



## Australian Energy Market Operator

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### **Star of the South submission to the Regulatory Investment Test for Transmission, Project Specification Consultation Report: Victoria to NSW Interconnector West (VNI West)**

#### **About us**

The Star of the South is Australia's first proposed offshore wind project. The project is located off the south coast of Gippsland in Victoria and has the potential to meet 18% of the state's electricity needs. We are a private company comprised of Australian founders and Copenhagen Infrastructure Partners (CIP), who are a global leader in offshore wind. CIP, based in Copenhagen has backing from over 40 pension funds and institutional investors and over EUR 7.8 billion under management. The CIP offshore wind portfolio currently consists of nine operational, under construction and development projects in US, Canada, Germany, UK, and Taiwan. CIP has 12 onshore wind and eight solar projects globally also under construction or development.

We have made significant progress on our project since receiving a Commonwealth Government licence in March 2019 to test the conditions out at sea. The development team in Melbourne is currently 35 strong and expected to grow to 50 within the next six months. In November 2019 we deployed floating LiDARs to monitor wind and wave conditions. We have commenced formal planning and environmental assessment processes to ensure the project can be ready in time for forecast coal exits.

#### **Victoria to NSW Interconnector West - PSCR**

We would like to acknowledge the Australian Energy Market Operator (AEMO) for its continued leadership and strategic guidance regarding electricity generation and security in Australia. Forward planning is critical to ensure a system that is resilient to changing market conditions, varying government policy agendas and the introduction of new technologies.

While we recognise the VNI West PSCR is primarily focussed on the increasing interconnector transmission capacity needs of the NEM, we encourage AEMO to consider the role of offshore wind (and specifically the Star of the South) as a credible option which impacts on the timing of the need for VNI West. The Commonwealth Government is progressing with a new *Offshore Clean Energy Bill*, expected to be introduced into the Parliament this year. The release of a Discussion Paper for this new legislation in early 2020 sent a clear signal to the international market that Australia is interested in offshore wind as a generation option into the future.

The Star of the South is the first proposed offshore wind farm in Australia. While there are complexities in introducing offshore wind into a new market, we see strong progress locally as well as global trends that suggest 'first of its type' projects provide confidence to future investment and creation of new industries.

Therefore, at a minimum, we believe there is merit in considering a state of the world where the Star of the South is built and fully commissioned by early 2027 as Australia's first offshore wind farm.

Using the Integrated System Plan scorecard ranking criteria, the Star of the South project represents:

- approximately 2,000MW of new generation projected to be fully commissioned by early 2027
- an "A" rank wind resource due to the consistency and strength of the offshore wind profile



- an “A” rank in terms of resource diversity and demand matching. Our independent third-party modelling shows that during residual peak demand the project has a very high capacity factor and strong inverse correlation to Western Victorian wind projects by virtue of systematic high-pressure climatic conditions that usually prevail in Bass Strait during exceptional hot weather
- a further “A” rank in terms of the spare transmission capacity to connect the project into the existing 500kV Latrobe Valley grid and this is before any Yallourn exit
- a high Marginal Loss Factor (MLF) connection point with an associated “A” ranking in terms of long term MLF robustness.

Our modelling shows the Star of the South has the capacity to almost wholly, and reliably, cover the generation shortfall of a Yallourn exit and it would do so, bereft of any short-term transmission upgrade to VNI West.

Furthermore, the project is located in an area where there is strong system strength which is not subject to multiple development risks – it is a single bulk generation entrant reliant on one permitting, connection, offtake and financial close process. To replicate the project’s generation and contribution to security would require around 20 smaller onshore projects – resulting in significant execution and timing risk.

On this basis the Star of the South project should be viewed and further analysed as both a credible option and a hedge against any delay in Snowy 2.0 and/or VNI-West or acceleration of earlier than expected coal exits.

Thank you for the opportunity to make a submission into this PSCR process. We would be pleased to share further details of our analysis with AEMO to inform future strategic planning and guidance.