Consultation Paper: National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014

Submission by the Alternative Technology Association

ATA Alternative Technology Association

Document Information

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Promoting Renewable Energy, Energy Efficiency and Water Conservation since 1980

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1.0 About ATA

Founded in 1980, the ATA is a National, not-for-profit organisation whose 5,300 members are mainly residential consumers with an interest in sustainable energy and resource use.

Through applying our expertise and experience in the energy market to our continuing advocacy and research, and close collaboration with fellow members of the National Energy Consumer Roundtable, the ATA is an important voice for energy consumers Australia wide.

ATA presents a uniquely two-fold perspective in the energy policy space: as well as representing all energy consumers through our support of improving energy affordability through refinements to the energy market, we have a great deal of insight into the growing portion of the consumer base who have an active interest in Demand Side Participation (DSP).

While ATA's membership is diverse, many members keenly await opportunities for more effective ways to interact with the National Energy Market to become available, and provide more opportunities to bring down the cost of energy for themselves and other consumers. Some ATA members play an important role as the 'early adopters' of new technology, which is vital to bring about the uptake and maturation of any emerging technology or service in the context of DSP.

As a leading consumer advocate, ATA works with energy market institutions, energy businesses and state and Commonwealth governments to address the problem of increasing energy prices through realising potential efficiencies in the National Energy Market.

ATA's consumer advocacy is funded by the Consumer Advocacy Panel.

ATA thanks the AEMC for the opportunity to respond to the issues paper and continuing engagement throughout this process.

2.0 Responses to Questions

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Question 1	**What other considerations should be included in the assessment framework?**

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

(ATA assume the missing words between 'levels' and 'determined' are 'could be' or 'should be')

In ATA's view figure 6.1 is an accurate representation of the ideal approach to setting network tariffs.

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

Question 4	**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?**

In ATA's view, all items on the list provided by SCER (p33 of the Consultation paper) should be included at a minimum.

Ideally the prices themselves will be included, but at the very least, estimates or a range of prices must be. In the absence of actual prices, more detail of the tariff structure should be included, along with the formulas for determining prices, and other information to help consumers and retailers understand the relative impacts of different tariff structures.

For example, it would be useful, in the case of three-rate time-of-use tariffs, to include indicative values for ratio of peak to shoulder and peak to off-peak, as this may help retailers to allocate their own costs between different time periods and shape the products they offer to suit their customer's needs. This in turn allows consumers to better understand when and how to use energy to maximise the benefit for themselves and the network.

ATA recommends that estimated prices be included, along with other information about how the final prices will be calculated and, where relevant, the ratios between different elements of the tariffs.

Commendably, SCER suggests including the 'expected customer impacts by class'. In ATA's experience of assessing and understanding impacts on consumers, it is critical to consider the impacts on different types, or sub-classes, of consumer, rather than the 'average' consumer in a class. An 'average' residential consumer is typically based on the aggregated load profiles of a number of different types or sub-classes of consumer, and is rarely representative of any actual consumer.

ATA recommends that 'expected customer impacts by class' be expanded to consider the impacts on households with different types of load profile. Factors that could be considered include whether or not a home has gas, solar PV, off-peak loads, or air-conditioning, as well as behavioural aspects of energy use such as stay-at-home or working households.

We challenge the view posited in the last paragraph of page 31, that network tariff structures, in the case of critical peak pricing for example, 'would not indicate how these periods will be determined'.

In our view, how CPP periods are determined would be a key element of a tariff structure, as it may influence how prices are apportioned, when the periods occur, how much notice consumers are given, how many peak events occur in a year, and other factors that impact consumers ability and inclination to respond.

For example, SP AusNet in Victoria offer a CPP tariff to large customers, with peak periods determined as follows:

- *'SP AusNet will provide advance notice of 'potential' CPD Days via SMS – potentially 7 days in advance – based on the Bureau of Meteorology (BOM) weather forecasts for Melbourne.*
- *Potential CPD days will be nominated where extreme temperatures are expected or consecutive days of hot weather are forecast.*
- *Potential CPD days will not automatically lead to a declared CPD day as forecasts can vary over time.*
- *SP AusNet will officially declare a CPD day via SMS by 2pm (AESDT), the day prior and update our website (www.sp-ausnet.com.au/cpd).'*

'At the end of the period SP AusNet will calculate the average of a customer's 5 maximum demands recorded between 2pm and 6pm (AEST) on those nominated days. This averaged figure will form the basis of the Demand Variable Component of eligible customers' tariff for the following 12 months.'[1]

In ATA's view, all of the above information provided by SP AusNet are necessary elements of the tariff structure and are important for consumers and retailers to understand. As such, all should be included in a tariff structure document accordingly.

ATA asks the AEMC reconsider the view that the methodology or approach to determining peak periods is not part of a tariff structure, and recommends including it in a tariff structures document accordingly.

[1] http://www.sp-ausnet.com.au/?id=23013319509D6B39ED5B799B1DCA257990001C586E

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

In ATA's view, DNSPs should be able to introduce new price structures at any time, that consumers can move to on a voluntary basis, and this will be an important element of DNSPs' ability to respond to changes in the market and meet the needs of consumers and businesses alike.

However we see no reason that networks should be able to vary existing network tariff structures within a regulatory period, particularly given that they can adjust price on an annual basis. Consumer behaviour tends to be based more on tariff structure than prices, and the risk to consumers of allowing networks to adjust structures within a price period is too great.

ATA recommend that DNSPs should not be allowed to vary tariff structures during the regulatory period without the consent of consumers.

Question 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?

In ATA's view, an indicative document is not sufficiently binding, hence DNSPs should be required to apply it to their annual pricing proposals.

ATA appreciates that this may mean some additional work for businesses in preparing the documents and possibly a small amount of increased risk later in the regulatory period - possibly an immaterial risk given DNSPs are still able to adjust their prices annually. However we are of the view that the benefit to consumers, of greater certainty around tariff structures, outweighs these minor downsides for DNSPs.

ATA recommends that a document on network tariff structures be binding and applied to annual pricing proposals accordingly.

Question 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?

Noting our response to questions 5 and 6 above, ATA recommends that a document on network tariff structures be binding and should not be allowed to vary tariff structures during the regulatory period without the consent of consumers.

In ATA's view a document on network tariff structures should be a something of a working document that is updated whenever a new tariff is introduced or an old tariff is closed to new entrants.

In that regard it would be somewhat arbitrary whether or not updates of the document are aligned with the annual tariff setting process, although doing so may (or may not) make it easier for some consumers to engage with the consultation process.

More importantly in ATA's view, it is important to understand that consumers are generally not aware of regulatory periods for networks, or annual tariff setting, and usually would assume that the shape of their current tariff would be available indefinitely.

ATA's view is that an appropriate approach is, as per the last paragraph on p34, the DNSP should be *'bound to follow the network tariff structures included in the PSS when it sets its annual network prices in the annual pricing proposal, and the AER would approve network prices only where they comply with the PSS document'*.

Question 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?**

That DNSPs undertake appropriate consumer engagement is a clear intention of the rule change. We agree with the AEMC that, as noted in the first para of page 39, the requirement to consider consumer impacts is likely to encourage DNSPs to consult with consumers.

However if it is left to the DNSP to choose how they 'consider consumer impacts', they may yet choose to rely on engaging consultants rather than consumers if they view it as easier, lower cost or less time consuming to so do so. It should therefore not be left to the DNSP to determine whether or not they consult with consumers on changes to the PSS.

In ATA's view, it is in the best interests of both consumers, businesses and the AER for the DNSPs to consult with stakeholders:

- when a PSS is being developed at the start of a regulatory period, irrespective of whether any changes are made; and
- whenever the PSS is proposed to be amended (including the addition of any new tariff).

ATA therefore recommends that DNSPs be required to consult with consumers at Stage 1.

Question 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?**

As noted above, in ATA's view, it is in the best interests of consumers, businesses and the AER for the DNSPs to consult with stakeholders:

- when a PSS is being developed at the start of a regulatory period, irrespective of whether any changes are made; and
- whenever the PSS is proposed to be amended.

Bearing in mind that Stage 3 consultation:

- should not be too burdensome or time consuming when the changes are minor; but
- will clearly be necessary when the changes are major;

ATA are of the view that the only change that should be exempt from Stage 3 consultation is, if the PSS is to include price, when the price is altered during the annual pricing determination without changes to the structure or pricing methodology.

This approach would presumably automatically exclude some the examples provided on p39 (such as unders and overs), in some cases, however where, for example, a change to consumption issufficient to warrant a change to tariff structure or pricing methodology then consultation would be required.

ATA therefore recommends that DNSPs be required to consult with consumers at Stage 3 for any changes other than changes to price alone.

Question 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?**

Absolutely. AER consultation is critical to ensure due process is adhered to. Where the DNSP can document that they have followed an effective stakeholder engagement process and stakeholders are satisfied with theprocess, further consultation under the AER is naturally not likely to attract a large additional time commitment.

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

In ATA's view the simplest approach is that AER's existing consumer engagement guidelines should be extended to include the guidance on the PSS. However, at the same time, they should be made binding.

There may a valid case against binding guidelines where being prescriptive risks locking in ineffective or inefficient ways of doing things, yet this is not a material risk in the case of guidelines for stakeholder engagement, particularly in the current environment where most networks are yet to undertake thorough stakeholder engagement.

The benefits of binding guidelines for consumer engagement outweigh the risks.

Question 12	Does the PSS need to be approved?

Stakeholders need to be confident that the PSS remains optimal and current.

Accordingly, ATA recommends that the PSS needs to be approved by the AER:

- **at the start of each regulatory period, regardless of whether it has been changed; and**
- **whenever it is amended during a regulatory period.**

Question 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?

ATA do not have strong views on options for amending a PSS, but presumably the AER should be able to amend the PSS with the tribunal as a means of appeal.

In ATA's view, in the absence of timely approval, the previous year's PSS (or existing price arrangements in the absence of a PSS) could be continued. Any resulting under or over-recovery by the business could be accounted for through adjustments to tariffs after the fact, except in the case where the DNSP's under-recoverery is the result of an unsuccessful appeal. This should act as some disincentive to businesses seeking to intentionally delay approval or appeal a fair decision.

Question 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?

Question 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?

In ATA's view, the method described on p 43 and 44, as previously applied by ESC Vic, is a suitable measure to penalise businesses for non-compliance.

On the question of how to balance compliance incentives and risks for DNSPs with certainty for businesses and certainty for stakeholders, to state what we would hope is obvious, in the event of non-compliance by any network business certainty for other stakeholders is paramount and material financial risk for the DNSP is to be expected.

ATA recommends that the risk of material financial loss for a business is present to act as a deterrent against non-compliance.

Question 16	Should DNSPs include forecasts of their expected changes in network tariff pricing levels in the pricing structures statement?

Yes. ATA appreciate the difficulty of forecasting prices into the longer term, and suggest a non-binding indicative forecast of prices would be appropriate to help consumers and retailers prepare for likely future price changes.

In our recent experience, United Energy provided a consumer committee with indicative values (+/- 2%) for the following year's prices before they were confirmed, and this was useful for information for all parties to the discussion when understanding the causes and effects of price changes.

ATA recommends that estimated prices be included in the PSS, along with other information about how the final prices will be calculated and, where meaningful, the likely ratios between different elements of the tariffs.

Question 17	Should any changes to the network tariff pricing levels included in the pricing structures statement be subject to consultation? If so, what level of materiality should apply to the change?

As noted previously, **ATA is of the view that consultation should occur when the price is altered during the annual pricing determination only if there are proposed to be changes to the tariff structure or pricing methodology**.

Question 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?

Noting the timing of upcoming regulatory periods and current transitional arrangements, **In ATA's view the first PSS should be completed in each jurisdiction in time before whichever comes first of:**

- **the implementation of changes to the pricing principles; or**
- **the 2016 calendar year.**

We note that this would require Aurora to implement a PSS during its current period but not impact the current period of any other DNSPs.

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

Ideally yes, however in ATA's view if the PSS process is unable to be completed soon then the lack of a guideline should not delay the first PSS. Indeed, being able to draw on the experience of the first PS processes may aid the development of the guideline.

Question 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?

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

With any move to cost reflective pricing, more risk is transferred to certain consumers. Above all, management of this risk must entail protecting the most vulnerable consumers from thepossible impacts of higher and/or more variable prices.

Purpose of cost reflective pricing

Section 9.1 of the discussion paper emphasises that the main benefits of LRMC based pricing will result from sending price signals about future costs. ATA agrees that in the absence of price signals a consumer has little or no reason to change their behaviour, but even if price signals are not always effective, cost reflective pricing is still necessary to avoid cross subsidy between consumers.

Cost reflective pricing removes existing cross subsidies and protects consumers against higher costs resulting from the behaviour of other consumers. By way of example, when more consumers installed air-conditioners during the last decade, in the absence of cost reflective pricing the bills of people without air-conditioners were driven up markedly due to higher network costs.

Had cost reflective pricing been in place at the time that outcome would not have occurred, regardless of the impact of pricing on the decisions made by customers choosing to install AC.

Cost reflective pricing is not just about price signals. Consumers do not need to change behaviour for there to be a benefit if prices are designed to fairly allocate costs and benefits and avoid cross subsidy between groups of consumers:

- If a consumer wants to use more energy during peak times, they should be allowed to, and the higher price they pay should reflect the impact of this decision;
- If they are willing and able to shift load due to off-peak times, they should be rewarded accordingly with lower prices that reflect the impact of this decision.

Impact of increased inflexible fixed pricing

Some stakeholders are pushing to increase inflexible fixed charges (daily and annual charges that do not vary according to use) to recover costs from solar and other customers.

This however undermines energy users' investments in equipment and behaviours to reduce their peak demand and improve their energy efficiency, and introduces a new cross subsidy from low energy users to high energy users, so would be grossly inequitable.

One of the main reasons that demand has dropped is in recent years is due to the uptake of energy efficiency measures by households. The basic economics of investing in energy efficiency for households are well understood - you spend more upfront with the expectation that in the longer term, you will be better off through lower bills by using less energy.

Regardless of the motivations - economic or environmental - consumers have invested in energy efficiency. Many have already paid more for essential items like refrigerators, light bulbs, and water and space heaters and coolers, and perhaps more significantly in their buildings with insulation and building features.

They have made these decisions with the encouragement of government policy and a very reasonable expectation that the extra cost they have footed will be returned through reduced energy costs.

Increasing fixed charges is particularly unfair on those who have invested in measures that significantly reduce their peak demand, such as improved building insulation, more efficient air conditioning and heating, as these are the consumers who have been contributing to improved load factor and higher overall efficiency in both networks and the energy market

Aside from being unfair, it's a highly risky strategy that may lead to unpredictable changes in demand with implications for businesses and other consumers alike. Consumers are somewhat responsive to price and price signals - as noted above it has been a key driver in the downturn in demand, which may reverse with a move to fixed charges. Higher inflexible fixed charges entail lower volumetric charges.

Higher inflexible fixed charges also give low energy users more incentive to move off the grid (something which is economically viable for some homes today and is likely to be mainstream within a decade due to the price path of battery and solar technology), accelerating the risk of the dreaded 'death spiral'.

Peak demand based pricing - a fairer solution

There are numerous more cost-reflective alternatives to fixed charges that could be applied to all consumers, including solar customers. Some are already commonly used for large customers, for example peak demand based tariffs where customers are charged a fixed fee based on their maximum kW (or kVA) demand during predetermined peak periods, or capacity charges which are in some ways similar.

Others are less common, yet are available in some areas and have been trialled in others, including variants of Critical Peak Pricing, and inclining blocks, and blended ToU tariffs.

Interval metering allows for all of these and other tariff structures. Taking a step further to smart metering offers options such as Direct Load Control and Supply Capacity Limiting to allow consumers who adopt any of the above pricing options to manage their exposure to higher prices.

Impact of inflexible fixed vs. cost reflective peak kW charges different consumers

ATA undertook a high level cost modelling exercise to start to understand the impact on consumers of the introduction of inflexible fixed and peak kW charges, compared with the current most common network tariff shapes (one- or two-rate volume based prices with a fixed daily charge. The results of the modelling have been provided to the AEMC. Key findings included:

- kW charges enable network costs to be recovered from PV and other customers in a cost-reflective manner;
- Fixed pricing introduces massive cross subsidies, of many hundreds of dollars per home, from efficient and lower-income households to high consumption homes.

The modelling showed that introducing peak kW based charges impacted solar customers markedly. However just as likely to be impacted are the consumers with AC systems, who make up the lion's share of the marginal peak demand in, typically, summer months.

Implementing any of these approaches, as an alternative to high fixed pricing, will afford networks the certainty of full cost recovery from solar customers. It would also allow these customers to share the benefit of reducing their impact on the grid by designing their renewable energy systems to minimise their impact on the network. Customers' options include facing solar panels to the west to coincide with evening peaks and/or implementing demand management and energy efficiency. Cross subsidies are reduced or removed, and consumers can be given a choice about whether they actively or passively participate.

As noted with any move to cost reflective pricing, more risk is transferred to certain consumers. Above all, management of this risk must entail protecting the most vulnerable consumers. Solar customers and those in large heavily airconditioned homes tend not to be among this group at the time that they purchase their solar panels or airconditioners, but like any type of customer their circumstances can change unexpectedly.

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

Question 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?

Some considerations relating to coincident peak

Which peak type?

- Maximum Demand – highest demand days, 50% or 10% POE. Also known as 'critical' peaks; In the interest of being cost reflective, MD days are the most appropriate peak – but using them is more complicated and carries higher risks for consumers; or
- Average peak by week/season/year: Lower risk for consumers, but less cost reflective.

Which peak location?

Transmission system peak (usually in the afternoon) should be considered for calculating payment for avoided transmission costs (refer to question on transmission pricing)

Any peak kW demand charge could be based on

- Distribution network peak (evening, usually)
- Home undiversified/self peak

There are reasons for and against the use of either, in our view the local Distribution peak is most appropriate: it's reflective of the true cost, and in some ways easier for customers to plan for. Basing the payment on 'self' peak runs the risk of sending a perverse signal to the consumer, to use more energy at times when the network is constrained, or avoid using energy at a time when no benefit is provided for doing so.

Other questions about the duration of peaks and advanced notice of critical peak days need to be considered also.

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

PV and the Transmission System

The impact of household PV on the transmission system is often not given the attention it warrnant in this debate. The transmission load profile is heavily influenced by large industrial customers that use about 70% of the NEM electricity load, such as in Victoria for example, where most of the transmission network peaks at 4pm whilst PV is still predictably generating (refer to AEMO report).

According to AEMO, PV has a material benefit here, providing about a third of its nameplate capacity during the highest demand period (maximum demand – MD).

At a transmission level this occurs without the negative impacts from PV that occur at a local distribution level. Importantly the charges that (at least some) transmission businesses pass on to DBs, which the DBs smear across all consumers, are contingent on the demand on these MD days.

It is reasonable that if PV customers and all other consumers have cost reflective charges to recover distribution costs, then they should be remunerated for the material saving to the DNSP and other consumers of reduced transmission charges. This is not without precedent.

Examples of avoided TUoS being paid to embedded generators

SP AusNet, for example, currently pay consumers (technically speaking, they pay retailers who may or may not pass this through to consumers) a tariff of 4.1c/kWh for all PV energy exported to the network between November to March. This payment is in addition to any applicable Feed-in Tariff. AusGrid's methodology for calculating avoided TUoS is below:

ATUOS = TUOS without EG – TUOS with EG
where: TUOS without EG = Demand Tariff X Transmission Peak Demand without EG
TUOS with EG = Demand Tariff X Transmission Peak Demand with EG or combining the above:
ATUOS = Demand Tariff X (Transmission Peak Demand without EG – Transmission Peak Demand with EG)

It is good practice for embedded generators to be reimbursed the value of avoided TUoS.

Thank you for the opportunity to provide comment to this process, and please do not hesitate to contact us at Craig.Memery@ata.org.au on 0412 223 203 should you have any queries regarding our submission.

ATA intend to supplement this submission with further information as time permits.

Kind regards,

Craig Memery