27 July 2022

Anna Collyer

Chair
Energy Security Board

By email: info@esb.org.au

Dear Ms Collyer

BlueScope Response to Capacity Mechanism Project High-Level Design Paper

BlueScope welcomes the opportunity to provide a submission to the ESB concerning the Capacity mechanism high-level design paper (**Paper**).

BlueScope is Australia's largest steel manufacturer and the only flat steel producer. We employ 6,700 people in Australian regions and cities to supply our nationwide customers in the building and construction, manufacturing, transport, and agriculture sectors. BlueScope also exports steel products and is a global leader in premium coated and painted steel products, manufacturing in 18 countries.

As a large user of electricity and natural gas across our Australian manufacturing footprint, BlueScope has a keen interest in ensuring that the energy market operates in a manner that promotes affordability, reliability and sustainability of supply. BlueScope recognises that the energy market is facing unprecedented pressure and that urgent action is required to restore more stable operations and to transition to a new energy model to meet Australia's climate commitments.

BlueScope is committed to meaningful climate action. We have established a dedicated climate change and sustainability function led by our Chief Executive Climate Change and Sustainability, which is developing clear decarbonisation pathways across our global footprint. Last year we released our first dedicated Climate Action Report, which sets out our steelmaking and mid-stream 2030 emissions reduction targets, and our goal of Net Zero by 2050. We are driving decarbonisation projects to reduce our Scope 1 and 2 emissions, and with the help of a $56m Federal Government MMI grant we are exploring the means to create an Advanced Steel Manufacturing Precinct, unlocking more capacity and capability to manufacture components for renewable energy infrastructure at our Port Kembla Steelworks.

As indicated in the AEMO 2022 ISP, the NEM is at the beginning of a true energy transformation, and BlueScope is supportive of Federal and State Government policies and initiatives to deliver increasing levels of firm renewable capacity into the grid in a coordinated manner. We recognise the complexity of the task at hand, with the energy transition coinciding with significant market uncertainty and global unrest. Recent events such as AEMO's suspension of the NEM in June 2022 serve as an important reminder of the importance of a stable, resilient and reliable energy grid.

As the market readies itself to take the next steps in energy transformation, it is important that the commitment remains to affordable and reliable energy. The proposed capacity mechanism provides an opportunity to address these imperatives so that Australia makes an orderly transition to new firm renewable capacity in a way that retains affordable energy supply as our competitive edge. In our view – and given the delay in Snowy 2.0 and the need for further technical advances in other storage technologies

- an orderly transition will require the retention of coal and gas generation assets until such time as equivalent firm baseload capacity is online. We make further comments on this point in this submission.

BlueScope has had the benefit of reviewing the submission from the Energy Users' Association of Australia (EUAA) and we are in support of the positions they have set out on behalf of large energy users. In addition, we wish to comment on the following:

1. **Affordability and reliability must be the dominant features of any capacity market design in recognition of the role of low-cost, reliable energy to support Australian manufacturing.**

   The Paper is sufficiently detailed as to the intended design supporting reliable electricity supply. There is little detail, however, on how affordability – a focus area in the Energy Ministers' principles – will be addressed as a key design feature of a capacity market. For Australian manufacturers such as BlueScope, electricity is both a material operational cost and a key enabler for future technological developments such as hydrogen-enabled green steel production. Although steel produced from hydrogen is some way from being technically and commercially ready, we must prepare ourselves for what a hydrogen-based future looks like. Regardless of the technology, production of green ironmaking to support 'green steel' from breakthrough low emissions technology pathways will need at least 1.5GW firm renewable energy, which equates to ~5GW renewable electricity capacity[1].

   In order to leverage this and other opportunities as technology evolves it is essential that we have access to low-cost electricity supply, and any future design of the energy market must strike the right balance between affordability, reliability and sustainability. The capacity market must be designed through a lens of affordability and reliability, prioritising projects that deliver the best economic outcomes for consumers. BlueScope contends that a well-designed capacity mechanism should be able to maintain a focus on cost and reliability without compromising increasingly sustainable supply, and we strongly encourage the ESB to elevate cost as a more prominent feature of any capacity market.

2. **Existing capacity must be included to provide affordable and reliable supply as the grid transitions to a low carbon future.**

   BlueScope agrees with the ESB that technology neutrality is the preferred approach, with a whole-of-market mechanism allowing the full spectrum of options to remain available in pursuit of lowest cost electricity supply. Limiting a capacity market to new capacity may have the effect of pausing the development of new capacity in the immediate term as investors await further clarity as to the qualification of their projects in a bid to avoid being classified as 'existing'. Importantly, the exclusion of existing capacity risks accelerating the closure of coal-fired generation that performs the essential tasks of providing system security and baseload dispatchability before sufficient equivalent replacement capacity enters the market. The announced delay of Snowy 2.0 is of particular relevance given this project has been identified by AEMO in the 2022 ISP as the provider of deep storage to manage seasonal variation especially out to 2030. It is important that as generation projects like Snowy 2.0 and transmission project such as Marinus Link find it increasingly difficult to be operational within announced timelines that a pragmatic and flexible approach to the use of existing capacity is adopted to maintain a reliable, resilient energy grid.

   BlueScope recognises that a delicate balance must be struck to retain certain types of existing capacity, particularly thermal generation, in a capacity market and to continue the pursuit of emissions reduction activities. We support a considered approach to the mechanism that sees existing thermal generation capacity retained with the clear intent of supporting a transition to enhanced grid decarbonisation in an economically prudent manner. With the inclusion of suitable conditions, limitations and qualifications on participation, it should be possible for thermal generation capacity to participate in a capacity market as a means of securing affordable and reliable energy until new

[1] Based on 100% utilisation rate and 30% renewable energy capacity factor

equivalent firm renewable capacity – supported by a range of federal and state policies and initiatives – becomes available.

3. **The capacity market must prioritise the introduction of longer, deeper storage to secure reliable energy supply.**

   The current mix of electricity generation – including coal and gas generation assets – provides deep storage capacity, which is essential to ensure electricity supply is reliable and secure when significant weather events restrict the amount of renewable energy available to the system. BlueScope's major facilities in NSW and VIC operate on a 24/7 basis and have a flat, stable demand profile that is well suited to similarly stable baseload generation. Our demand for energy is consistent, and any disruption to supply due to the unavailability of variable renewable energy (**VRE**) would result in significant economic and operational impacts. Deep storage must be remain available in the most economic form possible and in sufficient quantities to ensure reliability and security are not compromised as thermal assets exit the system. As the EUAA points out, the AEMO 2022 ISP is calling for significant additional gas generation to enter the system to support the rollout of VRE. A capacity market must be developed in a manner that prioritises medium and deep storage (as those terms are defined in the AEMO 2022 ISP) – whether gas or another form of storage – so that large users such as BlueScope can be assured of affordable and reliable electricity supply at all times.

4. **Only projects demonstrating an absolute need for a capacity payment should be eligible to participate, and only up to a threshold to avoid 'double dipping'.**

   BlueScope is of the firm view that the energy market should remain the dominant source of revenue generation for any project, existing or new, and that a capacity market should play a limited role as a form of supplement to ensure dispatchability where the energy market no longer can for a particular asset. The ESB must exercise care to ensure that the capacity market serves as a 'top-up' and is not relied upon by participants as a substitute to their base energy market revenue stream. There is an emergence of significant Federal and State policies that are providing momentum in addressing emissions reduction activities. Initiatives such as Rewiring the Nation and the NSW Electricity Strategy, along with funding opportunities from bodies such as ARENA, are already giving investors the necessary incentive to invest, as seen by the recent ARENA funding Large Scale Battery Storage Round where 54 EOIs were received to produce 12 short-listed projects. These projects are already prepared to proceed and so they should not, by way of example, be eligible for any future capacity payment. We encourage the ESB to adopt measures similar to the newness and additionality requirements used to assess the eligibility of Emissions Reduction Fund projects. This would limit projects participating where sufficient revenues can otherwise be generated, and minimise the risk of 'double dipping' in other Federal or State-based schemes.

5. **A capacity mechanism must recognise the role of large users in underwriting capacity through long-term commitments.**

   BlueScope has a relatively flat, stable demand profile and we have contracted in a manner that underpins physical capacity remaining in the market. Our long-term arrangements have contributed to our suppliers being able to provide stable, baseload dispatchability into the market and to that end we have been long-term contributors to ongoing capacity. As we look to the future, we will seek out arrangements that encourage and reward long-term commitments and believe that this should be acknowledged in the design of a capacity market.

   To that end, of the performance obligations considered by the ESB, BlueScope supports Option 3 as the preferred option for more detailed design and believes that large users should be exempt – or at the least benefit from reduced liability – in respect of the initial payment where they are parties to long-term agreements. This would incentivise large users to enter into long-term commitments, which enhance system security and reliability, and it would avoid the double-hit to large users in seeing capacity costs incurred as a function of both the energy and capacity markets. We consider the reduced liability model set out by the EUAA as having sufficient merit to warrant further investigation by the ESB.

6. **Capacity obligations must be strictly complied with to ensure the integrity of the capacity market.**

   A capacity market should be designed with strict compliance in mind, with capacity providers held to account if they fail to meet their obligations. This ensures the orderly operation of the market and provides investment certainty for users looking to support the success of a capacity market with long-term commitments. We are strongly in favour of a mechanism that incentivises performance where the costs of non-compliance exceeds the cost of compliance. This would ensure fidelity and rigour in the process, driving robust compliance processes and careful consideration of the nature of the commitments before they are made.

We appreciate the opportunity to provide our views on this important market development. If you have any questions please do not hesitate to contact me on 0447 291 006 or at matthew.mckenzie@bluescopesteel.com.

Yours sincerely

Matt McKenzie
Manager Energy Sourcing & Utilisation
BlueScope Steel