Major Energy Users Inc.

21 August 2014

Mr Peter Biddle
Australian Energy Market Operator

By email: peter.biddle@aemo.com.au

Dear Peter

REVIEW OF THE METHODOLOGY FOR CALCULATING FORWARD LOOKING TRANSMISSION LOSS FACTORS

The Major Energy Users (MEU) welcomes the opportunity to provide its views to the review of the methodology for calculating forward looking transmission marginal loss factors (MLFs). The MEU represents the views of many large energy using firms that are either connected directly to the transmission network or are located so close to the transmission network that they "see" the transmission loss factors in their costs for electricity. Because of this the MEU considers that its views are pertinent to the AEMO review.

The Issues Paper developed for initiating stakeholder involvement in this issue cites there are four aspects that AEMO considers need to be addressed:

1. Historical generation profiles.
2. Historical MNSP flows.
3. Generating unit capacity reductions.
4. The Methodology document is difficult to read due to the inclusion of commentary in the same document.

The MEU considers that the information provided in the Issues Paper also bring to light two other very important aspects about marginal loss factors from a consumer viewpoint. In this regard, it important to note that AEMO is required under the National Electricity Law, that what it does has to be "…in the long term interests of consumers…" but nowhere in the Issues Paper does AEMO highlight where its proposed changes reflect these long term interests.

Consumers are very concerned that the current approach to setting the MLFs results in significant year on year movements of the MLFs and as direct connected and subtransmission connected users are very large users of electricity, this yearly

variation in MLFs can lead to very significant cost variations in their annual budgeted costs for electricity.

Secondly, firms are very concerned that the current development and costs imposed by the MLFs do not reflect the locational impact of the losses that are actually incurred. By their very nature being set at the margin, MLFs over-recover the cost of the losses. The redistribution of this over-recovery is then carried out in a way which does not reallocate this over-recovery to those that paid the excess amount as it is redistributed via the transmission costs in a way that does not allocate the costs back to those that over-paid on their MLFs.

As a general observation, the MEU is concerned that the AEMO approach focuses its attention on the supply side of the market with little involvement or attention to the impacts the outcomes will have on the demand side of the market or how the demand side reacts to the loss factors calculated and then used. The MEU recognises that generators are impacted by loss factors but points out that so to do consumers get impacted by the decisions made. The MEU suggests that this review should address consumers' interests as much as it does those of the supply side.

This submission addresses the concerns that the MEU has with the issues raised by AEMO and also integrates the additional concerns highlighted above.

Historical generation profiles

The MEU agrees that historical generation data provides the most reliable source of assessing the likely generation profile in the future. The MEU considers that in order to minimise extrapolation, AEMO should use the most recent generation data available and not use outdated data that might be more convenient. For example, if the most recent data runs from January to December but the MLFs are being calculated for July to June, AEMO should not use the most recent July to June data as this will be more out of date than the January to December data. In this regard, the MEU notes that AEMO has made this shift in using more recent data in setting its transmission charges in Victoria.

The MEU notes that forecasts of demand data are showing significant shifts from historical demand patterns and that there is little growth in demand forecast in most regions with falls being seen in some. Further, the increase in wind generation and the decisions to mothball some generation for all or part of the year is also a new dynamic in the market, adding to the difficulty in calculating MLFs.

Despite these shifts, the MEU agrees that using the latest historical data is the most robust method of setting forecasts subject to the inclusion of changes in the market that are known - this applies to both known changes in generation and known changes in demand. To address the known changes in demand, the MEU suggests that AEMO, just as it does for setting Victorian transmission charges, should seek advice from large electricity users if they anticipate significant changes in demand that would impact the calculation of the MLFs.

The MEU notes that AEMO intends to trial the indicative extrapolation of generation profiles with market participants. The MEU agrees with this approach but considers that it should be expanded to include large users in this process as well.

AEMO Questions

- Are there any other practical modifications to minimal extrapolation under unusual conditions, given the constraints of the NEM design principles?
- Is AEMO's proposal to modify clause 5.5.6 of the Methodology sufficient to address the issue? If not, what more can be done?

The MEU responses to these is addressed in the comments above.

Historical MNSP profiles

The MEU is not aware of the detailed operation of Basslink but is of the understanding that, even though it is an unregulated interconnector, it essentially operates as a "free flowing" regulated interconnector just as Directlink and Murraylink do. AEMO should seek advice from Basslink owners (and those that pay for the Basslink services) to verify the actual operation of Basslink.

If Basslink is operated as a "free flowing" regulated link, then this should determine the way that AEMO uses the historical data. To use data that is inconsistent with the way the interconnector is actually operated will lead to an inaccurate outcome.

As with generation historical data, the MEU suggests that the most recent data should be used rather than outdated data

AEMO Questions

- Is a change to the assessment of MNSP network flows justified?
- If so, which option is preferred? Is there another option?
- What are the suitable guidelines to make such changes?

The MEU responses to these is addressed in the comments above.

Generator outages

The issue raised about generator outages is what is to be included in the MLF calculations. If hard numbers from the historical data used are included then the issue raised is valid.

However, with the changes seen in the electricity market in recent years, it is the profile of each generator and usage point that is most likely to represent the future rather than the actual quantity that the historical data would deliver. What is important, is the forecast of the amount of consumption and the location of the consumption that impacts on expected generation.

It is the forecast availability of the generation that is important rather than the actual quantum of historic generation. If the forecast availability is the same as that forecast

at the time for the actual generation then the historic data is a good surrogate for calculating MLFs as this would reflect the outages that occurred in the historic data.

This means that if the profile of the generation is modeled against an expected availability advised for that period, then the expected availability in the future could be modeled based on the historic profile. If the forecast availability is different to that forecast for the historic data being used, then the forecast profile should be pro-rated against the historic generation profile.

AEMO Question

- AEMO seeks comment on this proposal and any indicators to determine what are maintenance outages.

The MEU response to this is addressed in the comments above.

Methodology document

The MEU agrees that the discussion on the reasons for implementing a particular approach should be covered in a document separate to the actual methodology. This process is used satisfactorily by the AEMC in decisions on rule changes.

AEMO Question

- Are there any issues with the Methodology other than those identified by AEMO?

The MEU is not aware of any other than the issues raised in this submission.

MEU issues of volatility and over-recovery

As noted above, the MEU is concerned with the volatility seen in MLFs and in that they over-recover the cost of the losses actually incurred.

Appendix B provides a view that the current approach to calculating MLFs does result in some variation between the forecasts and the backcasts, and this highlights a degree of error already with particularly large errors for NSW and Tasmanian regions. This error imposes an unbalancing of costs between consumers.

Because the MLF is based on the change in lost electricity seen at the margin (ie the losses seen at each connection point for a +/- 1 MW change), the actual calculation delivers an outcome that exceeds the overall losses seen during a year. AEMO has to calculate the quantum of this over-recovery during the year so that this can be returned to the market. For consumers, this over-recovery is returned through transmission charges.

The MEU considers that levying an excessive charge and then returning the unneeded amount at a later time is not in the long term interests of consumers - in theory consumers should be paying what they are required to pay at the time they use the electricity, not overpaying and then getting it back well after the event. Further the mechanism for returning the over-recovery does not necessarily give

back to each consumer the over-charge each actually paid, so the process is not equitable.

The MEU considers that the MLF should be calculated in the way proposed and then discounted to reflect the forecast losses actually anticipated for the year. This will result in each consumer paying, at the time the cost is incurred, only the likely losses that the consumer causes to be lost

This approach has the added benefit of reducing the year on year volatility that is a concern for consumers and seen from the current approach to setting MLFs.

We appreciate the opportunity to have provided this input into the AEMO review. Should you wish for amplification of any of the comments provided, we would be pleased to expand on our views.

The MEU is keen to continue to be involved in this review and we request that you keep our Public Officer (David Headberry) aware of future discussion and request for further stakeholder involvement on this review.

Yours faithfully

David Headberry
Public Officer