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6 June 2024

Anna Collyer Chair Australian Energy Market Commission Level 15, 60 Castlereagh St Sydney 2000 E: aemc@aemc.gov.au

Consultation feedback on the Transmission Access Reform Consultation Paper

Dear Ms Collyer,

Thank you for the opportunity to provide feedback on the Transmission Access Reform Consultation Paper.

As a leading global specialist in photovoltaic (PV) system technology, SMA is setting the standards today for the decentralized, digital, and renewable energy system of tomorrow. Our product range spans the home rooftop sector, commercial and industrial applications, and large grid-scale applications. Our product range includes grid-connected inverters, inverters for independent, stand-alone systems and storage solutions for battery systems of all sizes. Our PV solar inverter and battery storage products are complemented by components for energy management, system monitoring, and data analysis. SMA has a global inverter capacity of 140 GW in more than 190 countries and more than 9GW inverter capacity in the Australian market. We are headquartered in Germany, with more than 4,300 SMA employees in 20 countries and over 110 employees across Australia.

SMA-Australia supported the initial concept of the Congestion Relief Market (CRM) because it promised improved investment signals for the development of energy storage in conjunction with renewable generation, which would result in better utilization of the existing transmission system. Improving the investment signals for energy storage will be crucial if we are to meet the Australian Government's renewable energy targets. It would be risky to rely excessively upon the construction of new transmission lines as the main mechanism to enable the rollout of the new renewable generation that will be needed.

As initially conceived, the CRM was a voluntary market mechanism to encourage the use of batteries to optimize the existing transmission network. We are concerned and disappointed that the proposed 'hybrid model' is no longer voluntary and now appears to be a mechanism to grandfather transmission access rights to incumbent generators – including coal-fired generators.

The changes proposed to the CRM model have fundamentally changed the concept. We are no longer able to support the proposal.

Since its establishment, the National Electricity Market (NEM) has been based on open access / common carriage arrangements for transmission. There are no physical or financial transmission right within each



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pricing region. In situations where network extensions have been funded by Renewable Energy Zone (REZ) participants, it is not unreasonable to allocate Priority Access to them. However, the shared network was funded originally by taxpayers and more recently by consumers via network tariff arrangements. The shared network should not be auctioned or administratively allocated to generators, and especially not to incumbent, coal-fired generators.

SMA-Australia is opposed to the proposal to grant priority access to incumbent generators, including coalfired power stations. It would damage the business case for new investment, reduce competition and slow down the transformation to a net zero energy system.

The proposed hybrid model would impede progress toward the emissions reduction objective of the National Electricity Objectives (NEO). It is unclear how the 'hybrid model' would contribute to the long-term interests of all energy consumers. The construction of the transmission network is ultimately funded by consumers. It is difficult to understand how the AEMC could justify the transfer of wealth to incumbent generators, in the form of firm transmission access rights.

We strongly urge the AEMC to significantly redesign the proposal so that it delivers on the initial goals of the CRM model without reducing competition and slowing down the transformation to a net zero energy system.

I have enclosed a submission, which is in a format suitable for publication on your web site. SMA-Australia's head of Energy Policy and Regulation, Darren Gladman, will continue liaising with you on our behalf.

Best regards,

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Doris Spielthenner SMA Australia Regional Manager APAC & Managing Director Australia & NZ



SMA-Australia Feedback on the Transmission Access Reform Consultation Paper

SMA-Australia welcomes the opportunity to provide feedback on the Australian Energy Market Commission (AEMC) Transmission Access Reform Consultation Paper.

As a leading global specialist in photovoltaic (PV) system technology, SMA is setting the standards today for the decentralized, digital, and renewable energy system of tomorrow. Our product range spans the home rooftop sector, commercial and industrial applications, and large grid-scale applications. Our PV solar inverter and battery storage products are complemented by components for energy management, system monitoring, and data analysis. SMA has a global inverter capacity of 140 GW in more than 190 countries and more than 9GW inverter capacity in the Australian market. We are headquartered in Germany, with more than 4,300 SMA employees in 20 countries and over 110 employees across Australia.

SMA-Australia supported the initial concept of the Congestion Relief Market (CRM) because it promised improved investment signals for the development of energy storage in conjunction with renewable generation, which would result in better utilization of the existing transmission system. Improving the investment signals for energy storage will be crucial if we are to meet the Australian Government's renewable energy targets. It would be risky to rely excessively upon the construction of new transmission lines as the main mechanism to enable the rollout of the new renewable generation that will be needed.

As initially conceived, the CRM was a voluntary market mechanism to encourage the use of batteries to optimize the existing transmission network. We are concerned and disappointed that the proposed 'hybrid model' is no longer voluntary and now appears to be a mechanism to grandfather transmission access rights to incumbent generators – including coal-fired generators. The changes proposed to the CRM model have fundamentally changed the concept. We are no longer able to support the proposal.

SMA-Australia is opposed to the proposal to grant priority access to incumbent generators, including coal-fired power stations. It would damage the business case for new investment, reduce competition and slow down the transformation to a net zero energy system.

It is unclear how the proposal would contribute to the emissions reduction objective of the National Electricity Objectives (NEO). It is also unclear how the 'hybrid model' would contribute to the long-term interests of all energy consumers.



In situations where network extensions have been funded by RenewabTe' Energy^Zone (REZ) participants, it is not unreasonable to allocate Priority Access to them. However, the shared network was funded originally by taxpayers and more recently by consumers via network tariff arrangements. The shared network should not be auctioned or administratively allocated to generators, and especially not to incumbent, coal-fired generators. It is difficult to understand how the AEMC could justify the transfer of wealth to incumbent generators, in the form of firm transmission access rights.

We strongly urge the AEMC to significantly redesign the proposal so that it delivers on the initial goals of the CRM model without reducing competition and slowing down the transformation to a net zero energy system.

Responses to questions raised in the Consultation Paper

1. Feedback on cost benefit analysis (CBA) conducted in 2023

The proposed hybrid model would have far-reaching impacts. Our preference would be for the AEMC to implement the CRM as originally proposed without the addition of the Priority Access proposal. However, if the AEMC decides to proceed with the hybrid model then a new cost benefit analysis should be undertaken, even if this causes a delay in the decision-making process.

2. Feedback on prototyping

There has been insufficient analysis to understand how the CRM and Priority Access models would work in combination. The proposal is 'half baked'. The AEMC should implement the CRM model first while it undertakes more detailed analysis of the likely impacts of adding the Priority Access model at a later date.

3. Feedback on modelling the hybrid model

We are concerned that the risks with implementing the hybrid model have not been adequately considered and addressed. New projects that have not been granted priority access will be disadvantaged in comparison with incumbent generators or new generators granted priority access. Of most concern is the technology-neutral approach to granting highest priority access to incumbent generators, including coal-fired power stations. Coalfired generators will maximise their advantages under the proposed approach, which would grant them "highest priority for full asset life". The modelling does not adequately



address the likely impact of incumbents using their market power under the arrangements. There is a risk that the hybrid model would advantage coal-fired generation and leave new wind and solar projects stranded on the grid. This would undermine the achievement of the emissions reduction objective of the NEO. The impact of the proposal on non-REZ, financially committed but non-incumbent generators should also be modelled.

The Consultation Paper states that the hybrid model is not a "solar stopper". We are more concerned that it would be a "coal keeper".

We note the observation in the Consultation Paper that each model could be implemented individually and that the AEMC would welcome comments on how stakeholder views would change if only one, rather than both, reforms were to be implemented:

- SMA-Australia supports the CRM,
- SMA-Australia opposes the proposal to grant Priority Access to incumbent generators on the shared network, and
- If the CRM and the Priority Access proposal are rolled together into a single hybrid model, then we oppose the hybrid model.

If the AEMC were to remove the Priority Access proposal and proceed with the CRM, SMA-Australia would again support the CRM.

4. Assessment of priority access allocation models

Since its establishment, the National Electricity Market (NEM) has been based on open access / common carriage arrangements for transmission. There are no physical or financial transmission right within each pricing region.

In situations where network extensions have been funded by Renewable Energy Zone (REZ) participants, it is not unreasonable to allocate Priority Access to them. However, the shared network was funded originally by taxpayers and more recently by consumers via network tariff arrangements. The shared network should not be auctioned or administratively allocated to generators, and especially not to incumbent, coal-fired generators.

The AEMC uses the pejorative term of "cannibalisation" to refer to the displacement of incumbent generators by new investments. It seems that emotive terminology has masked the need to demonstrate that displacement of generation by existing assets is an



undesirable outcome for consumers. We urge the AEMC to adopt neutral terminology (Such as 'overbuild' and 'generation displacement') and to demonstrate the circumstances in which displacement of incumbent generators is not in the long-term interests of all energy consumers. A level of overbuild resulting in curtailment and generation of displacement is efficient.

Displacement of incumbent coal-fired generators by new renewable generation is unequivocally beneficial for consumers and for meeting the emission reduction objectives of the NEO. From a dynamic efficiency perspective, the legacy coal plant is a sunk cost. As such stranding of this sunk cost has no impact on overall market cost and hence dynamic efficiency.

Even the displacement of incumbent renewable generators by newly built renewable generators can be beneficial for consumers and can drive system-wide benefits, such as retrofitting energy storage to incumbent solar generators that had not previously incorporated energy storage into their project.

The Priority Access model would constrain new wind and solar projects because incumbent generators are unconstrained. Modelling published by Prof. Paul Simshauser indicates there would be up to 30 per cent less output from wind and solar generators than might otherwise have been the case.

We are concerned that grandfathering highest priority access to coal-fired generators would delay coal retirement decisions. This would have a detrimental impact on SMA-Australia's business. More importantly, it would impede progress toward Australia's net zero emissions goals and would not be in the long-term interests of all energy consumers.

5. Assessment of CRM implementation approaches

SMA-Australia supports the initial concept of the CRM. It promised improved investment signals for the development of energy storage in conjunction with renewable generation, which would result in better utilization of the existing transmission system.



As initially conceived, the CRM was a voluntary market mechanism to encourage the use of batteries to optimize the existing transmission network. The proposed 'hybrid model' is no longer voluntary. As noted in the Consultation Paper, there could be a perception that "co-optimisation is less voluntary than the current lead model as CRM bids could affect or set the [regional reference price] that all participants face, including participants who do not opt into the CRM".

The implications of the proposed co-optimised CRM are unclear. We recommend the AEMC return to the original proposal for a voluntary CRM.

6. Feedback on impact of the hybrid model on PPAs

SMA-Australia does not have Power Purchase Agreements (PPAs) in the Australian market. We supply inverters to our customers, and it is our customers who have PPAs in the market. We will leave it to our customers to provide detailed comments on the likely impact the hybrid model would have on renegotiation of their PPAs.

7. Feedback on impacts of the hybrid model on financial markets

SMA-Australia does not participate in the financial markets that would be affected by the hybrid model. We provide inverters to our customers. We will leave it to our customers to provide detailed comments on the likely impact the hybrid model would have on financial markets.

8. Feedback on wide-reaching constraints

Under the hybrid model, new developments would be curtailed more often than generators grandfathered priority access. This risk would be very difficult for new generators to manage. This is likely to create a new barrier to investment in new generation and could prolong the operation of incumbent generators, including coal-fired generators. We anticipate there would be significant added costs to consumers to reach the same level of solar and wind generation if the Priority Access proposal proceeds.

9. Feedback on detailed priority access design choices

SMA-Australia does not support the implementation of the Priority Access model.

It is not appropriate to grant priority access rights to incumbent generators, especially coal-fired generators. This would be detrimental to the business model for new



investment. It would reduce competition and would likely slow down the transformation to a net zero energy system.

The construction of the transmission network is ultimately funded by consumers. It is difficult to understand how the AEMC could justify the transfer of wealth to incumbent generators, in the form of firm transmission access rights.

10. Feedback on detailed CRM design choices

SMA-Australia supported the initial concept of the Congestion Relief Market (CRM) because it promised improved investment signals for the development of energy storage in conjunction with renewable generation, which would result in better utilization of the existing transmission system. Improving the investment signals for energy storage will be crucial if we are to meet the Australian Government's renewable energy targets. It would be risky to rely excessively upon the construction of new transmission lines as the main mechanism to enable the rollout of the new renewable generation that will be needed.

As initially conceived, the CRM was a voluntary market mechanism to encourage the use of batteries to optimize the existing transmission network. We are concerned and disappointed that the proposed 'hybrid model' is no longer voluntary and now appears to be a mechanism to grandfather transmission access rights to incumbent generators – including fossil fuel generators.

The changes proposed to the CRM model have fundamentally changed the concept. We are no longer able to support the proposal.

If implemented as proposed in the Consultation Paper, the hybrid model would improve the 'bottom line' of incumbent generators at the expense of reducing investment certainty for investors and developers of new renewable generation.