

Terms of Reference

Electricity Supply and Reliability Check Up

Background

The NSW electricity system is part of a National Electricity Market governed by harmonised state-based laws. These national laws control the operations of the electricity system, including standards for system security and reliability and programs to address supply shortfalls such as the Reliability and Emergency Reserve Trader and Retailer Reliability Obligation.

In 2019, the NSW Government released the NSW Electricity Strategy to augment the national framework with NSW specific policies and programs. This includes enhanced and expanded schemes to support households and businesses reduce peak demand, a more stringent reliability objective called the Energy Security Target, funding to demonstrate emerging technologies and a NSW regulatory framework to support new generation and transmission investment.

In November 2020, the NSW Government released the NSW Electricity Infrastructure Roadmap (the Roadmap) that is legislated under the *Electricity Infrastructure Investment Act 2020*. The Roadmap sets out an investment framework to coordinate the replacement of coal-fired power stations and transition the electricity sector to a clean, affordable, and reliable system, based on best available modelling and forecasts at that time

This Roadmap and Act include mechanisms to deliver:

- 12GW of new renewable generation and 2GW of long-duration storage by 2030
- Long-term Energy Services Agreements for generation, storage and firming
- Five Renewable Energy Zones coordinating generation, storage and network infrastructure, including through new network infrastructure, network access schemes and community benefits
- Priority Transmission Infrastructure Projects in response to forecast breaches of the Energy Security Target.

The outlook for NSW's electricity sector has evolved and changed since November 2020. Key developments include:

- announcements of earlier planned coal plant retirements
- delays to major projects including Snowy Hydro's Kurri Kurri and Snowy 2.0 generators and new transmission projects
- national and global skills and supply chain shortages and issues following the impacts of COVID-19 and international acceleration of decarbonisation ambitions
- ongoing land use conflict and social licence challenges for infrastructure projects
- latest projections indicating NSW requires around 2640MW of firmed generation capacity by 2029-30 to continue to meet security and reliability standards.

The transformation of the electricity sector to meet NSW's growing and changing needs will require continued structural economic adjustment in NSW and across Australia. There is a need to ensure this effort supports the transition of our workforce from coal-related industries. This includes the

Commonwealth's National Net Zero Authority and the NSW Government's commitments to create a Net Zero Commission and four Regional Future Jobs and Investment Authorities.

The Australian Energy Market Operator's (AEMO) ongoing analyses provides clear and regular advice on whether NSW has sufficient projects to ensure electricity reliability and security. Nevertheless, there is an opportunity to assess the effects of recent market and policy developments and how capably the NSW Government's policies, programs and initiatives are responding.

Independent Check Up

The NSW Government will continue to implement the Roadmap and facilitate the transition and decarbonisation of the electricity sector as part of our commitment to achieve Net Zero by 2050. In this context, the Electricity Supply and Reliability Check Up (the Check Up) will:

- review the existing information, resources, known developments and structures rather than commission any new work or analysis
- consider the current overall policy and program approach to delivering a timely and cost-effective electricity sector transition, given the main developments that have occurred since the *Electricity Infrastructure Investment Act 2020* was passed
- comment on any residual risks for NSW (for reliability and price) should the Eraring Power Station close in 2025 and the potential additional controls available to mitigate them
- in undertaking the above, have regard to opportunities for the NSW Government to enhance local community support, workforce readiness and supply chain improvements.

The Check Up will be conducted by the selected independent and supported by the Office of Energy and Climate Change (OECC) and The Cabinet Office.

An Expert Advisory Panel (the Panel) will be utilised to support the Check Up. The Panel will consist of representatives of key stakeholder groups relevant to the electricity sector transition in NSW. Examples of relevant stakeholder groups the Panel members may be drawn from include, but are not limited to, Aboriginal and Torres Strait Islander organisations and communities, customers (small and large), generation developers and investors, civil and electrical contractors, existing generators, networks, regulators and market bodies, peak bodies, researchers and local government. The NSW Government will establish the Panel in consultation with the selected independent. The Panel will be utilised as a review process for the issues, opportunities and recommendations prior to formal submission to the NSW Government.

The Check Up will:

Review the existing information, resources, known developments and structures rather than commission any new work or analysis

- conduct targeted interviews with NSW Government agencies, market bodies and stakeholders
- review the latest reports and data available from NSW Government agencies and market bodies
- be provided with the current governance frameworks for evaluation

Consider the current overall policy and program approach to delivering a timely and cost-effective electricity sector transition, given the main developments that have occurred since the *Electricity Infrastructure Investment Act 2020* was passed.

- have regard to the commitments to establish a Net Zero Commission, the Energy Security Corporation and regional transition authorities to avoid overlap and duplication (current status and planning to be provided)

- consider any changes to simplify and streamline decision-making (including governance arrangements) under the Roadmap
- review the latest information available regarding the anticipated costs, benefits and timeframes of the Roadmap, and provide any relevant advice
- take account of how the Roadmap is contributing to NSW's emissions reduction targets, and if any emerging risks can be identified
- consider whether particular financing, planning and regulatory changes are required to accelerate projects.

Comment on any residual risks for NSW (for reliability and price) should the Eraring Power Station close in 2025 and the controls available to mitigate them.

- look at the existing mechanisms under the Roadmap, and provide comment on whether they are flexible enough to adapt to additional early closures of coal-fired generators and continue to meet growing demand for electricity
- identify any additional initiatives or programs beyond current consumer energy response (CER) programs and national initiatives, required to support the Roadmap
- the need for revised consideration of alternative forms of energy infrastructure than those currently being pursued under the Roadmap, to maintain reliability and security.

In undertaking the above, have regard to opportunities for the NSW Government to enhance local community support, workforce readiness and supply chain improvements.

- consider the effectiveness of current community engagement and the planned community benefits programs (including the Strategic Benefits Payment Scheme) in developing community support for the broad electricity transition
 - advise on whether current and proposed policies and programs for local manufacturing and the minerals sector will sufficiently support the supply chains needed to implement the Roadmap (current and proposed policies and programs will be provided)
 - consider current and proposed policies and programs for the skills and workforce requirements needed to deliver the transition of the electricity sector, and advise on how to effectively leverage complementary Commonwealth programs (current and proposed policies and programs will be provided)
 - identify any principal challenges to Roadmap delivery (such as planning time frames and processes, the availability of transport routes and supply chain constraints) and provide recommendations to address the challenges identified.
- Note: all tenders under the Roadmap are out of scope and will not be affected by Check Up.

Specific Activities

Specific activities will include but not be limited to:

- considering the NSW Electricity Infrastructure Roadmap and the *Electricity Infrastructure Investment Act 2020* and ancillary instruments
- considering the AEMO Electricity Statement of Opportunities (ESOO) and the Energy Security Target Monitor Report (ESTM)
- targeted consultation with National Electricity Market bodies and industry associations representing electricity generators, networks and consumers in NSW
- considering any existing market testing reports produced for the Roadmap and the outcome of the recent tender for Long-Term Service Agreements (LTESAs).

Timeframe

The Check Up will take approximately 8 weeks and a final report is required to be delivered to the Government by 04 August 2023.