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25th July 2022

Ms Anna Collyer
Chair
Australian Energy Market Commission
Energy Security Board

Dear Ms Collyer,

Submission on the Capacity Mechanism High Level Design Paper June 2022

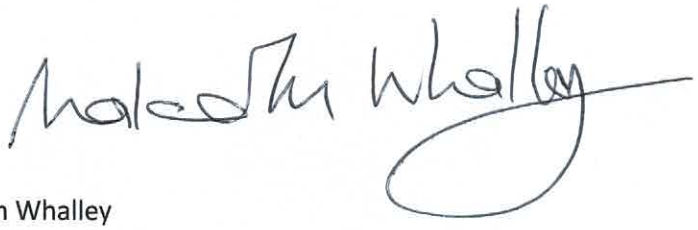
FRV Services Australia welcomes this opportunity to comment on the High Level Capacity Mechanism proposals and has been following the debate around this subject with interest.

FRV has extensive experience in both renewable generation and in battery storage systems both in Australia and throughout the world and we believe it to be essential for a successful outcome to the Capacity Mechanism project that decision making be fully informed.

Please find attached our responses to a selection of specific questions raised in the Paper.

FRV is supportive of the ESB in its work on developing a Capacity Mechanism for the NEM and we look forward to receiving your proposals under the detailed design stage of this project.

Yours sincerely,



Malcolm Whalley

Head of Business Development & Energy Markets.

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Q6 What approaches should be used to de-rate different technologies? Should different approaches apply to different technologies?

By their nature different technologies will be more or less reliable in providing an expected amount of availability at a specified time with utility scale batteries and pumped storage likely being the most reliable technologies for grid connected plant. The de-rating method should recognise both the individual technology and its expected performance during trigger period or pre-defined time period over which system stress is most anticipated.

Q8 Should de-rating factors be determined at a technology class/region level or at a station level?

Where station level factors have materially affected the expected performance of the plant and this is expected to continue they should be recognised when determining the de-rating factor if it is practical to do so. Otherwise technology class and region should be sufficient parameters to apply to the de-rating process. Here recognition should be being given to the emergence of hybrid VRE/BESS plant with the capability of deploying BESS capacity in support of VRE capacity during weather affected periods and also to the fast response time and flexible characteristics of utility scale batteries.

Q15 What are your views on how existing and new capacity should be treated in the auction process?

Whilst all capacity irrespective of its status as new or existing will contribute to system available capacity at any time, we believe that there is a strong case for treating these two categories of generation differently. If the capacity mechanism is to be compatible with Australia's emissions targets it will be necessary for existing thermal capacity to be retired and new VRE and storage capacity to be installed. It may be necessary to distinguish between new and existing capacity in order to meet our decarbonisation goals whilst at the same time maintaining system security and reliability. One way of achieving this would be to provide longer term contract of say 15 years only to new entrant capacity and limit existing capacity to shorter term contracts of 1 year. An alternative approach would be to make longer term contracts available only to VRE and storage plant which would mostly have the same effect.

Q18 Do stakeholders have a preference as to whether the investment support scheme provides guarantees of price only, or of both price and quantity?

Guarantees of both price and quantity would be preferable although it is reasonable for the plant to be reassessed periodically and in light of past performance.

Q20 How should the price settings interact with the energy market price? Over time, when settings are regularly reviewed, should the price settings in the capacity market be jointly determined?

We believe that it would be better were interaction between the capacity mechanism prices and energy prices be minimised. Under the current market arrangements new entrant generators are incentivised by high spot prices at times of tight supply. Were these price signals to be reduced that may affect the viability of new entrants particularly batteries and

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pumped storage. Whilst substitute revenue would be available under the capacity mechanism, not all new entrants will be equally able to access that revenue. Furthermore, the Capacity Mechanism is itself a new initiative and until it has come into effect and then proved itself over some period of time uncertainty will persist as to what effect it will have on energy market prices with this acting to make investment decisions more uncertain for some new entrants.

[Q3] Do you support the ESB's proposed performance model for consultation? If not, what other proposed model would be better and why?

FRV supports the ESB's preferred model (option 3) as being preferable to the other available options and subject to the response to Q27 below.

Q27 Do you support the ESB considering capacity payments based on availability throughout the year and during periods of system stress?

An alternative approach here would be to make monthly payments to participating generators based on 100% of the contracted capacity and with penalties in the form of foregone payments where availability was below that expected for reasons within of the control of the generator. This would have the advantage of being easy to implement and also incentivising the generator to be responsible for those circumstances that are under its control.

Q28 If you support payments based on two factors, what is the preferred distribution of the first and second payment? Should more or less weight be given to responding to events?

Were a two payment method be adopted weighting should be given to availability during periods of lack of reserve and possibly also to periods where reserve margin is expected to be low such as the evening peak period.

Q35 Should de-rating be based on pre-defined time periods or a forecast of when the anticipated trigger periods are expected to occur?

A de-rating method based on anticipated trigger periods would be preferable although we acknowledge the practical benefits of a time period based method raised in the ESB's paper. If practical the de-rating method should be based on anticipated availability during either forecast trigger periods or pre-defined time periods. Historical measures may be unreliable guides to future availability due to factors out of the control and foreknowledge of the of the asset owner such as weather.

Q37 Do you think that the MPC should be reduced if a capacity mechanism is introduced, and if so by how much? What key issues should the ESB take into account when considering this issue?

As covered in the response to Q20 the interaction between energy and capacity prices should be minimised and for the reasons given previously.

Note: Recognition of transmission constraints on delivered availability.
We acknowledge the references in the Paper to intra-regional transmission constraints being addressed as part of the detailed design stage of the project. We would like to stress the importance

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of addressing the impact of both intra and inter regional transmission constraints as these are both significant risk exposures for generators with capacity obligations.

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