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Dear Mark,

Second Draft Determination on the inter-regional transmission charging Rule change

Grid Australia appreciates the opportunity to respond to the AEMC's Second Draft Determination on the inter-regional transmission charging Rule change. As the representative body for transmission network service providers in the National Electricity Market, Grid Australia members have a direct interest in the outcome of the Rule change.

Grid Australia is broadly supportive of the proposal in the Second Draft Determination to introduce a modified load export charge (MLEC) as a mechanism for better reflecting the cost of using the transmission system between regions. However, in the attached submission Grid Australia wishes to highlight key issues which should be considered in the development of the Final Determination, namely:

- pass through of the MLEC to customers, as currently proposed, will not be on a genuinely locational basis. This submission suggests one option for effecting truly locational pass through to customers, if desired;
- introduction of the Rule change by 1 July 2014 is not feasible, and deferral is recommended; and
- there are some ambiguities in the proposed Rule drafting.

In addition, Grid Australia's attached submission responds to the AEMC's questions relating to implementation of the Rule change, and comments on the AEMC's preferred Cost Reflective Network Pricing (CRNP) sub-options for implementing the MLEC.

Please do not hesitate to contact Bill Jackson on jackson.bill@electranet.com.au or (08) 8404 7969 if you wish to discuss any of the matters raised in this submission.

Yours sincerely,



Philip Gall
Acting Chairman, Grid Australia Regulatory Managers Group

Inter-regional transmission charging

Submission in response to the Australian Energy
Market Commission's Second Draft Determination

18 January 2013

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1 Introduction

Grid Australia is broadly supportive of the AEMC's proposal in the Second Draft Determination on the Ministerial Council on Energy's inter-regional transmission charging Rule change proposal to introduce a modified load export charge (MLEC) as a mechanism for better reflecting the cost of using the transmission system between regions. However, in this submission Grid Australia wishes to highlight key issues which should be considered in the development of the Final Determination, namely:

- pass through of the MLEC to customers, as currently proposed, will not be on a genuinely locational basis. This submission suggests one option for effecting truly locational pass through to customers, if desired;
- introduction of the Rule change by 1 July 2014 is not feasible, and deferral is recommended; and
- there are some ambiguities in the proposed Rule drafting, which Grid Australia would appreciate the opportunity to discuss with the AEMC as the Final Determination is developed.

This submission provides high-level comment on the proposed Rule change in the context of the current regulatory environment. It then considers each of the key issues outlined above, responds to the AEMC's questions relating to implementation of the Rule change (pages 51-53 of the Second Draft Determination), and comments on the AEMC's preferred Cost Reflective Network Pricing (CRNP) sub-options for implementing the MLEC.

2 General comment on the Second Draft Determination

In the Second Draft Determination, the AEMC stated that it would prefer to implement some form of inter-regional transmission pricing as soon as possible given that any outcomes of the AEMC's Transmission Frameworks Review (TFR) may not be in place for a number of years. While Grid Australia has endorsed investigation of a nationally consistent transmission pricing system for the National Electricity Market¹, as proposed in the AEMC's Second Interim Report on the TFR², it considers that the implementation of the proposed MLEC is a satisfactory method to approach inter-regional transmission charging in the interim. Grid Australia endorses the AEMC's preference to implement an MLEC.

¹ As noted in Grid Australia's submission to the AEMC's Second Interim Report for the Transmission Frameworks Review, Grid Australia members consider that a critical design feature of any national transmission pricing mechanism would be continuing to have the local transmission network service provider (TNSP) issue customers' bills. This would allow for continuity of service provision. As for the operation of a national transmission pricing scheme, Grid Australia notes that the pricing run could be done by either an individual TNSP on the behalf of the others, or by the Australian Energy Market Operator.

² AEMC 2012, Transmission Frameworks Review, Second Interim Report, 15 April 2012, pp.67-71.

With the exception of the issues discussed in the remainder of this submission relating to the locational signal of the MLEC, the timing of implementation and the specifics of the proposed drafting, the MLEC proposed by the AEMC appears to be feasible.

If possible, explicit consideration of how the transition from an MLEC to a national pricing regime would work in practice would be advisable in the Final Determination on the inter-regional transmission charging Rule change.

3 Changing the proposed MLEC to be truly locational

Grid Australia is concerned that if implemented as currently proposed, the MLEC will not allow prices to “reflect the benefit derived by customers from costs incurred in a neighbouring transmission region”³. Although the AEMC has proposed including the MLEC in the locational component of the transmission prices, the proposed methodology does not pass through this charge based on the customer’s proportionate use of the adjacent regions’ assets (or a proxy for those assets). Instead, the ratio of assets used within the customer’s region (determined through the CRNP method) has been assumed to reflect the customer’s inter-regional asset use. As a result, the MLEC would be allocated based on the proportionate intra-regional asset usage rather than inter-regional asset usage.

To illustrate this issue, it may be useful to consider the case of a small, radially-connected customer in the North of South Australia. Such a customer may experience a locational price of \$1000 per MW per day while the equivalent load located in closer proximity to Adelaide may experience a locational price of \$100 per MW per day. Under the proposed methodology, if South Australia was required to recover a net MLEC of 10 percent of its AARR (for example), that charge would be added to the pre-adjusted locational component. This would result in all such prices increasing by 10 percent. Thus the remote connection point would increase by \$100 per MW per day versus \$10 per MW per day for the other connection point, notwithstanding the remote connection point being substantially less likely to have material usage of the assets of the adjoining regions.

If the AEMC wishes to better reflect the cost of inter-regional asset use on customers’ bills, the MLEC charge would need to be converted to an equivalent asset cost applied to a proxy asset(s) on the border(s) in order to be allocated to customers⁴. In the allocation of the ASRR to connection points in accordance with Clause 6A.23.3, occurring after a co-ordinating Transmission Network Service Provider (TNSP) has received an MLEC from an adjacent region. A second CRNP run, with the adjacent regions’ network modelled as a proxy asset (which may be an interconnector element) at each of the points of connection to adjacent regions, is required. The

³ AEMC 2012, Inter-regional transmission charging Rule change proposal, Second Draft Determination, 6 December 2012.

⁴ This is similar to the method used by ElectraNet under its pricing methodology to pass through Settlements Residue Auction proceeds to customers in South Australia.

proxy assets would be allocated an asset cost reflecting the MLEC. This second CRNP run would result in customers' use of the assets comprising the use of both the assets within the region and the adjacent region's assets (represented by the proxy asset). Allocation of the ASRR (including the MLEC) in accordance with Clause 6A.23.3 based on this second CRNP run would then be truly reflective of proportionate use of both the assets within the region and of the adjacent regions' equivalent assets representing the MLEC. This is similar to the method used by ElectraNet under its pricing methodology to pass through Settlements Residue Auction proceeds to customers in South Australia.

If the AEMC does not wish to add this additional complexity to the MLEC methodology, it would appear to be more accurate and equitable to pass through the MLEC through non-locational TUOS charges. This option would not only be administratively efficient but have a theoretical advantage as the non-locational component has been held to be more representative of the LRMC of running the transmission network while the locational component is more representative of the SRMC.

4 Timing for implementing the MLEC

Grid Australia is concerned that implementing the Rule change by 1 July 2014, as proposed by the AEMC in the Second Draft Determination, will not be possible. Between when the Final Determination on the inter-regional transmission charging Rule change is made (28 February 2013) and when the implementation of the MLEC is proposed (1 July 2014), a series of actions will need to occur. Grid Australia expects these actions to take longer than the 16 months allowed by the AEMC.

Table 1 below lists the activities that must occur before the implementation of an MLEC can take place. Grid Australia considers it highly unlikely that these activities can be completed with the appropriate rigour by 1 July 2014 without compromising time for stakeholder consultation and due procedural fairness. As such, Grid Australia strongly recommends that the AEMC defer the implementation of the MLEC until the subsequent transmission pricing period, beginning on 1 July 2015.

Table 1 Activities required for implementing the MLEC

| Activity |
|--|
| Final determination on inter-regional transmission pricing Rule change |
| Publish revised pricing methodology guidelines <ul style="list-style-type: none"> • Drafted by the Australian Energy Regulator (AER) • Stakeholder consultation • Final publication |

| Activity |
|---|
| Publish amended pricing methodologies <ul style="list-style-type: none"> • TNSPs Draft amended pricing methodologies • TNSP Board approval required • Approved by the AER following public consultation Note: <ul style="list-style-type: none"> • Substantial changes may be required by TNSPs currently applying a modified CRNP method • Transitional arrangements may be required for TNSPs with upcoming revenue applications |
| TNSPs implement required changes to modelling process <ul style="list-style-type: none"> • Pricing models amended and verified • Substantial changes may be required by TNSPs currently using modified CRNP |
| Information exchanged between CNSPs and the other TNSPs within their region <ul style="list-style-type: none"> • Receive information from TNSPs in region • Information required includes forecast Service Target Performance Incentive Scheme amounts, forecast Consumer Price Index, forecast Maximum Allowed Revenue and forecast revenue determination outcomes, each with attendant timing issues |
| Locational transmission charges for inter-regional load points (MLECs) calculated by co-ordinating TNSPs before 15 March using forecast inputs <ul style="list-style-type: none"> • Calculate MLECs • Publish MLECs |
| Normal pricing activities completed and transmission prices published either to the time agreed with DNSPs or by 15 May (whichever is earlier) |

In addition, Grid Australia would like to highlight to the AEMC that bringing forward the publication of draft transmission prices to 15 March will have implications for the accuracy of pricing. As detailed in Grid Australia's submission to EnergyAustralia's 2008 Rule change proposal on transmission pricing publication dates, information availability issues arise from bringing forward the publication date⁵, namely:

- TNSPs in some jurisdictions do not have access to the 'overs' and 'unders' revenue recovery mechanism in the Rules, and therefore need to be able to calculate their cost allocations and revenue exactly, using information which is not finalised until late April; and
- Larger year to year 'overs' and 'unders' adjustments with an associated shift of revenue recovery from cost reflective pricing structures to non-cost reflective revenue recovery mechanisms. This reduces the efficiency of transmission price signals and introduces unnecessary price distortions with implications for reduced allocative efficiency.

⁵ Grid Australia, 22 August 2008, submission to consultation on EnergyAustralia's transmission network prices publication date Rule change proposal to the AEMC.

5 Proposed Rule drafting

Grid Australia has identified several ambiguities in the proposed Rule drafting, and would appreciate the opportunity to discuss these with the AEMC as it prepares its Final Determination. In particular:

- the exact process for performing adjustments (MLEC true-ups, Settlement Residue Auction (SRA) proceeds and unders and overs) appears unclear in the current drafting;
- Clause 6A.23.3(b)(1) appears to allow for the adjustment for SRA proceeds in allocating the ASRR (including the MLEC) to connection points. Clause 6A.29A.2(a)(2) also allows for adjustment for SRA proceeds in the calculation of the MLEC. This would appear to result in ‘double counting’;
- Clause 6A.23.3(b)(1) appears to provide for adjustments for SRA proceeds when calculating the MLEC, which would give benefit to the adjoining region rather than ensuring that this revenue is returned solely to customers in the region. Grid Australia would like to clarify that this is the AEMC’s intention in the drafting;
- Clause 6A.23.4 appears to specify that locational prices can never be changed by more than 2 percent on a load weighted average basis if they are not related to the MLEC. Grid Australia would like to clarify whether this is the AEMC’s intent;
- the wording of Clause 6A.23.4(c) and (d) is unclear, and could be interpreted as the reverse of the AEMC’s intent (namely the use of the words ‘surplus’ and ‘shortfall’, and ‘downward’ and ‘upward’); and
- as drafted in the proposal, Clauses 6A.29A.5 and 6A.23.3 could provide contradictory allocation and recovery mechanisms for the MLEC (with resulting implications for whether Clauses 6A.24.1(b1)(3) and 6A.29.1(a)(3) should be included). In addition, Clauses 6A.29A.5 and 6A.23.3 may not allow for the variety of arrangements between TNSPs and CNSPs.

6 Responses to the AEMC’s specific questions

Grid Australia’s responses to the questions on pages 51 to 53 of the Second Draft Determination are provided below.

1. **Public information – the AEMC seeks stakeholder views on any other material in relation to the IRTC that either the CNSP or TNSPs should publicly disclose?**

TNSPs will need to release their pricing methodologies before the MLECs can be calculated and provided to TNSPs in other regions. This will require a Rule

change to allow update of pricing methodologies outside of the time of the revenue determination.

- 2. Information to be contained on CNSP to CNSP IRTC bill – the AEMC seeks stakeholder views on any other material that a TNSP or CNSP require to enable them to fulfil their obligations?**

The CNSP to CNSP MLEC bills would need to show the agreed load export charge, as well as how unders and overs will be accounted for.

- 3. Adjustment of the prescribed TUOS services – locational component for the MLEC. Is incorporation of the inter-regional transmission charge into the locational component of the intra-regional calculation the most appropriate mechanism?⁶**

As detailed in Section 2 above, Grid Australia does not consider that the AEMC's proposed method for incorporating the MLEC into the locational component is the most appropriate mechanism for providing cost reflectivity. However, as noted above, an adjustment to the methodology may correct this.

- 4. Sequence for IRTC – the AEMC seeks stakeholder views on whether this sequence reflects the most efficient way of incorporating the inter-regional transmission charges into the locational component of the intra-regional charge?**

Yes, the AEMC's proposed implementation is an efficient way to incorporate inter-regional transmission charges into the locational component of the intra-regional charge. However as noted in response to Question 3, Grid Australia considers that the proposed method will not actually provide a cost reflective locational signal, and so will not be meeting the AEMC's intent in making the change.

- 5. Commencement – the AEMC seeks stakeholder views on whether there is a more appropriate date to commence the operation of inter-regional transmission charging.**

Grid Australia considers that it would be more appropriate to begin the operation of inter-regional transmission charging on 1 July 2015. As described in Section 3 above, the proposed implementation date of 1 July 2014 is not likely to be feasible without compromising stakeholder consultation and procedural fairness.

In addition, given the large role the AER must play in meeting a short implementation deadline (through development of pricing guidelines and

⁶ Text for Question 3 is taken from the AEMC's email of 7 December 2012 (from Mark Allen), as the Question 3 text in the Second Draft Determination is identical to the Question 4 text.

approval of pricing methodologies), Grid Australia is concerned that a 1 July 2014 implementation date will create an unsupportable resource burden on the AER. This would be further increased by the heavy burden of the 2013 'Better regulation' consultations which must be conducted by the AER in effecting the implementation of the AEMC's Final Determination on the economic regulation of network service providers' Rule change.

6. Savings and transitional provisions – the AEMC seeks stakeholder views on whether there is any specific need for savings and transitional provisions to enable the MLEC to be introduced into the NER?

Transitional arrangements and, potentially, derogations, may be needed for existing connection agreements between loads and TNSPs.

7 Comment on the AEMC's preferred sub-options for construction of an MLEC

Grid Australia does not consider that the AEMC has made the case for moving ElectraNet and Transend to a standard CRNP methodology in lieu of their current modified CRNP methodologies. Such a change would be administratively inefficient, would disregard local conditions, and does not appear to bring significant benefits.

As was noted in Grid Australia's submission (included in Attachment 1) in response to the ROLIB Pty Ltd modelling of load export charges prepared for the AEMC in September 2012, Grid Australia strongly supports the use of the 365 day capacity method as proposed by the AEMC in the Second Draft Determination. It is appropriate, however, that provision is made for abnormal system conditions to be excluded from the conditions presented to TPRICE.

8 Conclusion

Grid Australia endorses the AEMC's proposal to implement inter-regional transmission charging via a modified load export charge. However, if the AEMC wishes to make a Rule allowing a truly cost reflective MLEC, Grid Australia considers it would be prudent to modify the AEMC's methodology as suggested in this submission. In addition, given the amount of consultation and modelling/process amendment required before implementation of the Rule can occur, Grid Australia strongly recommends deferring the implementation of the MLEC until 1 July 2015. Finally, in this submission Grid Australia has pointed to some ambiguities in the proposed drafting of the Rule and would appreciate the opportunity to discuss these with the AEMC as it develops its Final Determination.

Attachment 1 – Grid Australia response to ROLIB Pty Ltd modelling of load export charges

Please see overleaf.

2 November 2012

Mr John Pierce
Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW 2000

Dear John

Modelling of Load Export Charges Report (21 September 2012)

Thank you for the opportunity to comment on the recently released Modelling of Load Export Charges report prepared by ROLIB Pty Ltd for the AEMC (the Report) as part of its consultation on the Inter-regional Transmission Charging Rule change proposal.

Grid Australia has over time provided a high level of support to the AEMC in its endeavours to progress inter-regional transmission charging. This includes active engagement in modelling during the Review of Energy Market Frameworks in light of Climate Change Policies and subsequently in the Inter-regional Transmission Charging rule change proposal. Following earlier modelling conducted by TNSPs in December 2011 the AEMC engaged a consultant to conduct more extensive modelling.

Unfortunately, while Grid Australia members provided extensive data in relation to this modelling, there were limited opportunities for engagement in the modelling itself. Therefore, Grid Australia does not offer commentary in this submission on the methodology employed by the consultant nor the accuracy of the associated modelling. Comments in relation to the Load Export Charges Modelling report are accordingly at a high level.

Grid Australia notes that the report has been critical of TNSPs in relation to the data provided for the modelling exercise.

Therefore, this submission will first explain the background of the data provision, before commenting specifically on several elements of the Report.

Grid Australia also notes that the Transmission Frameworks Review (TFR) Second Interim Report includes specific recommendations on national transmission pricing arrangements, which impact on some of the recommendations in the AEMC's Inter-regional TUOS Draft Determination.

Background

In December 2011, the AEMC contacted TNSPs individually with a high level description of the proposed modelling methodology, data requirements and indicative time lines.

On 19 December, the AEMC conducted a teleconference with TNSP representatives to discuss details of the proposed modelling and data requirements and undertook to provide written confirmation of the data requirements together with a formal request to CEOs.

At this teleconference TNSPs expressed concern regarding the timing and volume of the data request versus their requirements under the Rules to publish annual transmission prices.

On 23 December, the AEMC provided more detailed written confirmation of data requirements and a requested due date of 24 February 2012.

On 16 January 2012, the AEMC provided copies of the formal request for the work to be conducted to respective company CEOs dated 12 January 2012.

Extensive modifications to TNSP pricing models were required to produce the requested data. TNSPs anticipated that this, the high volume of data required and the compressed timeframes would result in a significant degree of interaction with the consultant being required after the data was submitted. TNSPs believed that time had been allowed for an extensive collaborative review process for data acceptance, including a workshop. This was not the case and resulted in unanticipated delays in the modelling process.

Specific Comments:

The requirement for a common pricing methodology

Grid Australia agrees that for inter-regional charges to be calculated at a regional level a consistent methodology for allocating charges between a region and the adjacent regions is required. This may be overlaid on approved pricing methodologies that apply in each region or it could be a consistent pricing methodology which applies to all transmission pricing across the NEM as has been proposed in the Transmission Frameworks Review Second Interim Report).

The use of Standard or Modified Costs Reflective Network Pricing

The limited modified CRNP methodology used for the Report's modelling of Load Export Charges provides limited insight into the effect of application of the modified CRNP described in the Rules. Under the methodology contemplated under the Rules and used by ElectraNet the utilisation of transmission elements determines the split between locational and non-locational TUOS rather than using the arbitrary 50:50 split of standard CRNP.

Nonetheless, the modelling should give an indication of the relative charges at the extremities of the network under a standard or modified regime which may inform the Commission's deliberations on a consistent national pricing regime.

Cost Data

Grid Australia notes the normalisation of the network cost data by the Aggregate Annual Revenue Requirement (AARR) in order to have consistent cost data for NEM wide solutions. While not the focus of this report, should the Commission pursue a consistent national pricing regime under the Transmission Frameworks Review, a national approach to replacement cost valuation of the networks would be required.

Trading Intervals

As noted in the report the use of the full year of trading intervals is applied in all regions except Victoria. This is consistent with each TNSPs AER approved Pricing Methodology. The use of 10 peak trading intervals is not supported by Grid Australia as is unlikely to reveal the circumstances under which augmentation of network elements would be contemplated as is required under the Rules.

The Report notes that a number of additional 10 peak interval scenarios were pursued following exploratory discussions with Grid Australia members. Grid Australia reiterates its concerns with the appropriateness of the 10 peak interval methodology and does not endorse this methodology as it does not signal effectively investment and network utilisation decisions.

All Asset or Cumulative Assets

Grid Australia understands the intent of this variation was to determine the flow on effects of a new major interconnector asset on charges to adjacent regions.

Grid Australia believes that the analysis carried out in this area is unlikely to satisfy this intent.

A more robust methodology would involve identifying an interconnector asset in each region and inflating its value. By doing this for each region in turn the contribution of that element to prices in other regions should then be apparent. Alternatively it may be possible to modify the software used to identify the contribution of an identified interconnector asset to each connection point. This would effectively be a variation of the existing LOADSUM switch which looks at the contributions of all lines to the charges at that connection point.

Capacity or Energy Model

As has been previously stated Grid Australia supports the use of the capacity mode in conjunction with the full year of trading intervals. It is understood that the use of energy mode for large sample sizes tends to diminish the cost reflectivity of the methodology. The advice of the consultant in this area would be welcomed.

Load Data Accuracy

Grid Australia is concerned that the AEMC has characterised the quality of the load data provided as poor.

As noted earlier in this response it was expected that the data acceptance process would involve a high degree of collaboration between TNSPs and the consultant in order to identify material issues and resolve them promptly.

Notwithstanding concerns regarding the timeliness of the data acceptance process it is not apparent that all issues identified in section 8 of the report were drawn to the attention of TNSPs. An example of this is reference in section 8.3 to missing trading intervals in the ElectraNet load and generation data. By default ElectraNet's load data is filtered for trading intervals which exceed the expected maximum demands at any connection point in order to ensure that abnormal operating conditions due to temporary reconfigurations in the distribution or transmission networks do not inadvertently impact prices. Had this been raised with ElectraNet

the consultant would have understood that the trading intervals were omitted by design. Data could also have been readily resubmitted without the filter applied if desired.

The Report suggests the use of a system wide load data model as used by AEMO for marginal loss factor calculations. The Report notes that the TNSPs may need to “align their cost data with the AEMO network model”. While such a data set may provide a useful check for TNSPs, Grid Australia considers the use of the AEMO model would significantly complicate the cost allocation process for TNSPs and add additional complexity to the pricing process.

The Report’s Conclusions

Grid Australia supports the conclusion of the Report that a full year, capacity mode, standard CRNP approach be adopted for calculating inter-regional charges on a regional basis.

Grid Australia notes the complementary nature of the inter-regional charging proposal and the pricing proposals being progressed under the Transmission Frameworks Review. Grid Australia considers that it would be inefficient, and confusing to customers, to implement inter-regional charging and then soon after change again to a national approach to transmission pricing. Grid Australia therefore recommends that implementation of inter-regional charging be progressed only if there is no decision to implement national pricing in the near term.

In the event that the final Transmission Framework’s Review proposes a national approach to transmission pricing, Grid Australia considers that the choice between standard and modified CRNP be explicitly considered.

Given the process issues outlined earlier, Grid Australia would appreciate the opportunity to discuss this submission and the way forward with the Inter-Regional Transmission Charging Rule change with the Commission and staff.

Please don't hesitate to contact Bill Jackson on 08 8404 7969 if you require any further information or me on 08 8404 7983 to discuss any broader process issues related to the Rule change.

Yours sincerely



Rainer Korte
Chairman
Grid Australia Regulatory Managers Group