30 July 2019

Mr Andrew Splatt
Australian Energy Market Commission

Dear Mr Splatt,

Submission: Transmission Loss Factors

CS Energy welcomes the opportunity to provide a submission on Transmission Loss Factors, Consultation Paper, dated 6th June 2019.

About CS Energy

CS Energy is a Queensland energy company that generates and sells electricity in the National Electricity Market (**NEM**). CS Energy owns and operates the Kogan Creek and Callide coal-fired power stations and Wivenhoe, a pumped-storage, hydro-electric peaking plant. CS Energy sells electricity into the NEM from these power stations, as well as electricity generated by other power stations that CS Energy holds the trading rights to.

CS Energy also operates a retail business, offering retail contracts to large commercial and industrial users in Queensland, and, is part of the South East Queensland retail market through our joint venture with Alinta Energy.

CS Energy is 100 percent owned by the Queensland government.

General comments

CS Energy is supportive of changes to the Marginal Loss Factor (MLF) frameworks but not supportive of the proposals made by the proponent, Adani Renewables.

Our detailed submission is set out in the Attachment.

Yours sincerely

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ATTACHMENT

CS Energy has previously expressed support for improvements to marginal pricing close to real time, including improved marginal loss factors.

The current method, a regional static marginal loss factor, suffers from being calculated ex-ante, averaged over each half hour and then over a year's forecast data. This means, even if the forecast was perfect, the annual 'static' MLF would likely be wrong in every dispatch period. This is because generation, demand and flows change with each dispatch. A 'real time' MLF would reflect these conditions and allow participants to reduce fuel costs, improve profits and reduce prices for consumers.

It is CS Energy's understanding that a real-time formula to calculate MLFs could be devised, possibly requiring a non-linear, full-network model upgrade to NEMDE. CS Energy has previously argued (in submissions to the 5minute settlement Rule Proposal and System Security Review) that an upgrade should occur, not least to allow the dispatch engine to properly price losses, but also to enable the optimisation of other System Security services and improve price calculations.

CS Energy would recommend the AEMC consider a full-network model, the costs thereof and the implementation timeframes.

It should also be noted that in August 2018 AEMO presented data which showed 'mispricing' of losses and indicated a simple regression analysis, using generator load and region demand, would improve the MLF significantly. This shows there are simple and easy gains to be made by improving the MLF calculations to reflect dispatch conditions.

As a transitional measure before an upgrade to the NEM's network model can be made, CS Energy recommends the AEMC consider a real time MLF calculated from an equation using suitable inputs, such as generator loading and region demand.

Such a change may also require changes to offer submission because prices in the 10 price bands must not exceed the market price cap multiplied by the relevant intra-regional loss factor (or be lower than the market floor price multiplied by the relevant intra-regional loss factor).

Notwithstanding the above, CS Energy does not know whether a full-network model and real time MLFs would remove all mispricing of losses if the interregional loss factor calculations and regional representation of MLFs are used. For example, would this differ in pricing outlines compared to if no regions (zones) and no interregional loss factors were applied? The AEMC should seek advice from AEMO on this matter.

CS Energy would welcome further consideration of losses as part of the COGATI proposals. In the COGATI review the AEMC is debating the use of Locational Marginal Pricing, including the relevance of the NEM's regional representation.