

OPENING THE GRID TO CHEAPER RENEWABLES

Transmission and access

Large-scale renewables are coming online fast, and transmission networks are struggling to catch up. Our richest wind and solar energy resources are spread far and wide across often remote locations, leading to connection issues, delays and congestion on the grid. We need to put our generation and transmission together in ways that minimise costs so we can continue to get energy to where people need it.

We report back to energy ministers in mid-2021 with final recommendations for a redesigned electricity market.

Have your say: [▶](#)

PROPOSAL FOR REFORM PATHWAY

IMMEDIATE

New transmission investment

IMPACT

Large-scale renewables are widespread across windy/sunny locations. Building transmission in strategic locations as recommended by AEMO's Integrated Systems Plan is important to get generators on the grid. The AEMC will review the adequacy of frameworks for timely and efficient delivery of big transmission projects.

Actionable Integrated System Plan rules for transmission

IMPACT

Have introduced whole of system planning framework which provides information on generation and transmission options required to meet system needs over 20 years.

System strength investigation

IMPACT

Our REZ framework will integrate AEMC recommendations on a network planning standard for higher levels of system strength and new technical standards for generator grid access.

New rules on dedicated connections assets

IMPACT

New rules are being developed to encourage transmission investment by allowing generators to fund shared assets.

Interim Renewable Energy Zone (REZ) framework for confident long-term investments

IMPACT

We are working with state governments on implementation roadmaps for priority REZs which provide access solutions that apply to specific locations. A separate paper on aspects of this work will be submitted to energy ministers soon.

Enhanced congestion information

IMPACT

We want to hear your views on the usefulness of longer-term forecasts including a two year or 10-20 year congestion forecasting framework.

INITIAL

Medium term access reform options

IMPACT

Will be necessary before a long-term shift to locational marginal pricing and financial transmission rights. Medium term options include facilitating establishment of priority renewable energy zones (REZs) with a consistent framework to promote investment, and allow generators to fund shared assets.

NEXT

New system of locational marginal pricing

IMPACT

Pays generators for the actual value of supplying electricity from where they are physically located. This turns the currently blunt pricing instrument into a much more precise one that would see wholesale prices drop when there is congestion and return to the value of a regional reference price when congestion is alleviated.

New risk management tool - financial transmission rights

IMPACT

Allows generators to hedge for drops in revenue when local prices are lower. Helps lower the costs of capital, puts more certainty around earning levels and supports more efficient generator investment decisions.

Access gap

Getting more renewable energy to market as decarbonisation gathers speed

New wind & solar projects current at Jan 2021

ISP new REZ hosting capacity to 2029-2030

0 5000 10000 15000 20000 25000 30000 35000 40000 MW



This reform is key to help drive consumer costs down. Congestion is emerging across the transmission network preventing the cheapest, greenest combination of energy reaching the market. We want to pay generators the actual value of supplying electricity from the location they're in. This would give new, mainly renewable generators, financial incentives to locate and dispatch in the most efficient parts of the grid – and help more green power get to consumers.