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Energy Security Board
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ESB Transmission access reform Consultation paper

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Energy Security Board's Transmission access reform Consultation paper (Consultation Paper).

Overview

The NEM is undergoing significant change and it is important to always seek improvements that benefit both investors and consumers. Snowy Hydro does not however consider that there is a need for a material structural change to the market to respond to the transition the NEM is facing. The current NEM has more predictable pricing and simplicity for the retail market while also facilitating competition and significantly better from a risk management point of view.

As the NEM transitions towards higher levels of renewable energy, what is required is substantial new investment in renewables and transmission which can only be achieved with a predictable and stable investment framework. It is for this reason that Snowy Hydro supports the Ministers' directive that, in addition to transmission investment:

- There is an implementation of 'enhanced information' reforms to provide east-coast market participants with better information on the optimal location for new generation and storage, and;
- ruling out any models using locational marginal pricing (LMP)¹.

Snowy Hydro therefore remains concerned by the modified proposed Congestion Relief Market (CRM) and Priority Access as they portend an ultimately irreversible move towards mandating LMPs, and overcomplicating the NEM, leading to inefficient outcomes for contract markets, and customers needing contracts to manage their risk and costs. Instead we suggest that policy reforms be more directed to simple reforms to address transmission access than the higher risk options involving altering NEM dispatch arrangements.

The critical challenge for market design is to ensure revenue adequacy for firming and storage capacity. It is not, however, apparent that the ESB's transmission access reform objectives and assessment criteria have been developed with this consideration in mind. Dispatchable assets require certainty of market access during volatility in order to defend forward contracts. Without it, forward contracting and, ultimately, investment in new capacity, becomes too risky. Consideration should therefore be given to prioritising access for dispatchable plant during periods of market volatility, to ensure the availability of hedging contracts for Market Customers and revenue adequacy for those assets. This will also deliver the best outcomes for consumers.

The complexity of the NEM is currently well balanced with certainty and simplicity that is needed for contract markets. The risks associated with the modified transmission access reform models by the ESB however are likely to increase costs in the market which will impact consumers. The key concerns regarding the proposals include:

- The precondition for any such significant proposed reform, whether it be CRM or Priority Access needs to be a detailed cost benefit analysis. Instead the cost benefit analysis

¹ Energy and Climate Change Ministerial Council, Meeting Communique , Friday 24 February 2023

suggests that the majority of the benefits will be achieved in the investment timeframe while the potential benefits of further optimisation of the NEM dispatch process are quite limited compared to the already identified direct implementation costs. We have yet to see a demonstrated cost benefit analysis which demonstrates what the proposals will cost to implement and what low participation would do on the benefits side.

- Further to this, the ESB should detail which projects over the last 10 years it believes have located inefficiently and the alternative locations each of those projects should have located due to access reform.
- There is no clearly demonstrated link between the need for the investment timeframe with the implementing the operational timeframe, Participants should not be forced to accept both proposals in all circumstances.
- Although the key directive by Ministers is to rule out LMPs this is not reflected in the consultation. For those who do not participate in CRM, the ESB notes that if there is full participation in the CRM then arbitrage opportunities will force the RRPNEM and RRPCRM to converge over time meaning that all market participants will face an LMP. There is a clear risk in the consultation that those who do not voluntarily participate in the reforms could be forced to face the LMP in the future.
 - In the current market, the combination of an easily understood reference price and a large number of market participants exposed to the price, has provided a solid foundation for the development of liquid financial markets based on the RRP. Some NEM regions have experienced relatively low levels of liquidity in recent years, and this has reduced the availability of hedges in those markets and, ultimately, competition. Reforms which reduce liquidity should be avoided as far as possible.

Should the reforms proceed however, the ESB should consider the following:

- Priority access is focusing on different floors to facilitate access to different renewables; however the priority of different floors should be to improve the certainty of dispatch for dispatchable plant, which would lower the costs of firm hedging contracts.
- Priority access will have a negative impact on the efficiency of dispatch, which the ESB is attempting to solve by forcing businesses to participate in the CRM model. This goes against the voluntary aspect of CRM.
 - CRM should be developed in a way that does not interfere with dispatch or pricing outcomes for participants who choose not to participate.
 - We do not support the position that the current system is inefficient and that the ESB chooses an inefficient alternative.
- Under the voluntary CRM there is a risk to those contemplating to opt in that they will be unable to opt out. If this is not clarified then it risks making the mechanism no longer voluntary participation.
 - AEMO's system preferences should not drive policy decisions, participants should be able to opt out.
 - ESB consider developing priority access in a way that minimises inefficient dispatch, even without high levels of participation in the CRM.
- Under the queue or tier system, committed projects, especially large projects that have a longer lead time for completion such as Snowy 2.0, must be at the front of the queue or tier once their status is committed.
 - Further consideration should be given to allowing a short lead time intermittent plant to get priority over a longer lead time pumped hydro project. The faster to build plant would always jump the queue after the long build time project has been announced discouraging any investment in any long build time plant.



- Should States elect to derogate from Priority Access and CRM, the ESB should seek to clarify how the proposal would still operate if it is still able to do so.
- We do not support rounding constraint coefficients not being reviewed at this time. While there are key design choices to be finalised for priority access which affect this residual risk, the simplest reform of assessing the change in rounding constraint coefficients is being ignored for something more complicated. Rounding constraints should not be tied to Priority Access; they should be considered, concurrently, as a reform in their own right.
- The simplest reform should not be disregarded by adding further complex reforms such as CRM. The Enhanced information proposal only requires tweaks to existing publications, such as the ISP or TAPR,

The current approach taken by ESB still risks increasing the complexity of the dispatch and settlement processes and undermining liquidity in the financial market. The ESB's approach to the spot market is overly focused on allocative efficiency within a single 5-minute interval and it has failed to take into account the impact of the financial market on bidding behaviour. A more sophisticated understanding of the operational and contractual environment that participants operate in would assist the ESB's analysis. We therefore encourage the ESB to pursue simpler solutions wherever possible.

The Enhanced information proposal is a sensible proposal being put forward by the ESB. It is the only option that does not disrupt the NEM, as it is simple and at no stage requires being linked with any of the other disruptive approaches put forward by the ESB. The proposal will provide prospective investors with information about which parts of the network are available for further development, which parts are reaching capacity, and which parts are already full.

Enhanced Information

Snowy Hydro considers that Enhanced information promotes more informed investment. Although enhanced information' is not included in the scope of this consultation paper the impact it will have on solving the concerns the market and the ESB has should not be dismissed.

It is more likely that enhanced information will improve transmission access than CRM. Enhanced information will support investment decisions by creating greater transparency.

The simplest reform should not be disregarded by adding further complex reforms such as CRM, enhanced information proposal only requires tweaks to existing publications, such as the ISP or TAPR, which could easily provide enhanced requirements with very little additional effort. The main objective of the ESB's work should be to keep it simple for investors and assist with early stage investment proposals.

Priority Access

Snowy Hydro agrees with the ESB that *"there are linkages between the scope and nature of 'enhanced information' and the priority access reforms."* It is for this reason that the priority access reforms should build on the enhancements to information.

Despite the ESB showing that both the investment timeframe and operational timeframe have similar objectives to incentivise congestion relief, there has been no demonstrated reason why one requires the other and vice versa. It is for this reason Snowy Hydro continues to believe that Priority Access is not required so that CRM can work.

There needs to be a balance to protecting existing generators and making it simple for new investors. Snowy Hydro is concerned by the complexity in priority access.



The choice as to whether the priority offered is 'hard' or 'soft' will significantly impact the degree to which a generator's priority level supersedes its constraint coefficients in determining dispatch outcomes and will significantly impact the complexity of the proposal. Under hard priority the proposal will have a high reliance on CRM, which investors will take time to understand and participate in and have a significant impact on the RRP, which the CRM was initially intended to not disrupt. This will therefore make it more difficult to implement.

The hard version of priority access will have significant impacts on the efficiency of dispatch which is a major risk on market participants. Instead of addressing these problems, the consultation paper attempts to solve this problem by proposing that the CRM be used to solve these inefficiencies. This was not the intended purpose of the CRM proposal and now it will be forced on market participants who will be impacted by priority access. This does not demonstrate the intent of CRM where participants make a free choice to participate should CRM provide benefits.

Level of priority	Pros	Cons
Hard	<ul style="list-style-type: none"> Improved investor confidence; maximises the ability of generators to manage congestion risk Improved locational signal to avoid inefficient investment in congested parts of the network. 	<ul style="list-style-type: none"> Weaker locational signal to locate efficiently in uncongested parts of the network May be difficult to implement May have a significant impact on the RRP High reliance on CRM to unwind inefficiencies in priority dispatch
Soft	<ul style="list-style-type: none"> Stronger locational signal to locate efficiently in uncongested parts of the network Easier to implement May have a less significant impact on the RRP Less reliance on CRM to unwind inefficiencies in priority dispatch 	<ul style="list-style-type: none"> Limited impact on investor confidence; does not maximise the ability of generators to manage congestion risk Weaker locational signal to avoid inefficient investment in congested parts of the network

Forced LMPs

Should the ESB however proceed with priority access, the following will need to be determined and confirmed:

- Under the queue or tier system, committed projects, especially the large project that have a longer lead time for completion, must be at the front of the queue or tier once their status is committed. The risk if this is not undertaken large projects could be significantly constrained.
- The ESB has not effectively demonstrated how these proposals will work with NSW and Victorian access reform proposals. There is a risk that if this is not undertaken that the ESB reform could increase the complexity for investors. We have particular concerns regarding how this model will interact with and possibly undermine the effectiveness of state-based mechanisms like access rights.
- Support for grandfathering arrangements that would apply to legacy generators where priority level is awarded to legacy generators until it is retired.
 - Grandfathering rights should also be applied to generators which are committed prior to the reform being implemented or approved.

Snowy Hydro is concerned that mandating participation, or otherwise forcing parties into the CRM through the mandatory application of the Priority Access model, may materially undermine the efficiency of the REZ, and may dissuade parties from investing. This will force everyone to receive a local congestion price and will make it hard to strike meaningful options contracts, given these are based around modelled expectations of the RRP.

Priority dispatch in the energy market

When two or more generators bid at the market floor price, the Priority Access dispatch proposal is proposing that the EN dispatch would factor in the DP number to give a level of preference to generators with the higher priority. With this proposal Snowy Hydro is concerned that the ESB has not understood or assessed what the main objective of improving priority dispatch should be.

Dispatchable generation faces increasing transmission access risk due to the growth of wind and solar plants. As thermal assets retire and are replaced by weather-dependent forms of generation capacity, it is critical that the NEM sustains an adequate level of dispatchable generation. The ESB should instead be seeking to reduce transmission access risk for dispatchable generation to support capacity revenues for firm assets and lower the cost of hedging contracts, without materially affecting the energy revenue stream of renewables. The influx of renewables is harming dispatchable generators' ability to sell firm contracts.

Congestion Relief Management (CRM) Model

The introduction of a new voluntary spot market (the CRM) and its interactions with the energy market (EN) continues to pose risks that are associated with reform that have not been adequately addressed. There isn't enough detail on the cost-benefit analysis but instead to state a reliance on the Coordination of generation and transmission investment (COGATI) work on the industry and financial market impact side. This still needs to be addressed for CRM.

There needs to be clarity that CRM is purely a voluntary market and that if a party 'opts-in' to participate in the CRM they do not, now or in the future, have to submit CRM bids. The ESB has proposed that once a plant has opted in to CRM, it cannot opt out, and must continue to submit 2 bids (one for energy market, one for CRM). This creates a framework of *de facto* exposure to LMPs and should be changed. That is, participants should be able to opt out. AEMO's system preferences or technical limitations should not drive policy decisions.


ESB notes that if there is full participation in the CRM then arbitrage opportunities will force the RRPENM and RRPCRm to converge over time, meaning that all market participants will face an LMP. This is not the intent of the Ministers' directive to not introduce LMP's and Snowy Hydro is concerned that those who do not participate in CRM will ultimately be exposed to an LMP.

Snowy Hydro disagrees with the proposal to not pursue rounding constraint coefficients at this time. While there are key design choices to be finalised for priority access which affect this residual risk, the simplest reform of assessing the change in rounding constraint coefficients is being ignored for something more complicated.

There should be an investigation of rounding constraint coefficients in the energy market. As part of the transmission access reform work undertaken by the ESB there has been support for the investigation of the proposal to round constraint coefficients and this cannot be ignored for a more complicated approach. The proposal has in previous consultations been deemed valuable by the ESB. The proposal can be implemented as a stand-alone proposal and the ESB should conduct modelling to assess the potential impacts of rounding constraint coefficients on congestion and assess how much rounding would be required to deliver impactful results in the market.

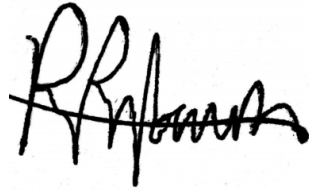
About Snowy Hydro

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 Energy Security Board on the Transmission access reform Consultation Paper. Any questions about this submission should be addressed to panos.priftakis@snowyhydro.com.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'P. Priftakis', with a horizontal line drawn through the middle of the signature.

Panos Priftakis
Head of Wholesale Regulation
Snowy Hydro

