

Mr Zaeen Khan  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235



5 May 2014

**Re: ERC0161 - National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014 Consultation Paper**

Dear Mr Khan

I write to provide a submission from the Energy Efficiency Council on the National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014 Consultation Paper (hereafter referred to as the "consultation paper").

The Energy Efficiency Council is the peak body for energy efficiency, demand management and cogeneration. The Council includes energy users and experts that assist energy users to manage their energy use. Tariff structures sending appropriate signals over the long term are critical to enable energy users to access cost-effective energy services by balancing their investment in energy supply and demand-side services.

**Overview**

The Council supports the view that electricity market rules and regulations, including network tariff structures, should support the National Electricity Objective (NEO), namely *'promoting efficient investment in, and efficient operation and use of, electricity services for the long term interest of consumers of electricity.'* To have an electricity market that serves the genuine interests of consumers, the definition of 'energy services' must be interpreted to include both supply-side and demand-side elements.

The current energy market arrangements for network pricing, and a number of other matters, do not support the NEO, and there is a strong case for reform. This submission focuses on distribution network pricing arrangements, but notes other regulatory issues where they overlap and interact with pricing arrangements.

Current network tariff structures are not cost-reflective and likely contributed to peak demand growing much faster than consumption between 2000 and 2009. On its own, this would have put upward pressure on network charges. However, it is critical to note that Distribution Network Service Providers (DNSPs) invested to meet their projections of peak demand growth, which were significantly greater than actual peak demand growth. As a result of DNSPs investing to meet incorrect peak demand projections, many parts of the grid now have excess capacity and network charges rose very rapidly between 2008 and 2013.

Therefore, we argue that reform is necessary for both pricing arrangements and DNSP incentive structures, to ensure that DNSPs have a strong incentive to minimise unnecessary investment in the grid. We further argue that, in some instances, alternative approaches to tariff structures may be more effective or feasible for encouraging efficient investment in, and operation and use of, electricity services. For example, ensuring that

DNSPs and third parties are incentivised to reduce peak demand in constrained parts of the grid may be more effective than imposing nodal tariff structures on end-users.

## Efficiency and Equity in Pricing Arrangements

The Council supports the proposal that tariff structures should encourage efficient future investment, operation and use of energy services by both energy users and DNSPs. However, given the need to recover significant sunk investment in the network, it is critical to assess the implications of various forms of tariffs that could be used to recover these sunk costs.

DNSPs overinvested in network capacity over the past five years, and recent trends in consumption and peak demand suggest that there will be excess capacity in much of the grid for at least the next five years. Given significant uncertainty around demand patterns and sources of generation beyond 2020, it is desirable to minimise further investment in expanding network capacity in coming years so as to reduce the risk of more stranded assets.

Economic efficiency is a key principle for tariff design, to ensure that future investment in, operation and use of electricity services is efficient. This includes the maintenance and operation of existing assets. However, for sunk investments the main goal of tariff structures should be equitable apportionment of the risks and costs of investments while maintaining long-term price signals that take account of future grid costs.

The community will hold multiple definitions of equity that may conflict. For example, equity principles for recovering sunk network costs from households could include:

- |                             |   |
|-----------------------------|---|
| <b>Investment certainty</b> | Where households have responded in good faith to existing tariff arrangement (e.g. consumption charges), moving away from these arrangements could undermine their demand-side investments and long-term interests. Therefore, it is critical to engage consumers in any change in tariff structures and transitions must be carefully structured to consider existing demand-side investments.   |
| <b>Uniformity</b>           | Some individuals may hold the view that it is equitable to split sunk network costs equally between all households (e.g. fixed daily charges). However, the majority of the community would find this highly inequitable, as it doesn't reflect a household's current use of the network, conflicts with the need for price signals to reflect the cost of high peak demand and devalues existing investments that have been made to reduce consumption or peak demand. In general, increasing uniform daily charges is both regressive and highly undesirable. |
| <b>Ability to pay</b>       | Some individuals will hold the view that low-income households should pay lower network charges. Income inequality can be dealt with through a number of means, such as welfare payments, and distorting price signals based on ability to pay could encourage higher consumption or higher peak-demand among low-income households, affecting future investment in the network.  |
| <b>Demand patterns</b>      | While sunk network costs are due to historical decisions by energy users and DNSPs, apportioning sunk costs to users based on their current energy use patterns can provide a proxy for historical use at a site and is: <ul style="list-style-type: none"><li>- Compatible with efficient price signals for future investment</li><li>- Supportive of price signal continuity;</li></ul>   |

- Broadly accepted as a principle; and
- Broadly supported as a route for price-sensitive households, including pensioners, to reduce their energy bills.

A network pricing structure could include a number of components to balance these equity considerations. For example, a proportion of sunk costs could be allocated through uniform daily charges, with the remainder of sunk costs allocated by some form of peak demand charge and a critical peak charge to encourage efficient future investment.

Whichever pricing structure is selected, it should encourage efficient investment in, operation of and use of electricity services. Even where network capacity exceeds current requirements, network replacement and maintenance costs are significant and price signals will help to determine whether assets should be retired or reduced in scale when they need to be replaced.

For example, in some fringe-of-grid areas it might be more cost-effective to retire existing network assets and allow users to install distributed generation, rather than continue a very expensive process of asset maintenance. A number of DNSPs are actively considering this option, and price signals will be critical to enable this to occur.

Finally, consumers are currently expected to take on the full risk of sunk costs incurred by DNSPs, despite having no control over these costs. While the Council broadly supports the notion that DNSPs should be able to recover their necessary costs, it is both highly inequitable and inefficient if DNSPs face no risk from imprudent investment decisions. At the very least, we would argue that DNSPs should take on more risk from any future investment in the grid.

Equity considerations are critical and DNSPs face limited incentives to consider these issues. Therefore, we recommend that an energy market body produce guidance to help inform communities, DNSPs and the Australian Energy Regulator (AER) as they develop equitable tariff structures for specific regions.

### **Consultation Arrangements**

There is broad acceptance that tariffs need to be periodically reviewed, and potentially changed, to ensure that they are efficient and equitable. However, changes in pricing arrangements affect the value of investments that energy users have made in end-use equipment (e.g. heating systems and industrial refrigeration) in good faith under current pricing arrangements. Therefore, it is critical that there is genuine communication and consultation with energy users over any planned changes to network tariffs.

It is utterly unacceptable that some DNSPs recently changed tariff structures for large and small energy users with almost no consultation. These tariff changes undermined energy users' investments that had been made in good faith based on existing tariff structures. These *ad-hoc* changes were contrary to the NEO and the principle of investment certainty and caused significant concerns in the community.

Therefore, the Council supports the proposal that DNSPs be required to develop a Pricing Structures Statement (PSS) and consult in the development and implementation of the PSS. The PSS should set out the cost drivers for future investment, and how they should most efficiently be signalled, what are the sunk costs and how the proposed tariff structures would balance equity and efficiency, why a change in pricing structures is required (if it is) and a transition plan for moving from existing tariff structures to a more equitable and efficient approach.

As noted in the consultation paper, there is a hierarchy of importance for energy users in consultation:

- It is critical that DNSPs engage with energy users over tariff structures and the rough proportion of costs split between the various parts of the tariff (e.g. 90 per cent of costs levied on peak demand charges and 10 per cent on daily charges). Having certainty on tariff structures is essential for energy users' investment in end-use equipment.
- While less critical, it is important that DNSPs identify the rough division of sunk costs between various classes of energy user, to facilitate debate amongst energy users about how these costs are shared.
- Finally, modest changes in the absolute level of network charges (e.g. a three per cent increase in 2015-16), while material, are less of an issue for long-term investments than changes in tariff structures.

Therefore, the Council recommends that DNSPs be required to consult extensively to develop a five-year PSS that sets out binding tariff structures and the proportion of sunk costs allocated to the various parts of the tariff. While DNSPs should have the option of changing tariff structures within that 5 year period, the PSS should set out the timeframe or conditions under which those changes would take place (e.g. a significant increase in peak demand in a region may result in the introduction of steep critical peak charges). If the DNSP wanted to make changes within this period that are not in line with the PSS, they should be required to undertake further consultation and seek approval from the AER.

This type of approach would balance the need for consultation and flexibility, while minimising the amount of effort required in consultation. While consumers and other stakeholders want to have an input on network tariff arrangements, fewer, more effectively structured consultations will result in better, deeper engagement for less time and effort. As noted earlier, we strongly recommend that an energy market body consult widely with consumers to develop detailed guidance on preferred tariff structures. This will reduce the need for reinventing the wheel during the development of every PSS.

## Summary

The Council supports reviewing network pricing arrangements to promote *'efficient investment in, and efficient operation and use of, electricity services for the long term interest of consumers of electricity.'*

Changes in tariff structures need to be carefully managed given both distributional impacts and the potential to undermine consumers' investments in end-use equipment. Given the AEMC's position that DNSPs are not incentivised to set efficient tariff structures, let alone equitable tariff structures, the Council recommends that an energy market body be tasked with consulting with energy users and other stakeholders to develop detailed guidance to help DNSP's and others develop tariff structures.

If you have any questions on the points raised in this submission please contact me on 0414 065 556 or [ceo@eec.org](mailto:ceo@eec.org).

Yours sincerely



Rob Murray-Leach  
Chief Executive Officer

## Responses to Specific Questions

### 1. What other considerations should be included in the assessment framework

In addition to efficient pricing, stakeholder engagement, predictability, allocation of risks and regulatory burden, the assessment framework should also consider:

- Equity and distributional impacts from various tariff structures.
- Investment certainty for energy users.
- The potential for consumers or intermediaries to respond to price signals. For example, price signals can be more effective if they are levied at key decision-making points (e.g. when a building is being constructed or air-conditioners installed).

### 2. Does figure 6.1 reflect the key components of how network tariff structures and pricing levels determined by DNSPs?

Figure 6.1 is reasonable, but also need to include the step at which the rough proportion of network costs is apportioned to various charging elements (e.g. fixed and variable components).

### 3. How often are network tariff structures likely to change during a regulatory period, and what are some of the reasons for that change?

No comment at this time.

### 4. What level of information on network tariff structures and network pricing levels should be included in a network tariff structures document to assist retailers and consumers to understand and respond effectively to changing prices and structures over the regulatory period.

The tariff structures documents should include:

- Tariff structures and the rough proportion of costs split between the various parts of the tariff (e.g. 90 per cent of costs levied on peak demand charges and 10 per cent on daily charges).
- The rough division of sunk costs between various classes of energy user.
- Reasonably accurate figures on absolute levels of network charges, and conditions under which these would be changed e.g. if there is a consumption-based charge and consumption goes down, the absolute charge per unit of consumption might be raised (revenue decoupling).
- Any conditions under which network tariff structures or prices might change in the regulatory period.

### 5. Should DNSPs be able to vary their network tariff structures during the regulatory period? Why or why not?

To provide investment certainty for energy users, it is critical that changes to network tariff structures are minimised during a regulatory period, particularly the sunk cost recovery elements. However, in certain circumstances structures might need to change (e.g. rapid growth in peak demand necessitates the introduction of a critical peak charge).

### 6. If a document on network tariff structures is put in place, should this be an indicative document or should the DNSPs be required to apply it in their annual pricing proposals.

The document must be binding to be of value. However, the document could stipulate conditions under which tariff structures or levels might be changed.

**7. If a document on network tariff structures is binding on the DNSP, should it be able to be varied and under what circumstances? If so, should it be varied outside or within the annual network pricing process?**

The document must be binding to be of value. However, the document could stipulate conditions under which tariff structures or levels might be changed.

**8. Should DNSPs be required to consult with stakeholders before submitting their proposed pricing structures statement to the AER for approval through the regulatory determination process?**

Yes.

**9. Is consultation necessary if DNSPs seek to amend their approved pricing structures statement during the regulatory period, as opposed to at the time of the regulatory determination? Are there any circumstances where amendments to the network tariff structures in the annual pricing process should be exempt from consultation on amendments to the previously approved pricing structures statement?**

Consultation should be required if DNSPs amend their approved pricing structures statement during the regulatory period. However, DNSPs should be given the option of including conditions under which tariff structures or levels might be changed in their approved statements, along with details on those potential changes, which would reduce the need for additional consultation during a regulatory period.

**10. Is it necessary for the AER (as opposed to the DNSP) to consult with stakeholders before approving any proposed amendments to the pricing structure statement sought by the DNSP?**

Yes.

**11. Should the AER be required to provide guidance on the consultation process for DNSPs? Should the guidelines be binding on the DNSPs?**

Yes.

**12. Does the PSS need to be approved?**

Yes.

**13. Should the AER be able to amend a DNSP's PSS? If the AER does not approve a DNSP's proposed pricing structures statement, what arrangements would be suitable for default network tariff structures?**

Yes.

**14. What are the risks to the annual pricing process if DNSPs do not comply with their approved pricing structures statement or are late submitting a full pricing proposal?**

No comment at this time.

**15. How should DNSPs be incentivised to comply with their approved pricing structures statement in their annual pricing proposals? How should compliance incentives be balanced against the financial risks for DNSPs and certainty for stakeholders?**

No comment at this time.

**17. Should DNSPs include forecasts of their expected changes in network tariff pricing levels in the pricing structures statement?**

Yes, this is essential to enable energy users to make investments in supply and demand.

**18. Should a pricing structures statement process be introduced as soon as possible? If so, what risks are there from having it in place before the next regulatory determination period?**

The requirement for Pricing Structures Statements should be introduced as soon as possible.

**19. Does the AER consultation guideline need to be in place before a PSS can be implemented?**

No comment at this time.

**20. If a PSS framework were implemented, would this reduce the timing pressures for the DNSPs, the AER and retailers that have arisen from the first year and subsequent year annual pricing process?**

No comment at this time.

**21. What would be the likely impacts on customers of making an LRMC approach mandatory?**

If it provided more certainty around price signals, a mandatory approach would be of significant benefit. However, such a mandatory approach must allow networks to take suitable alternative approaches, e.g. Queensland DNSPs providing lower network tariffs for households that accept remote load shedding.

**22. What would be the impacts on DNSPs of making an LRMC approach mandatory? Does it result in increased compliance risk?**

No comment at this time.

**23. How limited will DNSPs be in basing prices at LRMC if they must first comply with jurisdictional instruments?**

No comment at this time.

**24. Should LRMC be defined? If so, what level of detail would be appropriate?**

No comment at this time.

**25. Should one methodology apply to calculating LRMC or should multiple methodologies be allowed? Which is/are the most appropriate methodology(ies)?**

No comment at this time.

**26. Should the AER be required through a guideline to specify the methodology or methodologies of calculating and applying LRMC?**

No comment at this time.

**27. What is the impact of coincident peak demand on network costs and how are these additional costs currently recovered in network tariffs?**

Coincident peak demand has a significant impact on network costs. Current price signals to almost all classes of users poorly reflect coincident peak demand.

**28. How should LRMC pricing reflect additional costs associated with coincident peak demand and what are the practical impediments to DNSPs adopting tariffs that reflect coincident peak demand?**

No comment at this time.

**29. How important are locational pricing signals for distribution networks? Are locational pricing signals for some types of customers more important than others?**

Locational pricing signals are critical, but these might be better implemented through incentives for DNSPs, retailers and third parties to reduce demand or implement distributed generation solutions in specific areas.

**30. What are the practical impediments to DNSPs adopting tariffs that reflect locational pricing signals?**

Locational tariffs would be complex to administer and politically very difficult. However, locational incentives to DNSPs and other parties would be significantly easier to implement.

**31. Is an additional principle required to further encourage network prices which are based on the drivers of network costs to the maximum extent possible?**

No comment at this time.

**32. What are the pros and cons of using a Ramsey pricing approach or a postage stamp pricing approach?**

It is important to consider the equity impacts of a range of pricing approaches, not just Ramsey pricing or postage stamp pricing, for recovering residual network costs.

**33. Are there any other pricing approaches that should be considered to recover residual network costs?**

There are a number of equity principles that are critical for residential network pricing, including:

- Investment certainty for energy users.
- Splitting the residual cost of the network based on demand patterns.

**34. Should an approach or approaches be specified in the NER or an AER guideline?**

No comment at this time.

**35. What jurisdictional instruments or requirements could limit the ability of a DNSP to comply with any requirement to base tariffs on LRMC (including where that LRMC may vary with customer location or with different local peak demands)?**

There may be limits introduced by state license conditions and state policies.

**36. What are the potential impacts of a NER requirement for DNSPs to comply with jurisdictional instruments?**

No comment at this time.

**37. Should a requirement for DNSPs to take into account the impact of tariffs on consumers be included in the pricing principles?**

Yes.

**38. If a requirement is included, does the proposed principle provide enough guidance on how it is to be complied with, or would an AER guideline be useful?**

No comment at this time.

**39. If a requirement is included, does the proposed principle conflict with other principles within the NER?**

No comment at this time.

**40. Should network tariffs reflect transmission pricing signals? If so, what would be the most appropriate way to achieve this for different types of network customers?**

No comment at this time.

**41. Is the change to a mandatory requirement to group customers into tariff classes likely to achieve the desired outcomes?**

No comment at this time.



**42. Is the change to a mandatory requirement to group customers into tariff classes likely to result in inconsistencies within the NER or with any jurisdictional instruments or requirements?**

No comment at this time.

**43. Is the proposal to apply side constraints across regulatory periods likely to materially benefit consumers by protecting them from price shocks?**

No comment at this time.

**44. Is the proposal to apply side constraints across regulatory periods likely to lead to inconsistencies with other requirements in the NER?**

No comment at this time.

**45. Are there likely to be implementation issues in applying side constraints across regulatory periods?**

No comment at this time.

**45. Should network tariffs of customers with interval meters or other types of time-based meters be subject to side constraints?**

No comment at this time.