

9 April 2018

Ashwin.raj@treasury.wa.gov.au

Dear Mr Raj

**RE: Constrained Access Market Reform**

Thank you for the opportunity to make this submission in relation to the *Improving access to the Western Power network - Implementing a constrained network access regime* consultation paper.

Carnegie Clean Energy Limited (formerly Carnegie Wave Energy) is an Australian, ASX-listed (ASX: CCE) developer of utility scale solar, battery, wave and hybrid energy projects. Carnegie is the only company in the world to offer a combination of wave, solar, battery energy storage systems (BESS) and desalination via microgrids.

In addition to its first-of-class off grid hybrid and on-grid battery energy storage projects, Carnegie recently commenced construction of a 10MW solar farm in Northam, Western Australia, and has secured other sites throughout the South-West Interconnected System suitable for PV farms and subsequent BESS augmentation.

Carnegie's experience in accessing the Western Power network mirrors that of many other renewable energy developers in that it is often not possible to connect to the network at a commercially suitable cost and within a reasonable timeframe due to the existing unconstrained network regime.

As noted in the Consultation Paper, the unconstrained network regime results in a significant inefficiency that does not maximise the use of available capacity for energy dispatch. Carnegie is therefore broadly supportive of the State Government move towards a constrained access regime, which will contribute to achieving efficient outcomes in the market.

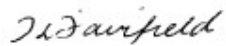
With respect to the consultation paper and associated modelling, Carnegie considers that BESS should be included as potential new entrant in the future capacity mix. While we appreciate that the current Market Rules do not anticipate BESS, utility-scale installations are likely to increase rapidly as costs decline. Solutions that BESS can provide to the energy market include peak shaving and shifting, arbitrage, Load Following Ancillary Service and voltage, frequency and harmonics support, Spinning Reserve and synthetic inertia.

As part of the associated package of reforms, suitable markets to incentivise those battery services that currently don't exist (e.g. Spinning Reserve and inertia) are required.

Carnegie is supportive of the proposed restrictions on entities keeping capacity when facilities are retired and considers that connections and capacity should be relinquished at that time.

We look forward to maintaining regular communications with the Public Utilities Office during the reform process.

Yours sincerely



Tristy Fairfield

**New Projects and Stakeholder Engagement**