# Expert Consumer Panel Submission
# 10 November 2021

Thank you for the opportunity to comment on the development of Western Power's Tariff Structure Statement (TSS) for the 2022-27 period.

We would like to thank Western Power for meeting with us on 16 August 2021 and 25 October 2021 to discuss the development of the TSS. This submission builds on those discussions, by providing high-level comments on the survey questions about cost allocation and transition principles outlined at the conclusion of the second meeting.

How Western Power recovers its costs through pricing is always an important matter for customers. Network charges make up a significant component of the final bills customers pay and impact affordability. The way tariffs are structured, in terms of fixed and variable components (particularly how rates vary with when electricity is consumed) also influence how retailers structure their services and ultimately how customers manage their use.

The development of the TSS for the 2022-27 period is even more critical for customers because it is the first under new pricing arrangements introduced in September 2020 as part of the Government's Energy Transformation Strategy.

## Understanding customer needs and impacts

The complex nature of the access arrangement and TSS processes, and the changes underway in the energy system, mean we only had time to discuss certain aspects of Western Power's approach in our two meetings. That is, how Western Power is interpreting the new TSS requirements, its intention to re-structure tariffs to recover a higher proportion of its costs through fixed charges, and some of the detailed cost allocation methodologies. Western Power also provided some indicative (static) pricing outcomes for some typical consumers who were exposed to higher fixed charges.

What we were not able to do, for example, was discuss in a substantive way the design of the tariffs that will be available to customers under the new arrangements, the choices available to customers to move between tariffs, or how Western Power's overall access arrangement proposal was shaping up, how revenues were likely to move up or down and what that implied for prices over the next five years.

From a customer perspective, it is this overall picture that is important in terms of the practical outcomes in terms of bills, price volatility, and technology choices that matters.

Ensuring pricing is informed by this holistic view is also consistent with one of the core elements of the Energy Transformation Strategy vision which is to give people more control over their electricity usage, and consequential amendments to the Access Code which emphasise the need, among other things, to consider the "reasonable requirements of users" (7.3F) in developing reference tariffs.

In the ECP's view, this gives rise to an important principle for Western Power in its approach to cost application and transition, which is that in developing TSS proposals, it must take reasonable steps to understand the requirements of users.

Best practice network approaches to understanding customers goes beyond in-principle discussions with customer groups, to engaging more deeply with user needs and preferences and the latest evidence from trials and research about how the energy use behaviour of households and businesses would respond to various price signals.

Ausgrid, following a similar TSS process in New South Wales, modelled different customer response scenarios (no usage response, and a 10 per cent peak demand reduction) to better understand the impacts of its proposals.[1] Importantly Ausgrid's approach to the customer impacts modelling, and its TSS more broadly, was informed by a set of principles developed by its customer consultative group (Attachment A).

Importantly, this kind of more granular view of customer impacts is critical if Western Power is to play its part in managing the risk of increasing the fixed component of its charges, particularly for customers on low incomes and those with vulnerabilities. All other things being equal, higher fixed charges will see bills fall for households with high electricity demand, and rise for households with low electricity demand. This raises the risk, for example, that high income, high use households see a bill reduction, at the same time as a low use, low income household, such as an elderly pensioner, sees their bills increase (at least in relative terms). This outcome would be out of step with community expectations about equitable access to essential electricity services. The Australian Competition and Consumer Commission (ACCC) identified issues with higher fixed charges in its Retail Electricity Pricing Inquiry:

> "[W]hile flat tariffs with a high fixed component may better match the cost profile of network businesses, they are not cost reflective and may even result in worse incentives on customers. By reducing the variable charge, customers have less incentive to manage their overall consumption (including at peak times), which

[1] Ausgrid Tariff Structure Statement - Attachment 10.01, April 2019, page 71, https://www.ausgrid.com.au/-/media/Documents/Regulation/Reports-plans/Ausgrid-approved-TSS-2019-24.pdf

> may lead to overall increases in future network costs. These tariffs also fail to deal with cross-subsidies in favour of customers who use a larger proportion of electricity at peak times (and may in fact worsen the cross-subsidy where high peak period users are also high overall users of electricity)."[2]

The ability of Western Power, electricity retailers and governments to identify who might be at risk of negative impacts from tariff restructuring and provide effective and well-designed services and well-targeted support relies on good information about the distributional impacts of the proposed tariffs.

The tariff trials undertaken as part of the Energy Transformation Strategy DER Roadmap, as well as trials in other parts of Australia, provide an important evidence base for Western Power to reflect on as it goes about developing the TSS. The ECP would be pleased to work with Western Power on ways to build this more complete picture of customer needs into its approach and analysis.

**Forward-looking costs**

The focus of the materials Western Power, and its consultant Houston Kemp, presented to the ECP in our two meetings to date, appeared to present the efficient allocation of historical costs, as the objective of the TSS, and the basis for a move to increase the fixed component of its charges.

We are concerned that this approach may lead to tariffs being developed which are backward looking and do not respond to the challenges consumers and the network will face over the next five years and beyond.

This is because higher fixed charges, all other things being equal, may weaken the price signal for customers to manage their electricity usage in a way that reflects the long run marginal costs of the network. This is why the updated regulatory framework for Western Power places an emphasis on forward-looking costs in both the overarching access arrangement objective (section 6.4(a)(i)) and access code pricing principles (section 7.3G).

We note for example that we did not have time in our meetings to explore the extent to which the network tariffs incorporate pricing which varies with time to properly reflect the efficient cost of providing network services to individual customers, and are based on

[2] Retail Electricity Pricing Inquiry - Final Report, June 2018, page 176
https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018_0.pdf

the individual customer's coincident demand which is the predominant driver of each customer's individual contribution to network costs.

A more detailed review of coincident demand, and the drivers for it, as well as the other challenges facing the network associated with the growth of rooftop solar PV, may also point to other, more appropriate and effective tariff options. Electricity export pricing may, for example, be a superior way to address inequities between consumers, and drive long-term network efficiency, associated with the growth in solar, than higher fixed usage charges.[3]

The ECP encourages Western Power to take account of this contemporary best practice and adopt a forward-looking approach, basing tariff design on a precise, evidence-based understanding of future challenges.

Please do not hesitate to contact the ECP secretariat via epwa-grants@energy.wa.gov.au if you would like to discuss our submission further.

Kind regards,

Expert Consumer Panel

*About the Expert Consumer Panel – The ECP is a group on consumers who are supported by the Western Australian Advocacy for Consumers of Energy Program to contribute consumer perspectives on energy sectors matters of a technical nature. This submission is made following agreement of all members. This submission is not to be represented as the view of any other party. Details can be found at https://www.wa.gov.au/government/document-collections/expert-consumer-panel*

[3] https://www.aemc.gov.au/rule-changes/access-pricing-and-incentive-arrangements-distributed-energy-resources

**Attachment A**

Pricing directions: A stakeholder perspective

# Pricing Directions: A Stakeholder Perspective

## Objective of tariffs and related instruments

The objective is to develop a pricing strategy comprising tariffs and other supporting incentives and measures that:

- Promote more efficient, lower cost means of meeting consumers' demand for energy services
- Reflect consumers' preferences, such as enhancing customers' control over their bills and encourage tariff transparency and consumer agency/empowerment.

Many utilities have the aim of 'putting the customer at the centre', as successful competitive businesses do. These objectives support, and provide a test, for that objective.

Note: by supporting 'incentives and measures' we mean programs such as:

- locationally specific tariffs and payments to consumers and purchases of demand reduction from intermediaries, such as retailers or other energy service providers, that encourage reduction in peak loads at critical parts of the network
- alliances with retailers and other energy service providers to roll-out innovative end-user technologies that promote more flexible and efficient provision of energy services
- information programs and other 'nudges' designed to inform consumers and encourage consumers to manage loads in their and the network's interest.

## Key features of the pricing strategy and TSS

Key features of a successful pricing strategy are that:

- it uses customer-facing language
- is adaptable to new information and changing technologies and demand patterns
- is adaptable to the different circumstances of each network
- is integrated with Demand Management strategy, programs, and incentives
- engages with the retailers and other energy service providers

Central to this is the understanding that consumers do not want electricity per se; they want the services that can be provided by using electricity: power (to produce things and for communication and entertainment), heating, and comfort.

### Customer-facing language

The primary audiences for the TSS may well be the AER, retailers and energy service providers, and some large consumers. It may only be read by a small number of other consumers, but the objective should still be to express it in terms that the final consumer can understand. However even more important will be the clarity of the accompanying consumer information package (paper and electronic) that should communicate the tariffs, what the tariffs hope to achieve, and the opportunities for customers to reduce their cost of using the network in simple terms. For example, 'costs you can control' may be a better way of expressing 'variable charges'.

### Adaptability

Circumstances can change significantly, quickly, and in directions not anticipated. For example, in the lead-up to the review of the pricing principles by the AEMC, peak demand had been rising quickly putting pressure on existing networks and investment requirements. By the end of the

AEMC review the problem was one of stagnant or declining demand and the implications of this for the fixed component of network bills. This is a practical example of changes occurring in a short term that can lead to significant differences in pricing strategies. It is expected that the pace of change in the technology for supply and use of energy to provide the services consumers need will accelerate. Our knowledge of how we can best provide the right signals to consumers is also expanding and changing. It is increasingly understood that it is not all about the price, but understanding what signal (price and non-price or informational) and how consumers respond to different signals. This is leading to innovations in customer-facing signals in various fields that are moving beyond traditional pricing models. While NSPs may innovate in pricing the responses of customers and retailers and other intermediaries may be uncertain. Hence, there may be a need to adapt strategies to their responses.

The key implications are that:

- the 'end-point' for pricing should not be seen as fixed. It is important to have a vision of where prices are headed, but this end-point cannot be fixed. IT will need to adapt to changing circumstances, new information, and responses of others.
- mid-point reviews of the TSS are desirable to build in adaptability in pricing strategies
- changing end-points may well mean that prices are in 'constant transition.

### Network Specific

Different networks may face different problems that will result in different transition paths and end-points, especially in regard to the balance between fixed and controllable costs, the nature of the demand charge, and the choices between demand and capacity charges. A network which has broadly-based growth in customers and demand may well move towards a broadly based tariff with a strong demand/capacity signal. Other networks may face stagnant or falling demand on average with only a few pockets of growth. This will lead to different choices and perhaps greater reliance on specific options (tariff and non-tariff) in those locations where growth is driving expected costs. Networks with a larger proportion of remote or difficult to serve customers may face greater risk of 'customer exit' from the grid. The key question here is whether the marginal costs of supplying those customers from the grid is greater than or less than the cost of self-supply. If it is, the network may try to design tariffs to discourage inefficient exit that would leave other customers having to pay more.

### Role of Retailers

Except for some very large customers, the tariffs the customers see are the tariffs charged by the retailer which recover generation costs and the retailers own-costs as well as the network charges. At present customers mostly do not see the network charges directly and retail charges do not necessarily simply pass-on the network charges in the form and structure that they see them. The signals sent by networks may not only be 'washed out'; they may be substantially changed by the retailer. This is not necessarily a problem as long as the retailers see the cost reflective charges, bear the associated risks, and work with customers in whatever manner in response to the signals provided by the network charges. However, it is important that networks work with retailers and other service providers to ensure that:

1. there is a good understanding of the cost drivers the network is facing and points of current or potential congestion; and
2. opportunities to work together to maximise efficient use of distributed resources in areas of constraint are explored.

This may raise questions of the nature of the relationship between networks and retailers and other energy service providers and what forms of strategic alliances are acceptable where the network has no direct interest in retailing.

One option may be to require retailers to offer at least one pricing option that passes through the network tariffs as set by the DNSP.

## Expectation for 'end point' of network pricing strategy and tariff design[1]

1. Just and equitable demand or capacity-based tariffs would be the standard tariff. The demand or capacity component is equal to or greater than the LRMC averaged across the network.
    - Demand /capacity better signals cost drivers than TOU
    - Consumers need to be aware of and be able to respond to peak demand signals

    The design and implementation of the tariff would have regard to the impacts on consumers.
2. Priority should be on the transition to demand/capacity tariffs. Refinement of TOU tariffs should not be seen as an end-point.
3. Under demand tariffs a key issue is what demand, what peak? Should it be the local or a broader, a coincident peak or the customer's peak demand? How often should peak demand be measured – a few nominated peak days or monthly or annual? There may not be a single 'correct' answer. It requires a balance between a relatively stable, easier to understand measure of demand and other measures of demand that can better measure the impact on future investment needs. Hence the choices made may depend on the importance of the demand signal in terms of the opportunities to defer investment, the nature of the customers and their capacity to respond, and whether it is the standard tariff or a more dynamic, locationally-specific tariff.
4. Residual costs recovered by charges that are 'less distorting'[2] such as fixed charges but increases in fixed charges should be tempered by:
    - Recognition consumers prefer variable to fixed charges – consumers want to do the right thing and be rewarded for it
    - Consideration of consumer impacts
    - Inclusion of environmental costs in variable charge (i.e. in an energy charge or the demand or capacity charge). This helps a) reconcile efficient tariffs with consumer preferences for greater control over the bill and to be rewarded for 'doing the right thing' as they see it and reducing usage b) reduce the impacts – and the often perceived inequity - of high fixed charges.
5. The standard tariff is unlikely to be location specific. It will be highly averaged but is aimed at encouraging some demand response consistent with overall objective
6. Application of the standard tariffs should be mandatory for new customers initially then expanding to all customers, recognising that this may impact on transitional arrangements and support. If mandatory application is not achievable in the short term, opt-out approaches should be adopted, but preferably not to a tariff with a single energy rate.

[1] As we understand it at this stage. New technologies, information and new thinking will see a continual evolution in ways we perhaps may not be able to envisage at present.

[2] It is likely that usage charges based on LRMC will not yield sufficient revenue to cover all the allowed costs of the NSP. If so, economic efficiency is enhanced if the remaining revenues are raised through charges that have as little impact on behaviour as possible.

Tariffs be set to tilt people towards not opting out, and supported by information programs and other incentives.

7. Innovative, dynamic local tariffs (eg critical peak rebates but all options should be 'on the table') aimed at reducing demand at/when it will make the biggest difference to capex requirements by promoting efficient distributed resources. These innovative tariffs are most likely to be optional and will require partnerships with retailers and energy service providers.
    - Where dynamic pricing is offered consumers may prefer rebate programs (with high 'normal' charges) than very large peak charges
8. Tariffs should not look beyond the meter
    - What customers pay in network charges should reflect their load profile not what energy-related equipment (e.g. Electric Vehicles s or PV panels) they have
    - But the networks/retailers/ESCOs may want to know what equipment consumers have so they can work with consumers to optimise my energy services.
9. As the economics of renewable energy continues to improve and renewable energy capacity increases, two-way flows will become a more important feature of the energy system and will introduce new challenges in pricing. To the extent that two-way flows have a different impact on network costs, this should be reflected in the pricing for those flows. The objective should be to price access to the distribution networks in a manner that:
    - Provides signals for renewable capacity to locate in areas and be operated in a manner that benefits the network where possible
    - Fairly reflects the costs imposed on the distribution network as well as the benefits that it may provide.
10. At the retail level, or in partnership with retailers and ESCOs, innovative incentives and nudges – information programs, rebates rather than prices, special 'bonuses' etc may be more effective than standard incremental price changes. The learnings from behavioural economics on how people respond to signals can be important in developing tariff strategies.

Note: (1)-(5) sets up the standard tariff which will probably help a bit but the action/benefits are really in the locational specific pricing and incentives at (7).

## Framing the Pricing Strategy

### Scope of the pricing strategy

In considering the scope of the pricing strategy it is important to remember:

1. It is not just about traditional tariffs and structures
2. There must be an integration between pricing and incentives for demand management and distributed resources.
3. The strategy should reflect customer preferences.

The tariff structures in the TSS should not be a mechanical application of the LRMC pricing rule. Behavioural responses are not all about prices. Innovation in pricing and other instruments may well come from extensions of the learnings from behavioural economics into tariffs rather than econometric studies.

Demand management incentives that are likely to be location specific should be seen as an integral part of the tariff strategy. Locational signals that best reflect ex-ante costs may be provided by demand management incentives as well as, or instead of, standard tariffs. This may have implications for how networks approach and structure the development of tariffs and demand

management incentives so that they are not developed in isolation. In assessing whether the tariff strategy meets the requirements of the network pricing principles the AER should asses the total tariff package including the demand management incentives.

Consultation by networks with their customers have highlighted that:

- Many customers have proactively sought to improve their energy efficiency
- They have done this not just to reduce their own bill but because they see it as doing the 'right thing' to benefit the environment
- Even though there is an element of 'green altruism' that consider that they should be able to benefit from reducing their consumption.

These preferences should be considered in determining the balance between fixed and variable costs and how sunk costs should be recovered.

### What are the relevant costs?

Two issues in estimating the relevant costs are:

1. What is the cost basis - market costs (i.e. what the utilities pay) or economic costs (i.e. resource costs including environmental costs)? Principles of economic efficiency support inclusion of estimates of environmental costs where these are not priced into the market costs. To not do so will encourage overuse of resources with adverse consequences for the community.
2. What should be the basis of the estimation of LRMC. The principles allow for the use of either the Average Incremental Cost or Turvey (Perturbation) methods. The AIC approach is simpler, is more widely used in the DNSPs, but is less time or location specific than the Turvey method. In contrast, the Turvey method can provide a stronger locational signal and is more sensitive to the timing of new investment requirements. Hence, while the AIC may be preferred in estimating variable rates for the standard tariffs, the Turvey method may be more appropriate for locational price signals.

### Customer impacts

Where significant tariff changes are proposed the DNSP should provide well-founded, comprehensive modelling of the impact of the changes on various users (classified by tariff class, usage patterns, and socio-demographic characteristics). Best practice impact modelling would link consumption data to household socio-demographic data and undertake microsimulation modelling that examines impacts pre- and post- expected behavioural responses.