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Australian Energy Market Commission
Submitted via AEMC website
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Re: Submission - National Electricity Amendment (Transmission Loss Factors)

MUFG Bank, Ltd (MUFG) welcomes the opportunity to provide its comments on the transmission loss factors rule change proposals.

MUFG is a market leader in the Clean Energy sector[1] with strong credentials in advising, arranging and lending on single asset and portfolio debt financings in the form of project finance. We are an active lender to renewable generation projects across a number of jurisdictions having financed over 450 transactions across all key renewable technologies. In Australia, MUFG is a leading financier to renewables transactions via provision of senior project finance debt[2].

Non-recourse project finance makes it possible to achieve much higher leverage than project sponsors could otherwise sustain on their own balance sheets. Accordingly lending institutions such as MUFG have been central to the facilitation of the growth of the renewables sector over several years. We have generally regarded Australia as a low risk jurisdiction, however the recent volatility in published Marginal Loss Factors (MLFs) has given rise to adverse outcomes against base case assumptions. The lack of a firm or predictable MLF undermines the financial viability of existing generation which in conjunction with other sectorial related matters is damaging confidence in lending to the Australian renewables sector.

MUFG is conscious of the current energy market transition resulting in significantly more renewable generation capacity connecting into more marginal parts of the grid. The quantum of new generator connections with significantly shorter lead time for construction has given rise to a rapid rate of change which can quickly undermine generator investment decisions. At a high level our submission considers:

- The MLF values which are set are positively correlated with a generator's revenue which is the primary source of cash flow to service debt and equity. The year on year volatility is having a significant impact on our assessment of future available cash flows and thus our confidence of the cash flow forecast which underpins our decision to provide finance.
- Whilst we are indifferent as to the methodology (marginal v average), as financiers we support a methodology which achieves greater *certainty* in forecasting of future MLFs and less *volatility* in order to provide confidence in the financing decision we are making to lend debt capital to support new build generation.

[1] Number one lead arranger for global clean energy and energy smart technologies for FY2018: *Bloomberg New Energy Finance* FY2018 League Tables
[2] Number one primary lender by volume for Australian renewables transactions for 12 months to 30 June 2019: *Inframation* online League Tables

- MUFG supports an objective which improves the availability of data to accredited consultants to facilitate greater alignment with AEMO's network model assumptions to improve reliability of consultant's forecasts which market participants rely on to support their investment decision.

Stakeholder Response

Question 1: Identifying the Problem

As a stakeholder we acknowledge the current consultation being conducted by AEMC on Coordination of Generation and Transmission Investment (CoGaTI)[3] which seeks to strengthen the links between the Integrated System Plan and transmission investment decisions. Further we note the consultation relating to rule changes in respect to Transparency of New Projects[4] which will lend itself to improved investment decisions in particular around optimising location given the impact of network constraints, system strength requirements and projected MLFs on generator returns. As a stakeholder we support any measures which improve the quality and reliability of information to all parties which enhance locational signals for investment.

The primary concern as a financier of renewable energy is the ability to be able to rely on accurate forecasts of unhedged variable risks. A large part of the variability in recent MLF values has been due to significant amounts of committed new generation capacity which was not captured in consultant's forecasts which has given rise to increased amounts of projected power flow towards the relevant RRN. This is compounded via the rate of change and assumptions being made on timing of connection and generation profiles for competing generators as well as interconnector flows. It is questionable whether the rule change proposal will significantly improve the position of those generators who have been subject to adverse MLF outcomes acknowledging the investment decision may have been made on incorrect analytics at the outset.

MUFG would support AEMO's suggestion which seeks to address the creation of a level playing field amongst industry consultants for conducting market studies on congestion and MLF risks. These studies are used by investors and financiers to support assumptions for new build project financings and refinancing's of existing generation capacity. This could be achieved by AEMO sharing its network model with a group of accredited consultants that are bound by confidentiality. Subject to ensuring effective competitive tension amongst consultants we see this as means to allow the industry access to more precise information to support its investment decisions.

[3] AEMC Directions Paper – Coordination of Generation and Transmission Investment Access Report 27 June 2019

[4] AEMC Consultation Paper – Transparency of New Projects, 18 April 2019

Question 2: Proposed Assessment Framework

MUFG acknowledges the requirements of the National Electricity Objective in terms of due consideration of any rule change proposals. Notwithstanding, MUFG notes the timing of this rule change in the context of the broader consultation underway in respect of CoGaTI. The assessment framework should consider the extent of overlap with CoGaTI and the timing of any change in future market design given the implications access reform may have for calculation of MLFs. Given the level of interplay with this reform a more transitional approach may be appropriate.

Question 3: Changing the Transmission Loss Factor Framework

MUFG recognises the inherent trade-off between achieving accuracy of transmission losses versus long term certainty of the MLF value which impacts generator revenues. Whilst we are indifferent between average vs marginal MLFs we acknowledge that the current methodology is consistent with the clearing price mechanism which is set at the marginal cost of supplying the next unit of generation which is required in order to encourage efficient investment and dispatch.

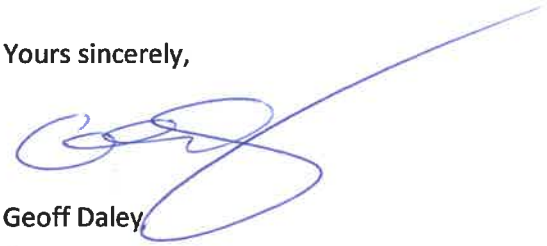
Consideration	**Comment**
- Should multiple loss factors be used?	- In order to achieve greater certainty in the stability of the MLF this could be achieved by moving from a 1 year forecast to that of a longer term forecast which aligns to the tenor of the debt that financiers typically lend against (i.e. from 5 – 10 years up to the end of technical asset life). - This could be a static number or combined with more granular values for seasonal peak and off peak factors which may align more closely with network flows and consumption intra-period.
- How often should intra-regional loss factors be calculated?	- Whilst increasing the frequency of the MLF calculation may improve accuracy of the value, its benefit would be outweighed by the increased potential for greater volatility.
- How much notice given to market participants	- At present the 3 month notice period provides limited ability to effect any meaningful change ahead of a revised MLF factor commencing from 1 July. - A longer notice period (up to 1 year) would assist project companies to a degree in that it would allow them time to preserve cash flow to meet scheduled debt repayments however equity would still take first loss on any adverse changes which had not been accounted for in its investment case.
- Using a forward or backward looking methodology	- Given our primary objective of increased certainty we are indifferent as to the use of forward or backward looking methodology.
- Using a cap and collar	- A cap & collar approach could assist in providing confidence in the annual changes, however to the extent the change is indicative of a longer term correction which had not been

	addressed in the original consultant's report it may not address the long term viability of a generator. - An intra-year change variation cap of 5% is considered more beneficial given it limits the potential annual volatility and provides more certainty and a means by which to model downside scenarios.
- Grandfathering MLFs	- Whilst this would lock in the return to existing generators providing the certainty required, it would cut both ways thus locking in adverse MLFs for incumbent generators who have been subject to incorrect forecasts. - A possible alternative would be to set a floor on existing generators' MLF allowing them to share in any future upside but any adverse changes get applied disproportionally to newer entrants.

MUFG is of the view that the current market design is creating impediments for new developments to continue to attract capital given the distortion of an existing project's investment case given the impact a new project can have on congestion or via reduced MLF. In conclusion we support a complementary solution which addresses both accuracy of input assumptions into consultant's forecasts and greater long term certainty of the MLF value which directly impacts future generator cash flows which underpin the lending decision.

If you have any queries please do not hesitate to contact me, or Cathy O'Doherty, Director, Australian Structured Finance Office, on (03) 9032 9645.

Yours sincerely,



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