

28 January 2022

Energy Security Board  
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Submitted by email to [info@esb.org.au](mailto:info@esb.org.au)

### **Transmission access reform Project initiation paper**

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Project initiation paper from the Energy Security Board (ESB) on Transmission access reform.

Snowy Hydro does not support the Energy Security Boards (ESB)'s continued push for extreme reforms following opposition from most of the industry. The 'Congestion Management Model (CMM)', is a back-door attempt to introduce Coordination of generation and transmission investment (COGATI).

The ESB's apparent resolve to implement access reform, and its claim that it needs to do so for the benefit of investors in renewable energy is unfounded when the majority of renewable energy developers overwhelmingly resist the reforms. CMM proposes a complicated system of costs and rebates for generators, introducing new layers of risk and undermining the contracts market, which is the key driver of new investment in the NEM. The CMM model would disrupt the contract market, and require existing contracts (including PPAs, which often run for 15-20 years) to be renegotiated and refinanced.

Although the ESB has focused on CMM it is clear that, in the long term, the introduction of locational marginal pricing and financial transmission rights is favored. In substance, this is the same as COGATI which was previously proposed by the AEMC and was widely rejected by most stakeholders. As part of the Post 2025 Market Design process, the ESB provided no modeling or cost benefit analysis to support its options, and appears to believe this should be done only after a model has been agreed upon. The design process should respond to the feedback from the National Cabinet which requires a comprehensive consultation process that does not predetermine the need for CMM but whether it is required.

The ESB in the previous consultations has made observations but does not appear to invite feedback on them, for example the ESB ignored the role of Marginal loss factors (MLF)s in locational decisions. Generation revenue is a function of price and quantity, and MLFs play a significant role in incentivising investment away from congested areas of the network. As it stands, the ESB's non-assessment of MLF's is a convenient means of justifying a reform proposal which has been roundly rejected by stakeholders. It is important that there is a genuine consultation with industry that does consider alternative models to CMM and does not only seek options which appear similar to CMM.

The fundamental issue is a lack of transmission capacity. The current network was built for legacy assets and will not deliver the transition to a decarbonised NEM, implementing the Integrated System Plan (ISP) is the critical step in improving transmission, connecting consumers to cheap renewables, firming and storage, and increasing competition. Running the CMM reform consultation separately to the transmission investment work provides an inherent risk to the NEM and it's investors. The CMM consultation has increasingly become less about the core issue which was about removing congestion from the NEM.

### **ESB Post 2025 Market Design - Reform mis-alignment**

Snowy Hydro has become increasingly concerned by the ESB's lack of assessment regarding feedback from industry. This has led to the majority of investors surveyed by the Clean Energy Investor Group (CEIG) having a negative or mixed view of the Post 2025 reforms, which were

supposed to set Australia up for a smooth transition from reliance on coal, to zero emissions electricity.

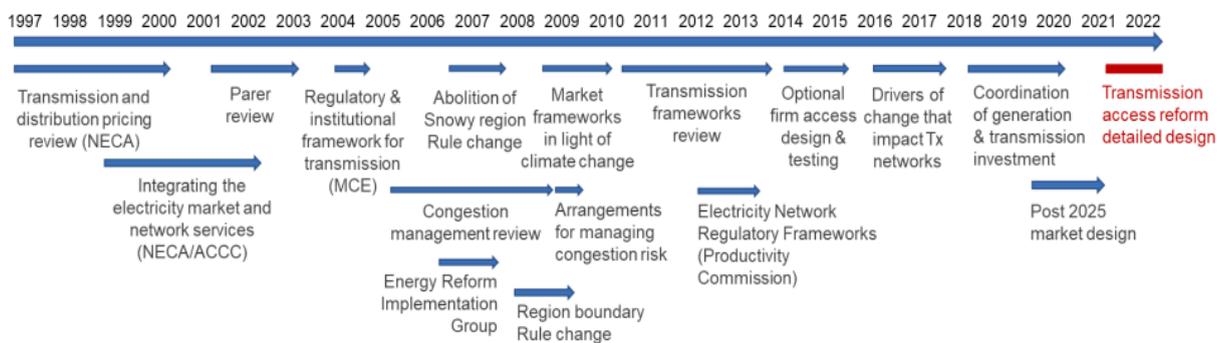
The consultation paper highlights correctly that *“transmission investment is an essential component of the task of delivering the energy transition”* but then notes that these matters are beyond scope. A reform that was initially set out to transform the way that transmission and generation investment decision-making processes interact has now completely removed the transmission investment side of the project. This as a consequence has become a reform less about transmission access and more about an unnecessary reform that will not solve any of the problems that investors have, which is a lack of transmission. It also suggests that, in large part, the proposal reflects the ESB's apparent desire to address so-called disorderly bidding, rather than reforming transmission and investment decisions.

Running separate consultation processes has the consequence of contradicting proposed reforms, something that the ESB was expected to solve. The CMM proposal contradicts the proposed capacity mechanism work that the ESB is also consulting on in a separate process. That is, the CMM will make contracting much more difficult by introducing, effectively, basis risk, whereas the capacity mechanism is designed to mandate an increased level of contracting. Two proposals, each having the opposite effect.

### Timeline of NEM access reform reviews

The ESB in Figure 1 notes that over the past 20 years various bodies have conducted four major reviews on the locational signals and the imbalance between those who benefit from, and those who pay for, the transmission network. While these reviews have highlighted that solving these issues is technically complex they have also demonstrated the significant concerns investors have with such an approach to the market.

Figure 1: Timeline of NEM access reform reviews



In the ESB's project initiation mistakes made in previous reform proposals need to be a lesson learnt and not repeated. Access reform proposals have lacked forward looking cost and benefits quantitative analysis and understanding concerns from investors. Without this it then affects how the current review should be developed, that it should not assume that this case regarding access has yet been made and should not, at this time, lay out an implementation plan. ESB should not waste unnecessary time of industry participants attempting to present similar models which all come at a cost to the market.

### Solutions to assist with congestion and connection in the market

Snowy Hydro has strongly supported an Actionable Integrated System Plan (ISP), which, together with existing locational signals, obviates the need for access reform. The ISP displaces, rather than complements access reform. The renewable energy industry has almost unanimously adopted a

<sup>1</sup><https://esb-post2025-market-design.aemc.gov.au/32572/1637195631-access-reform-project-initiation-document-nov-2021-final.pdf>

similar position. The actionable ISP sets out proposed augmentations of the transmission system to support connection of the capacity that is projected to occur.

Transmission upgrades will accelerate the integration of renewables and large scale storage into the grid, both of which are good both for consumers and Snowy Hydro. The Actionable ISP can clearly address most of the problems transmission access reform is attempting to solve, shown below. This includes removing congestion, solving Marginal Loss Factor (MLF) issues, connecting Renewable Energy Zones (REZ) and improving system strength. Implementing transmission access reform at a time when the ISP will solve the exact same problems will only increase costs for consumers.

If competition for transmission is reducing market access for dispatchable generators during volatility then Snowy Hydro proposes a dual floor price, so that the floor for semi-scheduled (wind & solar) plant would be lifted, while the floor for scheduled generation would remain unchanged. This will improve dispatch certainty for dispatchable generators, by ensuring they are prioritised for dispatch by AEMO during periods of volatility. This will not materially disadvantage renewables given their business model is based on selling energy, not capacity.

The CMM proposal's primary objective to reduce congestion in the NEM, as shown in Figure 2, can only be solved by transmission augmentations. The fundamental issue is a lack of transmission capacity which will be solved by providing more capacity for renewables to connect, not by moving renewables around in a congested system. The CMM proposal is an attempt by the ESB to fix potholes in an old road while investors and the AEMO ISP are working on a new highway for renewable energy.

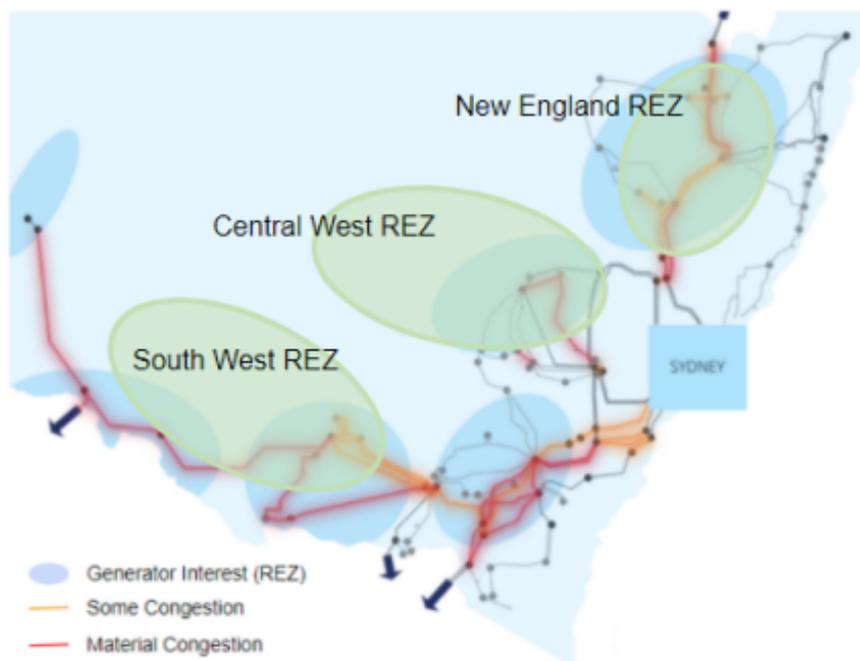
Figure 2: NEM (historical and forecast)



Figure 3 below highlights the problem NSW is facing with congestion; there is already no spare transmission capacity available for renewables. There are currently more than 6,000MW of applications for new renewable generation, but this capacity is unable to be developed until transmission infrastructure is upgraded.



Figure 3: NEM Congestion in Regional Areas (REZs)



The ESB note that “*generation investors respond to market signals and will invest when they consider it most profitable to do so*”, it is therefore important that the ESB listen to the concerns from majority of investors on the need for transmission to solve their concern for congestion but not mistake that concerns with congestion on the need for CMM. An unnecessary reform will expose consumers to higher wholesale costs.

### ESB CMM Objectives

The ESB's objective of the transmission access reform program and its associated CMM design process lists the following challenges:

- Better signals for generators to locate in areas where there is available transmission capacity.
- Better use of the network in operational timeframes
- Establishing a framework that rewards storage and demand side resources for locating where they are needed most and operating in ways that benefit the broader system.
- Measures to give investors confidence that their investments will not be undermined by inefficient subsequent connections.

The objectives however miss a significant part of the NEM which is contracting. The CMM reform would significantly disrupt contracting between generators and retailers/loads and stall investment in new renewable energy. The proposed CMM rebate suffers from the same lack of firmness that Coordination of generation and transmission investment (COGATI) faced. This is expected to affect generator contracting activity, both with respect to any obligations under the RRO's Market Liquidity Obligation (MLO), as well as contracting activity more broadly. This would act to reduce retail competition and increase retail prices for consumers. The ESB therefore at minimum should include the impact on contracting CMM will have as an objective.

Without contracting there is no investor certainty. Market participants would take fixed loss factors with an occasional and model-able risk of outage versus unknown congestion payments every time there's a constraint.

### Description of the CMM - issues with the model



The CMM is designed to improve locational signals for generators however the congestion charges and rebates risks impacting the contract market. CMM, like its predecessor (Coordination of generation and transmission investment ('COGATI')) would increase the cost of selling price insurance contracts, since it will create new risks for generators, increasing prices for consumers. Snowy Hydro therefore disagrees with the ESB that CMM:

- For incumbent generators, receipt of the rebate substantially mitigates the financial impact of the introduction of the congestion charge; and;
- For new generators, the rebate allows them to better manage the risk of congestion.

The concerns that have not been addressed by the CMM proposal include:

- CMM would significantly disrupt contracting between generators and retailers/loads (who for unknown reasons are proposed to continue to face the regional reference price, rather than locational pricing) and stall investment in new renewable energy.
- One of the major concerns with the previously proposed COGATI reform was that Firm Transmission Rights (FTR)'s were not firm, which would adversely affect generators' ability and willingness to sell contracts. The proposed CMM rebate suffers from the same lack of firmness. The provision of rebates will not be sufficient to remove basis risk for sellers of hedging contracts, who will no longer be assured to receive pool revenue necessary to defend hedges. This is expected to affect generator contracting activity, both with respect to any obligations under the RRO's Market Liquidity Obligation (MLO), as well as contracting activity more broadly. This would act to reduce retail competition and increase retail prices for consumers.
- Similar to concerns with FTRs, the non-firm CMM rebate would also be expected to worsen generator revenue certainty, as generators are potentially exposed to price risk and volume risk, affecting how generators participate in both the physical (current and proposed future essential system services markets) and financial contract markets. The CMM discourages investment, as it is a step closer to a full transmission access regime, which increases risks for investors
- Market participants would have more certainty in fixed loss factors with an occasional and model-able risk of outage versus unknown congestion payments every time there's a constraint.

Further to this the ESB should answer the following questions, these include:

- What happens with access rights that are not used because a project doesn't go ahead?
- Is there an electricity market globally where local marginal pricing works. ie not just in the physical market but where there is a dynamic financial market as well?
- The boundary of the REZ could have vastly different outcomes in each region, how does the ESB expect to manage this?

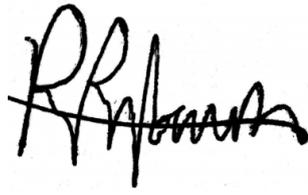
### **About the Snowy Hydro Group**

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. Collectively, they retail gas and electricity in South Australia, Victoria, New South Wales, Queensland and the ACT to over 1 million customers.

Snowy Hydro appreciates the opportunity to respond to the Energy Security Board on the Transmission access reform Project initiation paper. Any questions about this submission should be addressed to [panos.priftakis@snowyhydro.com.au](mailto: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 letters.

Panos Priftakis  
Head of Wholesale Regulation  
Snowy Hydro

