Scoping NSW’s Central-West Orana as a Renewable Energy Zone

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today announced $5 million in funding to TransGrid to conduct a detailed feasibility study to develop the proposed Central-West Orana Renewable Energy Zone (REZ) in New South Wales (NSW).

The $16.2 million study will assess the technical and commercial options for the development of new high voltage transmission lines to enable Australia’s first coordinated REZ and demonstrate a pathway for future REZs across the National Electricity Market.

The Central-West Orana REZ will unlock more than 3,000 MW of new electricity generation by the mid-2020s, enough to power around 1.3 million homes and will represent at least $4.5 billion in private investment. Construction is due to begin at the end of 2022 and the project is expected to provide 450 regional jobs.

The NSW Government has also already committed $9 million to the project and today announced a further $31.2 million in funding for the pilot, including the establishment of a body to oversee the development of the new zone.

REZs will play an important role in removing barriers to investment in new renewable generation over the coming decades. Released in late 2019, the NSW Electricity Strategy sets out a commitment to deliver Australia’s first coordinated REZ in the NSW Central-West Orana region.

The Central-West Orana region has been chosen for the pilot due to the existing investment and investor interest in the area, relatively low build costs and strong mix of solar and wind resources. The REZ is also expected to deliver new electricity to fill the anticipated gap from retirement of ageing power stations in NSW.

The Australian Energy Market Operator’s (AEMO) Integrated System Plan (ISP) contemplates the development of REZs and a test case is expected to be highly informative for energy network businesses and regulatory bodies to ensure the regulatory framework can promote efficient investment outcomes.

ARENA’s funding will support a detailed scoping study that will deliver a business case of the Central-West Orana REZ that will include a commercial model and cover viability considerations, local community and consumer considerations and technical considerations. The study will investigate all aspects of delivering a REZ and provide a template for a national approach.

ARENA CEO Darren Miller said: “The Australian energy system is transitioning from dispatchable thermal generation to largely variable renewable energy generation. New transmission will be required to connect regions with strong renewable resources to load centres and to reduce network congestion.”

“This study is expected to provide a pathway to achieve Australia’s first true Renewable Energy Zone and provide a blueprint for how others can be created in the future, helping to unlock investment in renewable energy projects, secure new regional jobs and cheaper, emission free energy.”

Transgrid CEO Paul Italiano said: “We are pleased to be working closely with ARENA and the NSW Government to develop the first coordinated renewable energy zone, where new generation will be co-located with new transmission infrastructure in the state’s Central-West Orana region.

“Investment in the new infrastructure will enable renewable energy providers to connect to the grid and enable more affordable, reliable and clean energy for New South Wales customers,” he said.

NSW Energy Minister Matt Kean said: “With this funding locked in, we can bring the Central-West Orana REZ from a vision to a reality.”

“The Energy Corporation of NSW will oversee the development of the REZ, and this new funding will enable it to coordinate the technical design and planning processes, lead community engagement and oversee the local benefit sharing process,” Minister Kean said.