Transmission Loss Factors (ERC0251)

Stanwell appreciates the opportunity to provide feedback on the Australian Energy Market Commission’s (AEMC’s) Transmission Loss Factors (TLF) Consultation Paper.

Stanwell does not support moving from marginal to average loss factors, or redistributing intra-regional settlement residues (IRSR) to consumers and generators as the proposed rule changes fail to demonstrate the net benefit to consumers. Any consideration of changes to TLF should be incorporated into the current transmission and market reform processes underway in a holistic manner that more appropriately addresses the context and need for change.

1) Prioritisation of current system and market challenges

The AEMC recently articulated the current priority areas on which industry needs to focus:\(^1\)
- Generation access and transmission pricing;
- System security;
- Integration of distributed energy resources;
- Digitalisation of energy supply; and
- Aligning the financial incentives that operate on market participants and the physical needs of the power system.

While loss factors are an important part of the market, they do not fall directly within these priorities as a stand-alone issue. Furthermore, there are a number of significant market reviews and rule changes currently underway that take precedent in addressing priority areas relative to this rule change request. Progressing changes to TLF at present should be considered only as part of the broader work streams already underway.

---

2) Interaction of the proposed rule change with other market reviews, rule changes

Adani’s proposed rule changes do not acknowledge the number of ongoing reviews and rule change processes that align with the issues identified in the rule change:

1. Transparency of new projects

The AEMC is progressing consultation that consolidates three separate rule changes requests concerning the transparency of new projects. The proposed changes include:

- Requiring *intending participants* to notify AEMO of any changes to the information about their projects they have provided during the *intending participant* registration process; and
- Permitting Transmission Network Service Providers (TNSPs) to publish certain information they receive from connection applicants.

These proposed changes will go some way to addressing Adani’s concerns about increasing information about new projects connecting to the network. More accurate and timely information relating to new entrants would be expected to reduce the uncertainty and errors included in MLF calculations in recent years. Notably the 2019-20 loss factors were delayed and republished multiple times in response to uncertain or inaccurate new entrant generation forecasts.

2. Coordination of Generation and Transmission Investment (COGATI)

The COGATI access and charging review is underpinned by the proposed implementation of locational marginal prices and transmission hedges. The purpose of the COGATI review is to increase the strength of the locational signal for generation investment by integrating it more closely with the cost of the transmission developments that would be needed to allow unrestricted access to market for that generator. The proposed change from MLFs to ALFs works directly against this intent by muting the existing signals. Stanwell considers that pursuing both ALFs and COGATI would reduce the potential benefits of either change and is unlikely to be consistent with the NEO.

Stanwell suggests it would be more appropriate to undertake a review of TLF as part of any access regime changes stemming from the COGATI review rather than an isolated approach.

3. Existing AEMO loss factor review

AEMO have been consulting on potential changes to the loss factor arrangements for some time, including the two proposals submitted by Adani. In their September 2018 engagement session AEMO noted a number of possibilities and an initial evaluation of the pros and cons of each approach. Notably AEMO considered that MLFs were consistent with economic theory and that there were strong arguments against ALFs\(^2\). AEMO also noted that changing

\(^2\) *MLF engagement session, presentation slides prepared by AEMO 05 September 2018, Slide 50*
the use of intra-regional revenues required detailed impact analysis and that the increase in complexity may outweigh the benefits. To Stanwell's knowledge no such detailed analysis has been performed.

4. Post-2025 market design for the National Electricity Market

The Energy Security Board (ESB) is developing advice on a long-term, fit-for-purpose market framework that could apply in the NEM from the mid-2020s. This process may recommend changes to the market design with flow-on impacts to transmission network operation. Any required changes are to be identified by the end of 2020 to enable sufficient time for the market to transition to the new framework.

Given the short timeframe before any potential changes recommended by the ESB’s work would need to be finalised, it is possible that loss factors could be changed in 2022 (to accommodate access regime changes stemming from the COGATI review) and 2025 (in response to ESB’s recommended market framework changes).

Stanwell does not consider a third potential change to loss factors between now and 2025 is warranted or efficient, rather the two larger packages of work should address TLFs as part of the broader reform.

5. 5 Minute Settlement and Global Settlement

5 Minute Settlement (5MS) and Global Settlement are currently being progressed, with an aim to have both fully implemented by 6 February 2022.

While it is not envisaged that there would be any changes to the treatment of MLFs under 5MS and Global Settlement, these changes will affect how participants’ revenue flows are calculated. Proposing further changes to revenue calculations concurrently will only increase uncertainty for market participants.

3) Specific comments to aspects of the rule change proposals

If the rule change is progressed for further consideration, the AEMC needs to consider the following:

1. Intra-regional residues should be returned to consumers

Stanwell does not support changing the beneficiaries of the redistribution of IRSR to include generators as well as customers. Although this proposal would be of prima facie benefit to Stanwell, we do not consider it is justified against the NEO.
Under current arrangements Generators benefit from strong confidence that there will be sufficient revenue collected in any period to enable settlements to balance with customers ultimately receiving the benefit of this surplus. The proposed arrangements risk diluting this confidence (through ALFs) and/or the benefit which ultimately flows to consumers (through risk premiums retained by generators through settlement nuances).

2. Marginal loss factors provide economically efficient dispatch

Marginal loss factors result in more economically efficient dispatch than average loss factors, as supported by the COGATI discussion:

“…the MLF represents the electricity losses that would occur if one additional megawatt of electricity was generated at that connection point. The marginal approach is consistent with how most other aspects of dispatch and pricing operate in the NEM, on the basis that marginal pricing is considered to lead to the most efficient outcomes.”

Stanwell suggests retaining marginal loss factors over average loss factors satisfies the National Electricity Objective (NEO), principally the “efficient operation” of electricity services. This may need to be reassessed through the reform processes underway, but done so in a holistic and informed manner.

4) Potential alternative approaches to MLFs

If the current rule change is seen as an interim step to future loss factor reform (for example, under COGATI or the ESB’s post-2025 market design), there are options identified outside the current rule change request that may be beneficial.

At the TLF public workshop, AEMO discussed a number of intended actions to address stakeholder concerns in the short-term, including:

- Consultation on the loss factor methodology, either before or after the conclusion of the transmission loss factor rule change process;
- Potential updates to the software that calculates MLFs;
- Increasing the frequency of publishing MLFs for greater transparency although annual MLFs will still be applied; and
- Sharing the model with accredited consultants.

Advancing these initiatives will increase locational information for market participants and potentially the accuracy. However, an appropriate number and/or regulation of “accredited” consultants for sharing this model to would need to be considered to avoid any potential conflict or oligopolistic issues arising.

5) Stanwell's preferred approach

Overall, Stanwell recommends that in the absence of evidence that the proposed rule changes would provide a net benefit to consumers, any action on loss factors be considered as part of the broader market reviews currently underway.

If changes are considered, Stanwell suggests quarterly loss factors strike an appropriate balance between accuracy and certainty for market participants, and align with quarterly contracts which represent the bulk of products traded in the NEM. Loss factors that cover short periods of time (e.g. day-ahead or monthly) to increase their accuracy may have adverse impacts on the long-term hedging options for market participants. Additionally, loss factors calculated intra-day (e.g. real time of peak/off peak) would have more significant systems and process impacts which would need a cost benefit analysis performed before being supported.

Stanwell welcomes the opportunity to further discuss this submission. Please contact Evan Jones on (07) 3228 4536.

Yours sincerely

Alison Demaria
A/Manager Market Policy and Regulatory Strategy