

18 July 2019

Mr John Pierce AO
Chair
AEMC
PO Box A2449
Sydney South NSW 1235

Re: Transmission Loss Factors Rule Change Proposal (ERC0251): Consultation Paper

Dear Mr. Pierce,

Thank you for the opportunity to make a submission to the above rule change.

Canadian Solar is the 3rd largest manufacturer of PV modules in the world and an active developer of large-scale solar farms having successfully completed 4,600MW of solar farms worldwide. In Australia, Canadian Solar has developed the Normanton, Longreach and Oakey Stage 1 solar farms which are currently operational and the Oakey Stage 2 Solar Farm which is nearing completion, and currently has over 1,000MW's under active development.

Canadian Solar welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC's) consultation paper in relation to the transmission loss factors (MLF) rule change proposal. This consultation, in conjunction with other active consultations, are critical as it pertains to reducing MLF volatility for both existing and new generators in addition to investors. We consider amendments to the MLF framework would achieve the National Electricity Objective (NEO) by ensuring this framework remains fit for purpose for the least cost dispatch of generation within the National Electricity Market, thus enabling the achievement of maximising benefits to end-consumers by means of underpinning the development of firmed renewables, which are already the lowest cost form of new-build technology.

Canadian Solar considers that any holistic design changes to MLF framework are best captured under the *Coordination of Generation and Transmission Investment Implementation* (COGATI) review (AEMC Reference APR0073) by efficiently embedding Congestion and Marginal Losses into a Zonal (i.e., multiple zones within a NEM Region) clearing price in line with the experience and lessons learnt in several overseas jurisdictions since the 1990's and previously proposed¹ within Australia. However, we note the significant lead time to implement new systems, rules, and processes needed responsibly implement a market

¹ <https://www.pc.gov.au/inquiries/completed/competition-policy/submissions/capelec/sub079.pdf>

change of this magnitude, thus necessitating relatively simple ‘transitional MLF arrangements’ under this consultation until such time COGATI changes are fully developed, tested, and implemented across the market.

Specific ‘transitional MLF arrangements’ supported by Canadian Solar include:

- **Allocation of Intra-Regional Settlement Residues (IRSR’s)** – We support Adani Renewables’ Rule Change Request to equally share IRSR’s between generators and customers in order to deliver lower cost dispatch of generation, thus underpinning efficient least cost generation dispatching into the NEM;
- **Average Loss Factors** – We support Adani Renewables’ Rule Change Request to move towards Average Loss Factors in lieu of the current Marginal Cost Pricing Methods (using MLFs) which are roughly equal to twice real average loss factors;
- **Transparency** – The sharing of AEMO’s actual model parameters with a limited number of ‘super consultants’ will further minimise investor uncertainty and deliver lower cost renewable development. Specifically, we consider the publishing of a forward (i.e., 10-15 years) ‘Generator MLF Index’ to be a key output from these so-called ‘super consultants’. This Generator MLF Index may be published by AEMO in consultation with each consultant and reflect the arithmetic average of MLFs for each Existing and ‘Committed’ generator as published periodically by AEMO on its Generation Information Page. Furthermore, the embedding of Loss Factor Robustness (i.e., MLF volatility) information for each Existing and ‘Committed’ generator (or by Renewable Energy Zone, at a minimum) by the nominated consultants can also further assist in efficient investment signals to renewable energy developers as stakeholders navigate the energy transition; and,
- **Information & Frequency** – The minimisation of MLF forecasting error is essential. As a result, we consider the more frequent publication of MLF’s (i.e., quarterly or in tandem with information updates on AEMO’s Generation Information Page, for the next 8 quarters) to be essential as it pertains to delivering adequate analytical data to stakeholders (generators, customers, and investors alike) to more robustly manage their exposures and investment decisions alike.

Canadian Solar further notes that any grandfathering of MLFs are very unlikely to adequately balance the objectives of the Energy Trilemma (low cost, low carbon, reliable energy supply) by disproportionately benefiting high legacy thermal generators who are geographically more closely located to major load centres than their renewable energy counterparts. As such, this issue is best addressed under the scope of the COGATI reforms as it pertains to the development of Zones within Regions.

Canadian Solar is broadly supportive of efforts to more accurately deliver locational pricing signals and incentives during this unprecedented time of change within energy markets. We would be pleased to discuss our response with the AEMC in more detail, if desired.

Sincerely,

A handwritten signature in black ink, appearing to read "Leo Figueira". The signature is fluid and cursive, with the first name "Leo" and last name "Figueira" clearly distinguishable.

Leo Figueira

Director, Structuring

Leo.Figueira@canadiansolar.com

