Transmission and access reform pathway

The rapidly changing mix of generation in the National Electricity Market (NEM) has implications for electricity networks – the networks that transport electricity from producers to users.

While the network was built to bring electricity from large generators to major cities and industry, new renewables are much more spread out.

There is a need to better coordinate new generation and network build to make sure the system overall is built and used efficiently, and to minimise costs to energy users.

What are the Renewable Energy Zone Principles?

- Renewable Energy Zones (REZs) are a way to coordinate building renewable generation and storage, with matching transmission capacity. This will allow the NEM to take advantage of our renewable energy potential at the lowest cost.
- The Principles will support development of REZs in a way that is more consistent and predictable. The principles cover:
    - Planning for REZs;
    - Generators connecting to a REZ;
    - Funding and economic regulations for REZs; and
    - REZ specific access regime.
- The adoption of these Principles builds on the REZ Planning Rules that came into force earlier in 2021.

What is the Congestion Management Model and why is it needed?

- The Australian Energy Market Operator (AEMO) and network operators are expecting congestion to get worse across the entire network, driven by increases in new generation.
    - Congestion happens when the network does not have enough capacity to transport all the electricity produced in one area to the customers that need it.
    - The ESB has modelled the impact of congestion on the NEM and found that this could mean only one third of additional generation capacity actually being accessible by customers.
- The current system for managing networks does not provide good signals for where generators should locate – leading to increasing congestion. This costs consumers either through having to use electricity from more expensive generators or through building greater network capacity.
- The proposed Congestion Management Model (CMM) aims to help generators take into account the network when they decide where to build, to drive more efficient investment, dispatch and use of the network.
- The ESB proposed a CMM with REZ adaptation (CMM (REZ)) involving both charges and rebates for generators.

    - All significant generators would face a congestion charge, reflecting the generator's impact on congestion.
    - Eligible generators, such as those in REZs, would receive a rebate, funded from the revenue received from the congestion management charges.

- National Cabinet has asked the ESB to do further detailed design work on their proposal. This will include comprehensive consultation with all relevant stakeholders and interested parties, the outcomes of which will be used to help achieve the optimal design of the final model.