



## Comments on the Draft Determination on A Averaging loss factors in distribution network

21 June 2001

### Preface

This submission is based on an intimate knowledge of the Victorian Electricity Industry Restructuring, the close involvement with the establishment of the National Electricity Market (NEM) and over 10 years experience in electricity pricing both under a regulated environment and in the new competitive market.

Electricity Markets Research Institute (EMRI) undertakes research with primary focus on:

- Public benefit aspects of competitive electricity markets:
- Technical and market efficiency,
- Equity issues,
- Transition issues going from integrated utility in a monopoly market to competitive marketing.

A brief write-up of the work of EMRI and a short biography of the author are given in Appendix A.

### Introduction

The National Competition Policy Review of 1993 (Hilmer Report) has led to considerable restructuring of key infrastructure industries in Australia – electricity being one of the industries restructured at an early stage. Restructuring of the electricity industry actually started before the Hilmer Report – driven mainly by the developments in Victoria. The basic building block of the disaggregated industry consists of:

- Competitive wholesale market for electricity (commodity market)
- Monopoly market for network services
- Competition for retail customers

The National Electricity Market (NEM) and the National Electricity Code (NEC) basically cover the first building block - competitive wholesale market. The Monopoly market for network services cover three distinct groups of facilities – the Inter-connectors linking NEM regions, the transmission network within each NEM region and the distribution networks. Interesting to note that there is still no coherent and consistent methodology to ensure public benefit is safeguarded in this monopoly market. Most inter-connectors and transmission networks will shortly be under the jurisdiction of the Australian Competition & Consumer Commission, while most distribution networks continue under State jurisdictional Regulators.

The NEM is only now coming to grips with the central issue of ‘whether the NEM is a truly ‘National Market’ for all electricity dealings or is it destined to be the “National Electricity Wholesale Market”. Depending on the answer, we can expect the NEC to govern the conduct of the “Wholesale Market” participants or of all electricity industry participants.

## 2 Distribution Network Services Statutory Test

The fact that electricity industry restructuring started before of the Hilmer Report was implemented has created some undesirable anomalies. The main concern EMRI has with the current situation is the confusion between regulation of competitive market conduct and the regulation of monopoly market conduct. Because the NEM is (was originally intended to be) a wholesale market (cannot say it is truly competitive due to absence of demand side interaction – but ‘pseudo’ competitive as long as there is excess capacity) regulatory control was in the main based on Part IV of the Trade Practices Act 1974 (TPA) – Restrictive Trade Practices. The current Draft Determination is based on an assessment under Part VII of the TPA – Authorisations and Notifications in Respect of Restrictive Trade Practices. As noted earlier Distribution Network Services operate in a monopoly market and TPA Part VII is not the appropriate section of the TPA to be used. The fact that the subject matter is something incidental to determining the outcomes of the wholesale market is not sufficient excuse to use inappropriate process.

EMRI is strongly of the view that the Draft Determination should have considered the ramifications of TPA Part IIIA – Access to Services and the respective State based Access Arrangements. EMRI takes confidence in its position from the quotation below taken from the “Position Paper - Review of the National Access Regime” prepared in March 2001 by the Productivity Commission:

“In particular, there is a widespread perception that reliance on the anti-competitive conduct provisions in Part IV of the Trade Practices Act would not be a viable stand-alone mechanism”.

EMRI is concerned that customers dealing with the monopoly Distributors’ face huge disadvantages. Key disadvantages are – lack of access to data, difficulty in assessing compliance with good practice, lopsided bargaining power, almost no recourse to dispute resolution. Under an effective Access Regime these concerns would have been addressed.

It is also interesting to note that the above mentioned Position Paper by the Productivity Commission makes the point “competition is a means to an end, not an end in itself. The current approach necessitates that, under the declaration process, efficiency effects are addressed as part of a residual public interest test, rather than being a ‘first order’ consideration”. We are also told “While the impact on economic efficiency is always a primary consideration in determining community welfare, the NCC has indicated that it will consider other matters. These include environmental matters, social welfare and equity considerations, such as the maintenance of community service obligations (CSOs) and regional development”. The inference we can make is that the “benefit to the public” espoused in the Draft Determination – which follows the TPA Part IV is not that customer focussed as the interpretation by the Productivity Commission – presumably based on TPA Part IIIA.

## 3 The Code Amendment

EMRI recognises the desirability to simplify the loss factor calculation per individual retail customer. EMRI’s concern that customer safeguards inherent in effective Access Regimes are not being realised is evident by the fact that the only condition ACCC has attached to

the granting of conditional authorisation is “to ensure that the aggregate adjusted gross energy for distribution connection points assigned to virtual transmission nodes are accounted for when calculating the adjusted gross energy for transmission connection points”. No doubt it ensures that wholesale market operation is not jeopardised, but it misses addressing some underlying concerns of distribution network customers.

It must be remembered that most distribution network owners have their associated Retail operations within the area serviced by the distribution network. The nature of the retail market competition is such that it is not uncommon for an outside retailer to target a closely situated group of customers – maybe shopping strips, retirement homes / caravan parks, etc or a large facility and its surrounds – like a hospital or University. There is the added situation where a co-generator may be associated with an outside Retailer (or have its own Retail license) who has an interest to serve close-by customers. Allowing Transmission loss factors based on Virtual Transmission Nodes can lead to favoured treatment for the associated Retailer’s customers unless there are adequate provisions to discourage such practice. It is very important that the monopoly Distributors exercise of discretion is subjected to public scrutiny and not be left to the dis-interested vetting by sometimes in-effectual State based Regulation.

The blurring of the Transmission Loss Factors also has implications for assessing the appropriateness of the Distribution Loss Factors - which are derived by the Distributor. It sometimes happens that the Distribution Loss Factor forms a ‘catch all’ factor to absorb theft, metering errors, fault current (leakage) and poor accounting practices. Some State Regulators have instituted incentives to reward Distribution companies for reducing Distribution losses. It would be counter-productive to allow distributors to collect these rewards by unfair ‘gains’ from distorting Distribution loss factors.

Given that a very large number of customers do not have half hour metering and associated communication facilities, a substantial component of the pool market settlement is based on deemed values. For customers billed on a quarterly basis (over 30% of total energy) their accumulation meters are read only once in three months. Much of that deemed energy is on account of retail customers belonging to the associated Retail arm of the Distribution business. Given this vested interest in the deemed energy component, there needs to be a methodology to verify the integrity of the Transmission Loss allocation process. EMRI does not share the comfort displayed by the ACCC in endorsing the monopoly Distributors use of discretion in matters connected with deeming / loss allocation.

Minimum requirements for such transparency should involve:

- Publication of loss factors for all Virtual Transmission Nodes in conjunction with loss factors for Transmission Nodes derived by NEMMCO
- Each Distributor should publish the methodology used to determine the required number of Virtual Transmission Nodes, their area of application and the calculation process to derive the applicable loss factor
- A customer should have the right to ask the Distributor to produce the actual working how the particular customers Virtual Transmission Node Loss Factor was calculated based on the relevant Transmission Loss Factors provided by NEMMCO

- Where the issue at stake is higher than the threshold set for the Industry Ombudsman Scheme, there should be a dispute resolution process as is normal for an effective access regime.
- NEMMCO should be required to do an annual reconciliation of total losses from Virtual Transmission Nodes and directly allocated Transmission losses versus the total Transmission losses allocated to that Distribution system - as part of the Annual setting of Transmission Losses.

#### **4 Recommendations**

- EMRI recommends that the ACCC should assess the proposed NEC amendment not only under Part VII of the TPA but also under Part IIIA of the TPA
- ACCC should expand its conditions of authorisation to include:
  - Require Distributors to publish loss factors for all Virtual Transmission Nodes in conjunction with loss factors for contributing Transmission Nodes as derived by NEMMCO
  - Each Distributor required to publish the methodology used to determine the required number of Virtual Transmission Nodes, their respective area of application and the calculation process to derive the applicable loss factor
  - On an application made by a customer or prospective customer, the Distributor be required to produce the actual working how the applicable Virtual Transmission Node Loss Factor was calculated from the relevant Loss Factors provided by NEMMCO
  - Where the disputed issue at stake is higher than the monetary threshold set for the Industry Ombudsman Scheme, there be an effective dispute resolution process (as is normally found in effective access regimes).
  - NEMMCO be required to do an annual reconciliation of total losses from Virtual Transmission Nodes and directly allocated Transmission losses versus the total Transmission losses allocated to that Distribution system - as part of the Annual setting of Transmission Losses.

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## Appendix A

**Electricity Markets Research Institute (EMRI) undertakes research with primary focus on:**

- Public benefit aspects of competitive electricity markets:
- Technical and market efficiency,
- Equity issues,
- Transition issues going from integrated utility in a monopoly market to competitive marketing.

**Other research & consultancy work cover:**

- retail pricing and value studies,
- demand forecasting,
- demand side response,
- network and ancillary services pricing,
- pricing of externalities eg Greenhouse Gas Emissions.

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### **Biography of Lasantha Perera, Director - National Electricity Markets Research Institute**

Until July 1999, was Manager Pooling with Eastern Energy Ltd. Played a significant part in the deliberations of various bodies connected with the setting up of the National Electricity Market, including membership in the Dispatch and Pricing Reference Group. Was a founding member of the National Retailers Forum and have made many submissions to NEMMCO, NECA and the ACCC on different facets of the National Electricity Market.

Was inducted into Eastern Energy at its inception in 1994 and as Manager Pricing and Forecasting set up their Pricing and Forecasting section, participated actively in the trade sale process and managed the contestable customer pricing process.

As Pricing Analysis Manager with SECV spent seven years working on pricing development, cost of supply studies and the development of industry cost models, and defining price paths to reduce cross-subsidies. Was an active participant in the Victorian Electricity Supply Industry Restructuring process involving industry codes, Tariff Order and network pricing.

Has a MSc in Technological Economics from the University of Stirling in Scotland, is a Chartered Engineer with both the Electrical and Mechanical Institutes in the UK.