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Mr Paul Smith  
Chief Executive  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

By email: [aemc@aemc.gov.au](mailto:aemc@aemc.gov.au)

Dear Mr Smith,

### Draft Determination – Distribution Network Pricing Arrangements

The City thanks the Commission for the opportunity to make a submission on distribution network pricing arrangements.

It is noted that key changes in the draft determination relate to use of cost-reflective pricing by networks, and engagement with customers when setting prices.

In the City's view, increased engagement with customers when setting prices is to be commended. However, a single pricing objective ("cost reflective pricing") is too limited.

An objective relating to energy efficiency should be added:

***"The setting of network tariffs and charges must take into account the long term interest to the electricity consumer that is served by efficient use of energy both now and into the future."***

Also, an objective relating to the ongoing transition to a more decentralised electricity market should be added:

***"The setting of network tariffs and charges must take into account the relative use of system resources in an efficiently designed and managed system."***

Further information is set out in the City's submission. Additional detail can be provided by Chris Barrett on (02) 9265 9004 or at [cbarrett@cityofsydney.nsw.gov.au](mailto:cbarrett@cityofsydney.nsw.gov.au).

Yours sincerely



**Kim Woodbury**  
Acting Chief Executive Officer

Enclosure: Submission – Distribution Network Pricing Arrangements

*city of villages*



## **SUBMISSION TO THE AUSTRALIAN ENERGY MARKET COMMISSION**

### **RULE CHANGE PROPOSAL – DISTRIBUTION NETWORK PRICING ARRANGEMENTS**

**This submission is made in response to a draft determination by the Australian Energy Market Commission on pricing arrangements for distribution networks under the National Electricity Rules.**

#### **INTRODUCTION**

The City of Sydney (the City) welcomes the opportunity to make a submission to the Australian Energy Market Commission (AEMC) in relation to AEMC's draft determination on new pricing arrangements for distribution networks.

The draft determination follows a rule change request submitted by the Standing Committee on Energy and Resources (SCER), part of the Council of Australian Governments.

The SCER rule change request itself reflects recommendations in the "Power of Choice" review undertaken by the Productivity Commission. "Power of Choice" recommendations covered a number of areas, including the principles and processes for setting of prices by networks.

Key changes in the AEMC draft rule change determination relate to the use of long run marginal pricing (LRMC) as the basis for network prices and an explicit obligation on networks to consult with and better manage the impact of price changes on customers.

#### **CONTEXT**

The genesis of SCER's rule change request was the rapid rises in network prices in the period from 2003 to 2013 (especially in NSW and Queensland).

Some of the factors which led to rapid price rises – such as the need to replace network infrastructure as it reaches end of life – remain.

Others factors, such as a spurt of investment in augmentation to cater for expected growth in peak demand have largely subsided or faded away altogether.

In fact, much of the rapid growth in prices had little or nothing to do with actual levels of infrastructure investment. Rather, it was a consequence of the way networks have been funded, in particular, their permitted level of return on capital and their network growth forecasts.

Simply reducing the level of return on capital has done much to address deep and widespread consumer concerns about spiralling network costs. So has increased attention to network charges by regulators, politicians and commentators.

The fact that many network charges are today lower than they were two years ago is testament to the power of increased scrutiny.

In this context, the broad intent of the draft determination to formalise greater scrutiny of network price setting, and to increase network obligations to consult with customers and justify price rise to them, is not just welcome. It is long overdue.

To that extent, the actions of AEMC, SCER, the Productivity Commission and others must be commended.

However, the City believes that other issues ought to have been considered as part of the AEMC investigation. Because of their fundamental importance, these issues still deserve a public hearing, if not as part of the current determination then as a separate investigation. These issues - which go to the heart of network pricing - are discussed in this submission and specific recommendations are made on page 9.

## **COMMENT ON AEMC DRAFT DETERMINATION**

The City's comments on the draft determination are organised under the same headings as the table headed "Summary of key differences between existing and draft rules" that appears in the Executive Summary of the draft determination.

### ***Network pricing objective***

|                                         |
|-----------------------------------------|
| <b>Draft rule as summarised by AEMC</b> |
|-----------------------------------------|

|                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| Each network tariff should reflect the efficient costs of providing network services to the consumers assigned to the tariff |
|------------------------------------------------------------------------------------------------------------------------------|

The network pricing objective proposed by AEMC would seem to ignore broader consideration of social, environmental and economic factors relevant to network prices. Other objectives ought to be included. In particular, the City identifies two objectives consistent with the National Electricity Objective.

In the City's view, network pricing (and energy pricing generally) ought to reinforce the importance of being energy efficient. This is important in terms of the long term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply.

In the City's view, network pricing should also facilitate a transitioning to the electricity networks of the future, less focussed on large-scale transmission-based generation and more focussed on local generation. In the future, the cost of delivering electricity to customers ought to be lower if less of the network is used. Again, this is important in terms of the long term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply.

In support of its views, the City will be proposing an appropriate rule change to the AEMC in the near future.

## **Long run marginal cost (LRMC)**

### **Draft rule as summarised by AEMC**

DNSPs must base network prices on LRMC

Even within the confines of AEMC's proposed pricing objective, the mechanism of long-run marginal cost (LRMC) may not fully address cost reflective pricing.

Particularly at a time when networks are not growing, it is not obvious why setting prices based on anticipated (not actual) future costs is more equitable than setting prices on historic costs (which affect the rate of return).

LRMC can achieve only part of the goal of cost-reflective pricing. Here's why:

*1 – LRMC is focused on the allocation of forward costs relating to replacement, reinforcement or augmentation of network assets.*

No guidance is given as to how residual costs are to be distributed amongst customers, even though in some networks these may exceed 90 per cent of operating costs over a regulatory period. Customers may expect historic costs to be allocated on one basis, such as perceived equity; forward costs may be allocated on another. Thus, the effect of LRMC may be dampened.

*2 – AEMC has left it in the hands of networks to define what is meant by LRMC*

AEMC itself demonstrated that there are quite a range of LRMC models and that these may have quite different effects, depending on how tariff classes are defined or how costs are categorised and dispersed.

Without more active guidance, and especially in an environment of static or declining demand, the efficiency signal to customers from LRMC will be at best muted.

*3 – LRMC as described approximates medium-run marginal cost.*

One of the underlying concerns that the City has about the use of LRMC based on a single regulatory period is that anticipated marginal costs can change markedly between regulatory periods (recent history in NSW amply demonstrates this). Accordingly, the pricing signals to customers could be expected to change, and do.

This can be illustrated by recent pricing changes for Ausgrid residential customers. Most residential customers use the inclining block tariff. In FY 2014, the gap between the lowest block and the highest block was over 50 per cent; in FY 2015, the gap dropped to about 16 per cent. To add to this, some retailers in the Ausgrid franchise area that currently charge less for the highest block than for the intermediate block, ignoring the intended pricing signal!

*4 - What constitutes LRMC for distributors may not coincide with LRMC for transmission networks.*

Most customers have only the most limited awareness of the distinction between networks; if transmission costs are simply a cost to be smeared across distribution network customers, how does this provide meaningful pricing signals?

Retailer costs or interests may not align with distribution networks, any more than transmission network costs.

It is disappointing that costs are not seen more from the perspective of those on whom they ultimately fall – as a package. This is an unfortunate consequence of the fragmented electricity supply framework of the current time.

*5 – Tariff classes are too broadly spread and too divorced from the drivers of electricity investment for efficient sharing of costs within tariff classes.*

Public scrutiny of electricity network costs is limited and a very large proportion of the knowledge which underlies the allocation of costs between groups of customers is known only to a very small number of industry participants, be they consultant pricing specialists, network asset engineers or economist-regulators.

The fact that Australian networks (especially in NSW and Queensland) have large and disparate franchise areas compounds the insensitivity of tariffs.

For example:

- the daytime peak in central Sydney runs from 11am to 5pm, according to a recent Transgrid presentation. This is different from the overall Ausgrid network peak, which runs from 2pm to 8pm
- the seasonal peak (winter) in southern NSW and the Northern Tablelands does not match the seasonal peak (summer) on the North Coast and inland NSW.

This could be seen as an argument for more pricing that is more localised. It could also be seen as an argument for reducing reliance on broad-based tariff structures as a way of allocating network costs.

### ***Total efficient cost recovery***

#### **Draft rule as summarised by AEMC**

The revenue recovered from each network tariff must reflect the DNSP's total efficient costs of serving the consumers assigned to that tariff.

DNSPs must recover their allowed revenue in a way that minimises distortions to the price signals for efficient usage provided by LRMC based prices

The concept of total efficient costs needs to be treated with some scepticism. For example, concern has been raised by some distributors about the distortionary effects of consumer based solar panels. Yet most customers with solar panels impose reduce load on the network, not more. Hence, they bring down the need for network augmentation, they do not increase it.

Pricing signals may be difficult for customers to respond to e.g. tenants are constrained by landlord preferences; fuel switching for cooking is not possible in areas that do not have gas supply; areas with constraints in the short term become areas that are over-serviced after upgrades; overseas studies show inconsistent responses to pricing signals

The total efficient cost recovery approach does not of itself provide an incentive for networks to avoid costs, meaning, the underlying issue of keeping networks as small as possible and extending the use of existing networks as much as possible has been effectively ignored.

### ***Consumer impact principle***

#### **Draft rule as summarised by AEMC**

DNSPs must manage the impact of annual changes in network prices on consumers e.g. by transitioning consumers to new network prices over one or more regulatory periods.

DNSPs must set network prices which consumers are reasonably capable of understanding i.e. consumers are able to relate their usage decisions to the price structure

The principle of consumer impact should not be limited to moderating the impact of annual changes, long overdue as a principle as this certainly is.

Customers, other than medium and large business customers, do not generally experience the direct effects of network pricing.

Retailers receive and pass on network charges but they rarely do so in a way that directly reflects the charges made by networks, at least in the case of mass market customers.

A classic case is changes to small customer pricing structures in NSW that have occurred since full deregulation on 1 July this year. A pattern of inclining block charges for non-TOU residential customers has been replaced by what are now essentially flat blocks (notwithstanding that neither energy costs nor tariff elements have fundamentally altered).

### ***Jurisdictional obligation principle***

#### **Draft rule as summarised by AEMC**

DNSPs may depart from network prices that meet the LRMC and total efficient cost recovery principles to the extent necessary to meet jurisdictional pricing obligations.

The City has no comment to make on the proposed principle, other than that the concept of a National Electricity Market may deserve re-examination.

Costs to customers have soared and investment in network infrastructure has increased drastically, even as generation costs have been driven downwards, making it harder for emerging technologies to compete with existing suppliers.

Australia has ended up with one of the largest and most extended electricity grids in the world, despite being so thinly populated and having such a dispersed pattern of settlement.

### ***Process to develop network prices***

#### **Draft rule as summarised by AEMC**

DNSPs must develop a tariff structure statement (TSS) that sets out their network price structures. The TSS is approved by the AER as part of the regulatory determination process and applies for the five year regulatory control period. Price levels are approved by the AER on an annual basis

The City believes that other matters ought to be considered by distribution networks when developing their price structures and will be proposing a rule change to the AEMC in the near future in support of this view.

Essentially, the City is of the view that the cost of transporting electricity over a reduced set of network elements ought to be lower than the average cost of delivering electricity over the combination of transmission, sub-transmission and local distribution network elements.

### ***Consultation***

#### **Draft rule as summarised by AEMC**

DNSPs are required to describe how they have consulted with retailers and consumers on the design of network prices and sought to address their concerns. The AER must invite stakeholder submissions on the TSS

The City welcomes a process of engagement on network pricing. However, the City notes that most electricity customer do not experience network pricing directly, accordingly, greater transparency on customer bills may be desirable.

### ***Timing***

#### **Draft rule as summarised by AEMC**

Binding timeframes are included so that network prices are generally approved at least six weeks before they commence, except in the first year of a regulatory period. To allow this to occur, DNSPs must submit their annual pricing proposals earlier; TNSPs (other than those in Victoria) must publish their prices earlier; and the AER must approve network prices within 30 business days

The City does not have a view on the timing of network price setting.

### **ADDITIONAL OBJECTIVES FOR NETWORK PRICING**

The work done by AEMC in preparing its draft determination is of great value in demonstrating the complexities of setting network prices.

As discussed above, the use of LRMC can play only a limited part in setting prices, especially in a period of consolidation (rather than growth) and innovation (both in customer expectations and in technology).

Nothing in the introduction of the proposed pricing objective ought to be construed as relieving networks of a responsibility to consider energy efficiency or the proper treatment of embedded generation in their pricing structures.

The City proposes that two additional objectives ought to be added to the pricing principle identified by AEMC i.e. that each network tariff should reflect the efficient costs of providing network services to the consumers assigned to the tariff.

These two additional objectives are as follows:

***“The setting of network tariffs and charges must take into account the long term interest to the electricity consumer that is served by efficient use of energy both now and into the future.”***

The reasoning behind this objective is straightforward and would seem unarguable – using less energy, not more, should be encouraged now and into the future. This is important in terms of the long term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply.

The implication of this is potentially quite profound – network tariffs (and other pricing elements) ought always to encourage efficient use of energy and of energy infrastructure. As a consequence, networks ought not to be rewarded for building (or replacing) infrastructure and then encouraging greater use of network infrastructure by the way that network tariffs are structured. Rather, networks ought to be rewarded for keeping networks smaller (rather than larger) and more flexible (able to respond to changes in generation technology and type).

***“The setting of network tariffs and charges must take into account the relative use of system resources in an efficiently designed and managed system.”***

Again, the reasoning behind this objective is straightforward and would seem uncontroversial – using less system resources ought to be rewarded with a lower applicable tariff. This is important in terms of the long term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply.

The implication of this objective is also potentially quite profound – instead of offering electricity to customers that is imported to the local loop over vast and complex infrastructures at the same cost as electricity generated (or sourced) from across the road or even in the same building, recognition needs to be given to the lower cost to networks of locally generated and used electricity.

Increasing demand-side participation was an important recommendation from the “Power of Choice” review.

A standardised, cost reflective framework for valuing local exports creates price signals to weight generation towards the times of day and seasons when the network needs it. Developing appropriate local charges and payments will also enable networks to start ‘shaping’ local energy and the accompanying business models to deliver effective network support.

The more important benefits for networks from enabling local energy is likely to be in the medium to long term, in ‘future proofing’ their business model.



By offering more attractive and fairer network terms for local energy, networks can actively promote the use of existing local grids as an alternative to grid defection. A new modular approach to charging and paying for grid services could create new revenue streams for networks, and de-incentivise behind the meter solutions.

Maintaining high utilisation of the local network is important to preventing widespread grid defection. This proactive approach to managing the transition to a system with high contributions from local energy will help networks, not just producers and consumers of local energy.

## CONCLUSION

The City thanks the AEMC for the opportunity to comment on its preferred rule change for distribution network pricing principles. The City particularly welcomes AEMC's initiative in including additional consultation process and other consumer safeguards as part of its proposed changes.

The introduction of cost-reflective pricing (as represented by the use of LRMC) must be seen as only the first of several steps in refining the objectives which underpin the electricity supply system in the National Electricity Market.

In particular, the proposed network pricing objective ought to be supplemented by two further objectives:

***“The setting of network tariffs and charges must take into account the long term interest to the electricity consumer that is served by efficient use of energy both now and into the future.”***

AND

***“The setting of network tariffs and charges must take into account the relative use of system resources in an efficiently designed and managed system.”***

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Chris Barrett Commercial Manager, Green Infrastructure

Peter Coombes, Senior Program Manager, Green Infrastructure

16 October 2014