Friday, 28 August 2026

Transgrid

180 Thomas Street

Haymarket NSW 2000

Submitted electronically: srs@transgrid.com.au

CEC submission to Transgrid's project assessment development report (PADR) for the Sydney Ring South

The Clean Energy Council (CEC) is the peak body for the clean energy industry in Australia, representing nearly 1,000 leading businesses across renewable energy, energy storage, and renewable hydrogen. We are committed to accelerating Australia's transition to a clean energy future as rapidly as possible while maintaining a secure and reliable electricity supply for customers.

The CEC welcomes this opportunity to provide feedback on Transgrid's Sydney Ring South Project Assessment Draft Report (PADR). The CEC strongly supports Option 6 as the preferred option and urges Transgrid to pursue every opportunity to accelerate delivery of the full 500 kV augmentation from Bannaby in the Southern Tablelands to South Creek in South Western Sydney as soon as is practicable.

Support for preferred option 6

The CEC supports the findings in the PADR that option 6 represents the preferred transmission solution for the Sydney Ring South. That is, the construction of a new 500 kV double-circuit line from Bannaby to South Creek by 2033-34 (Stage 2), combined with the installation of series reactors as power flow controllers on the 330 kV network and a new South Creek 500/330 kV substation by 2030-31 (Stage 1). We consider the principal strategic benefit of the Sydney Ring South arises from the 500 kV transmission upgrade delivering an additional 3,600 MW of transfer capability into Sydney, and supporting future growth in renewable generation, storage and demand in southern NSW.

The CEC notes the optimal development path in the 2026 integrated system plan (ISP) has been updated to be consistent with option 6 in the PADR, and we are supportive of the 500 kV asset upgrades being brought forward from 2037-38 to the earliest feasible in-service date of 2033-34.[1] We agree this will provide near-term congestion relief while establishing the longer-term transmission network backbone into the Sydney, Newcastle and Wollongong region, which accounts for ~75% of NSW demand.

[1] AEMO | 2026 Integrated System Plan - final report, June 2026, p.22.

Phone: +61 3 9929 4100
Fax: +61 3 9929 4101
info@cleanenergycouncil.org.au

Level 20, 180 Lonsdale Street, Melbourne, VIC 3000, Australia

cleanenergycouncil.org.au

ABN: 84 127 102 443

Congestion between southern NSW and Sydney is already binding – and worsening.

The existing three single-circuit 330 kV lines into Sydney from the south were built for the original Snowy scheme in the 1960's and are no longer fit for purpose. As thermal generation including Bayswater, Eraring, and Vales Point approach retirement, coupled with increasing demand from electrification, electric vehicles and data centres, congestion is already curtailing renewable output, weakening investment signals and increasing wholesale electricity price volatility.

Without faster delivery of the necessary transmission network infrastructure, constraints are likely to worsen, renewable projects will be delayed or stranded, and consumers will face higher costs.

The CEC understands that Project Energy Connect and Humelink are expected to improve connectivity between generation and storage assets in NSW and South Australia. However, flows transported on Humelink, which runs from Wagga Wagga to Bannaby, lack an effective pathway into Sydney. Due to the physics of network flows, this radiates congestion across the network. The PADR therefore also highlights that congestion on the southern corridor has the potential to limit flows not only from the south and south west of NSW, but will impact other parts of the network, such as the Central West Orana renewable energy zone (REZ).

As such, the Sydney Ring South is the missing link which will alleviate this congestion and maximise the benefits of these complementary transmission, generation and storage investments. As such, the Sydney Ring South is not only a reliability investment – it is a critical enabling investment for the efficient integration of the ~14 GW of new NSW grid capacity required by 2033 to replace retiring coal.

Sydney Ring South also helps to unlock the South West REZ and Snowy 2.0

The CEC continues to advocate for the consideration of the necessary transmission network infrastructure to facilitate development of available renewable energy resources in the South West REZ and their broader integration into the Sydney load centre via the Sydney South Ring. The South West REZ (N5 of the ISP) has ~35 GW in the planning pipeline (19.65 GW wind, 10.17 GW storage, and 4.54 GW solar), but only 3.56 GW of access rights have been granted – leaving ~31 GW seeking a pathway to market. The zone offers favourable wind speeds, capacity factors above 40%, flat cleared land, a lower environmental impact and strong social licence – producing a levelised cost of energy up to ~30% lower than Central-West Orana and ~25% lower than New England REZ. [2]

In addition, the Sydney Ring South is important for maximising the value delivered by Snowy 2.0. Where transmission constraints exist, the value of storage resources is reduced because energy cannot be transported to locations where it is most needed. Improved transfer capability into the Sydney load centre will increase the ability of Snowy 2.0 to firm renewables, manage extended periods of low wind and solar production and reduce price volatility.

Conclusion

In summary the CEC:

1. confirms support for option 6 as the preferred option in the PADR, retaining the 2030-31 series reactors and South Creek 500/330 kV substation and the 2033-34 500 kV Bannaby to South Western Sydney line.
2. recommends that Transgrid pursue every opportunity to accelerate delivery of the full 500 kV augmentation, including early works, long-lead procurement, early contractor involvement and coordinated approvals with the NSW Government.
3. continue to advocate for coordination of the Sydney Ring South with the extension of the South West REZ (e.g. Option 6A from the CEC's ENOR submission – new double-circuit 500 kV lines

[2] Clean Energy Council | Submission to AEMO Draft 2025 Electricity Network Options Report, July 2025.

and additional transformer capacity between Dinawan and Bannaby) so the full ~14 GW NSW grid build-out by 2033 can be delivered.

The CEC welcomes further engagement with the Transgrid as it finalises its assessment of the Sydney Ring South culminating in the publication of the project assessment conclusions report (PACR) in mid-2027. Further queries can be directed to James Eastcott at jeastcott@cleanenergycouncil.org.au.

Kind regards

Martin Kennedy

General Manager – Market, Operations and Grid