

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

*Submitted via [www.aemc.gov.au](http://www.aemc.gov.au)*

19 December 2013

Dear Mr Pierce,

**Submission on distribution network pricing arrangements (ERC0161)**

EnerNOC is grateful for the opportunity to comment on this rule change request.

EnerNOC is an energy management company, currently managing over 24 GW of load sourced from over 14,000 commercial and industrial sites across markets in North America, the UK, Australia, New Zealand, and Japan. As well as offering much of this load into energy, capacity, and ancillary services markets of varied designs, we also assist customers in improving their efficiency and minimising their spending on energy.

**1 General comments**

From discussions with industrial energy users, we understand that the apparent arbitrariness of existing tariffs, and changes to them, causes considerable frustration. It is also clear that it is rare for any consumer to face a tariff that provides an effective price signal of network cost drivers. Network tariffs are hence treated by customers as an unpredictable and unmanageable cost.

The proposed changes can fix this, so we strongly support them.

We welcome the recognition by SCER that even price-capped DNSPs are not incentivised to price at efficient costs, and that more specific guidance is needed. This is consistent with the findings of the Productivity Commission.

It is correct to focus on coincident peak demand, as this is the main driver of network costs. A successful set of pricing principles should lead to coincident peak demand charges dominating network tariffs, and energy charges being eliminated.<sup>1</sup>

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<sup>1</sup>As discussed in our response to Q33, energy charges may, however, have a role in recovering residual network costs.

We hope that these changes will lead not just to better cost-reflectivity, but also to actionable price signals, so that energy users will have a reason to change their behaviour in a way that reduces long-run network costs. At present, they have no reason to do so.

## 2 Responses to consultation questions

Our answers to the relevant questions in the consultation paper are below:

*Q4 What level of information on network tariff structures and network tariff 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 document should set out the tariff structures in detail, along with the method by which the actual prices for each tariff component will be calculated each year, clearly stating all the inputs to the process.

Ideally, there would be sufficient information that the price setting process each year would become purely mechanical: taking the most recent values for all of the inputs, and applying the agreed methods to arrive at the new prices.

In practice, side-constraints are likely to render this excessively complex. However, it would still make sense to calculate and publish the ideal, unconstrained tariffs in this way, and then amend the results to enforce the side-constraints.

This would remove arbitrariness from tariff setting – increasing customer confidence in the process – and have the added benefit of clearly identifying the distortions caused by the side-constraints.

*Q5 Should DNSPs be able to vary their network tariff structures during the regulatory period? Why or why not?*

Yes, they should be able to change their structures. Otherwise they would only have a single opportunity every five years to introduce new structures or improve structures based on lessons learned.

However, frequent changes of structure would undermine customer confidence and cause retailers to incur excessive costs in updating their tariffs and systems.

We would therefore suggest that there should be a higher burden of proof on the DNSP for an intra-period change than when establishing the structures prior to the start of the regulatory period: for the AER to approve a change, they must be satisfied not only that the new structures comply with the pricing principles, but also that they comply better than the old structures.

*Q6 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?*

They should be required to apply it. This is necessary to avoid surprises and to give consumers confidence that the prices charged are fair.

*Q7 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?*

Yes, it should be able to be varied, as discussed in our response to Q5. Any variation to the structures would need to be approved by the AER before the start of the annual pricing process, so as to allow retailers plenty of time to adapt.

*Q8 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.

*Q9 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?*

Yes. We cannot see why there would be any need for exemptions.

*Q10 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.

*Q12 Does the PSS need to be approved?*

Yes. An approval process is essential to ensure that the Pricing Structure Statement complies with the pricing principles.

*Q13 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. If a DNSP is for some reason unable or unwilling to submit a statement that complies with the pricing principles, the AER should be able to amend their

submission so that it does comply. This seems a better outcome than continuing with the previous pricing structures, as those may no longer be appropriate or compliant with the pricing principles. The threat of this action should provide a strong incentive for DNSPs to submit compliant statements.

*Q15 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?*

Under the approach outlined in our response to Q4, the annual pricing proposals become quite simple. If a DNSP is for some reason unable or unwilling to apply the approved methods to determine the prices, the AER should do it for them. If the DNSP has also failed to publish some of the necessary inputs, the AER should use its own reasonable estimates. Again, this fallback arrangement should lead to DNSPs choosing to comply.

*Q16 Should DNSPs include forecasts of their expected changes in network tariff pricing levels in the pricing structures statement?*

The most important purpose of the PSS is to explain the method by which the DNSP will arrive at the prices. It may be helpful also to include price forecasts, but it should be made clear that – unlike the structure and the method – they’re not binding. It may be more helpful to provide ranges, rather than point estimates.

*Q18 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?*

Yes. The potential benefits from increased transparency seem great, and the risks seem minimal.

*Q20 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?*

It seems likely that it would reduce the pressures, as the tariff structure – the most difficult part to implement – would be known ahead of time, and it may also be possible for interested parties to forecast the annual changes to the inputs and hence the likely prices.

*Q21 What would be the likely impacts on customers of making an LRMC approach mandatory?*

So long as the tariffs were also sensibly structured, such that they produced actionable price signals, it would provide appropriate incentives for customers to change their consumption patterns in ways that reduce long-term network costs.

Where customers' existing tariffs are far from cost-reflective, side-constraints should act to smooth the transition.

If the approach outlined in our response to Q4 is adopted, the increased transparency should lead to customers having greater confidence that tariffs are fair, and greater willingness to invest, or to change behaviour, in response to the resulting price signals.

*Q22 What would be the impacts on DNSPs of making an LRMC approach mandatory? Does it result in increased compliance risk?*

It would reduce DNSPs' discretion in setting prices, which should reduce compliance risk.

*Q27 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 is a strong driver of long-run efficient network costs, and yet at present these costs are mostly recovered in a smeared manner through energy charges.

*Q28 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?*

The long-run marginal cost to the DNSP of supplying an additional unit of energy is generally very near zero. Hence we would expect the energy component of an LRMC-based tariff to be at or near zero.

We would expect DNSPs to evaluate their LRMC on a capacity basis, as it is the need to provide capacity that drives a DNSP's costs.

This is likely to be dominated by coincident peak demand, but we would expect there to be smaller non-coincident anytime demand element to cover dedicated connection assets.<sup>2</sup>

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<sup>2</sup> Anytime maximum demand charges are a poor fit for recovering the costs of shared assets, as they provide perverse incentives. This is a particular problem for customers with cogeneration facilities, as it leads to them incurring significant network costs when they have a maintenance outage of their generators, regardless of when it occurs. Charging for shared assets on the basis of coincident peak demand achieves the desired outcome: it provides an incentive for the customer to schedule outages for times when the network is not stressed.

It is only for small customers outside Victoria that this kind of tariff arrangement is impractical, due to the lack of interval metering. This approach should be adopted for all customers who have interval meters.

**Q29** How important are locational pricing signals for distribution networks? Are locational pricing signals for some types of customers more important than others?

There is a trade-off between simplicity and cost-reflectivity. As the number of pricing regions increases, so do complexity, overhead costs for DNSPs, retailers, and the AER, and the potential for customer confusion. Some analysis is required to determine the best compromise. We have not done this analysis, but we anticipate that it would find one pricing zone would suffice for many DNSPs, and others would need at most half a dozen.

Where the DNSP wishes to manage demand within a particular constrained area, so as to defer or avoid some planned augmentation works, LRM-based tariffs are not the appropriate tool, as they are not tailored to that project's specific costs, and give no guarantee of response. Rather, the DNSP should explicitly procure non-network solutions.

**Q31** Is an additional principle required to further encourage network prices which are based on the drivers of network costs to the maximum extent possible?

Yes. It is good to avoid any possible misinterpretation.

**Q33** *Are there any other pricing approaches that should be considered to recover residual network costs?*

Although energy charges generally have no role to play in efficient, cost-reflective network tariffs for customers with interval meters, they may be helpful in recovering residual costs.

It is because they are ineffectual at providing a price signal that energy charges fit quite well with the Ramsey pricing approach: they should cause minimal distortions to behaviour. Recovering residual costs in this way would be preferable, and cause fewer equity issues, than recovering them through fixed charges.

**Q40** *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?*

Transmission charges should be incorporated into network tariffs in as close to a pass-through manner as possible, so as to preserve the pricing signals.

Ideally, transmission charges, distribution charges, and retail charges should appear entirely separately on customer bills so that all price signals are preserved. In some cases the transmission cost drivers may be quite distinct from the distribution cost drivers, and the transmission price signals could be much sharper. Customers should be exposed to these price signals unadulterated, so that they can respond appropriately.

Allowing DNSPs to recover transmission costs in a smeared manner defeats the purpose of setting cost-reflective transmission charges, just as allowing retailers to obscure network charges on customer bills undermines the ability of DNSPs to send effective price signals.

**Q43** Is the proposal to apply side constraints across regulatory periods likely to materially benefit consumers by protecting them from price shocks?

Yes, and it is important to do this so that tariff changes can be phased in over an appropriate period. The appropriate levels of the side-constraints may need to be reviewed, so that the phase-in can be completed within a few years.

As discussed in our response to Q4, this approach would allow customers to see – and hence prepare for – the underlying “end-state” tariff. This is greatly preferable to compromising the pricing principles to avoid shocks.

**Q46** Should network tariffs of customers with interval meters or other types of time-based meters be subject to side constraints?

Yes. However, it may be appropriate to apply weaker side-constraints to larger customers.

I would be happy to provide further detail on these comments, if that would be helpful.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Paul Troughton', with a long horizontal flourish extending to the right.

Dr Paul Troughton  
Director of Regulatory Affairs