



9 February 2022

Mr Daniel Westerman

AEMO

By email: isp@aemo.com.au

Dear Mr Westerman,

AEMO Draft 2022 Integrated System Plan (ISP)

Pacific Hydro Australia welcomes the opportunity to comment on the AEMO Draft 2022 ISP.

Founded in 1992, Pacific Hydro Australia is a leading owner, operator, and developer of renewable energy assets. It operates a high quality, diversified portfolio of wind, hydro, and solar assets with an installed capacity of 665 MW; it also has a development pipeline of substantial projects totalling over 1100 MW of potential capacity, as well as over 300 MW of energy storage solutions. It also has a growing electricity and gas retail arm, Tango Energy, with approximately 150,000 customers as of January 2022. With a strong reputation for engaging and collaborating with the communities where it operates, Pacific Hydro has a track record of delivering lasting, sustainable benefits. Its operating assets currently avoid over 1.6 million tonnes of greenhouse gas pollution every year.

At Pacific Hydro, we are committed to accelerating the decarbonisation of Australia's energy system, while maintaining a secure, affordable, and reliable supply of electricity for customers.

The ISP plays a critical role across the energy sector providing a forward-looking 30-year roadmap that seeks to optimise consumer benefits as the market transitions to a lower carbon environment. We commend AEMO's effort and dedication in its development of the 2022 Draft ISP and acknowledge the complexity of the ISP process and the demonstrable improvement made since the release of the 2018 ISP.

The scale of the investment challenge in the NEM is significant, as highlighted by the ISP modelling. Under the Step Change scenario, which is the most likely scenario, AEMO is forecasting a ninefold increase in required VRE capacity which will ramp up from the current 15 GW to 140 GW by 2050, while DER is expected to increase to 70 GW. Furthermore, approximately 45 GW / 620 GWh of dispatchable storage capacity will be required during the same period to firm the VRE. As AEMO highlights, significant investment in the NEM is needed to treble the firming capacity that can respond to a dispatch signal, along with efficient network investment.

Pacific Hydro believes that careful thought needs to be given to address the priority issues facing the NEM. Investor certainty is currently undermined by the number of reforms, reviews and consultations underway that continues to create uncertainty in timeliness of connections along with network capacity and constraints post commercial operation. The draft 2022



Integrated System Plan (ISP) shows that coal retirements are likely to proceed even faster than anticipated. Under the most likely scenario, Step Change, the NEM is likely to see up to 14 GW of coal retire by 2030 and all coal retired by 2040.

It is critical that regulatory frameworks and reforms are assessed in terms of how it will help or hinder the renewable investment needed to deliver this transition. The market needs certainty of time and cost to deploy developments, and certainty of capacity and availability of our assets in operation.

In our view improved transmission capacity is a fundamental issue in the NEM that needs to be prioritised. The ISP already acknowledges the need for 'Actionable Projects', which provide a way forward in terms of areas of need for transmission investment. Turning the focus on transmission investment and projects outlined in the Optimal Development Plan (OPD) and resolving the implementation issues and risks is critical to ensuring the electricity system is secure and reliable. The ISP also usefully sets out the role that funding from governments could play in accelerating projects.

Pacific Hydro notes the collaboration between AEMO, the CEC and industry on the Connection Reform Initiative and the transparency and openness displayed through the AEMO Financial Consultation Committee, of which I am a participant. We support the work underway and encourage AEMO to prioritise these recommendations and continue to work with generators and developers and industry through to implementation with a focus of creating technical, cost and time certainty. Resolving the connections issues is fundamental to progress the investments needed moving forward.

Please feel free to contact Preeti Arora, Executive Manager, Engineering via email parora@pacifichydro.com.au if you wish to discuss this submission or have any questions.

Yours sincerely

Jonathan Spink
Director of Development, Projects and Operations
Pacific Hydro