

# Infrastructure Investment Objectives Report 2023

Setting a pathway for delivering NSW's energy transition while minimising consumer costs



Significant progress has been made towards delivering electricity infrastructure to support NSW's transition towards reliable and affordable power.

The Infrastructure Investment Objectives Report (**IIO Report**), is prepared every two-years by AEMO Services in its foundational role as the NSW Consumer Trustee. The IIO Report forms an essential element of NSW's Electricity Infrastructure Roadmap (**the Roadmap**) for transitioning the NSW electricity system to one that is clean, reliable, and affordable.

The IIO Report sets out a development pathway for the next twenty years, and a tender plan for the next decade, identifying the timing and scale for renewable energy generation and storage investment – while providing flexibility to ensure we continue to prioritise the financial interest of NSW electricity customers.

The 2023 IIO Report highlights the significant progress in achieving the Infrastructure Investment Objectives but also the need for more investment in new generation, storage and network infrastructure at or near record levels.

## Infrastructure Investment Objectives



The 2023 IIO Report shows **over 46% of the minimum objective has been achieved** for generation (15,600 GWh/ 5,790 MW added since November 2019), tracking well towards 2030. After multiple successful tenders, the delivery of long-duration storage is also aligned with the planned trajectory of construction towards the end of the decade to minimise costs to consumers, with almost 600 MW secured to date.

## 20-Year Development Pathway



The Development Pathway sets out AEMO Services view for achieving the Infrastructure Investment Objectives in the long-term financial interest of NSW electricity customers. It shows:

### Consistent renewable generation construction is required

The IIO Report shows a need for generation infrastructure investment in NSW across a range of technologies at or near record levels to 2030 and beyond to meet the infrastructure investment objectives.

### Substantial investment in long-duration storage is required

The build trajectory requires balancing projects' cost to consumers with their ability to deliver to the 2030 minimum objective.

### Firming infrastructure will help ensure reliability

Over 1 GW of firming infrastructure supported through a successful tender will help meet reliability needs as the power system evolves.

## 10-Year Tender Plan



The 10-Year Plan sets out the schedule of competitive tenders for delivering the Development Pathway. The 10-Year Plan shows consistently sized tenders for generation and long-duration storage to meet 2030 objectives.

**Generation:** opportunities for projects every 6 months.

**Long-duration storage:** annual tenders up to 2028 until the 2 GW and 16 GWh objective is met.

**Firming:** tender recently completed, directed by the Minister.

## Key considerations



In preparing the Development Pathway for the 2023 IIO Report, AEMO Services has considered how the pathway and corresponding tender plan might mitigate against a range of future risks, ranging from supply chain constraints to lulls in wind and solar resources.

AEMO Services modelled two scenarios to compare how outcomes and build trajectories may change under circumstances including delays to major infrastructure. Analysis in the 2023 IIO Report shows the importance of the timely delivery of critical infrastructure projects to improve the affordability, reliability and sustainability of electricity supply.

Decisions in tenders will be based on both the planning presented in the IIO Report along with information received in tenders. Given the emerging risks in NSW, AEMO Services expects to err on the side of over-investment rather than under-investment to protect the long-term financial interest of NSW electricity customers.

## Defining features



### Provides stakeholders with certainty

The 20-year Development Pathway provides certainty to industry, consumers, and the community, on required levels of investment to transition the NSW electricity system to one that is cheap, clean and reliable.



### Promotes real outcomes

AEMO Services conducts tenders on the basis of the IIO Report to support the construction of infrastructure to deliver outcomes for consumers. The IIO Report is a call for investors to come forward with projects to deliver the Development Pathway.



### Focuses on the long-term interests of consumers

AEMO Services seeks to deliver the Development Pathway and 10-Year Plan in a manner that optimises energy system needs whilst safeguarding the future financial interests of NSW electricity customers.

