long term hedges need to be transparent and an input to the ISP process (see Attachment).
- These arrangements should only apply to new investments which are sponsored directly by a generator or other market participant and could apply to new ISP projects. The free rider issue needs to be considered for later generators and enable some advantage to the initial generator(s) who may have committed through the initial bond process.
- It is useful to clarify whether this is a separate radial connection onto a shared network (dedicated asset) or whether this is shared network. It appears to be a model where generators may be exclusively funding shared network investments but may not be in business at that location for the life of the transmission asset.
- Given that it appears we may be moving away from generator led transmission investment then the efficient development of REZs remains a central role of the ISP . i.e. its all about transmission access to market and hence optimal shared transmission system development. The additional complexity of these hybrid

concepts should be considered in this light and the additional net benefit quantified.

- In the October strawman it may be useful to test how this will apply where generators only partially fund bring forward assets or bring forward future replacement or replacement of assets that wouldn't be replaced.
- Energy Networks Australia agrees that a long term physical access contract is not practical and it needs to be based on financial access. However even if a generator fully funded the removal of a constraint on a single transmission segment via the long term contract it may not be practical to ensure that no one is worse off as the constraint is just moved to a different network segment within the shared network.

Energy Networks Australia appreciates the opportunity to comment on this interim paper and looks forward to engaging with the AEMC and other stakeholders on the development of the detailed design.

If you would like to discuss this submission, please feel free to contact Verity Watson, vwatson@energynetworks.com.au.

Yours faithfully

Andrew Dillion

Chief Executive Officer

## Attachment

This diagram is indicative of one way that long term (LT) hedges can integrate with a short term (ST) auction process.

| | Y1Q1 | Y1Q2 | Y1Q3 | Y1Q4 | Y2Q1 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1300 | | | | | | | | | | | | | | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 |
| 1200 | Y1Q2 | Y1Q3 | Y1Q4 | Y2Q1 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 |
| 1100 | Y1Q3 | Y1Q4 | Y2Q1 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 |
| 1000 | Y1Q4 | Y2Q1 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 |
| 900 | Y2Q1 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 |
| 800 | Y2Q2 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 |
| 700 | Y2Q3 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 |
| 600 | Y2Q4 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 | Y8Q4 |
| 500 | Y3Q1 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q2 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 | Y8Q4 | Y9Q1 |
| 400 | Y3Q2 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q3 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 | Y8Q4 | Y9Q1 | Y9Q2 |
| 300 | Y3Q3 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q4 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 | Y8Q4 | Y9Q1 | Y9Q2 | Y9Q3 |
| 200 | Y3Q4 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y7Q1 | Y7Q2 | Y7Q3 | Y7Q4 | Y8Q1 | Y8Q2 | Y8Q3 | Y8Q4 | Y9Q1 | Y9Q2 | Y9Q3 | Y9Q4 |
| 100 | Y4Q1 | Y4Q2 | Y4Q3 | Y4Q4 | Y5Q1 | Y5Q2 | Y5Q3 | Y5Q4 | Y6Q1 | Y6Q2 | Y6Q3 | Y6Q4 | LT | LT | LT | LT | LT | LT | LT | LT | LT | LT | LT | LT |

Assume the network capacity is 1200 MW. This capacity gets progressively auctioned off over 12 quarters (3 years) in 12 equal tranches, each of 100 MW. The last 8% of the capacity is auctioned off during the quarter before the hedges apply.

Now assume a new network investment will commission at the start of Year 4 (Y4Q1) and provide an additional 100 MW of network capacity. This is slotted in at the bottom of the stack to signify that it could, potentially, be treated as firmer than the ST auction hedges. In any event, the ST auction process can work around the creation of LT hedges.

Under the current SRA process for Inter-regional hedges, all tranches rank equally and provide an equal share of the available residues. That's why it helps to think of them as 'units' rather than as 'MWs'. One option for any new access regime, though it becomes more complicated, would be for any residue shortfalls to come out of the payments to the later purchased tranches. That is, hedges purchased earlier are firmer, with the LT hedges being the firmest.