

# Expert Consumer Panel submission – Attachment 3 - Detailed comments

## Contents

Expert Consumer Panel submission – Attachment 3 - Detailed comments .....	1
WA Expert Consumer Panel detailed comments on Western Power’s published fifth access arrangement submission and the ERA’s Issues Paper .....	2
1.0 Summary .....	2
1.1 Recommendations .....	2
2.0 Ensuring the Regulated Asset Base (RAB) value is not too high .....	3
3.0 Investment strategy in an uncertain future .....	3
4.0 Western Power’s proposed approaches to addressing climate change.....	4
5.0 Western Power’s approach to safety.....	6
5.1 Silicone treatment of insulators with the lines turned off.....	7
6.0 Measures to improve network reliability in outage-prone areas .....	7
7.0 Western Power communication with customers .....	8
8.0 Western Power’s consultation on network tariff changes .....	8
9.0 Network tariff structures and price signals.....	9
9.1 New super off-peak tariffs RT34 – RT37 are supported .....	9
9.2 Concern about increasing the fixed charges .....	9
9.3 Demand-based tariffs for residential and small business customers .....	10
9.4 Coincident demand charges.....	11
9.5 New tariffs (RT40 and RT41) for dedicated electric vehicle charging stations based on the existing RT5 and RT6 reference tariffs, and a new high voltage distribution storage service tariff (RT39) based on RT5 .....	13
10.0 Operational productivity improvements .....	13
10.1 Ensuring Western Power’s quotes for works are reasonable.....	14
11.0 Managing peak and minimum network demand to defer capex .....	14

# WA Expert Consumer Panel detailed comments on Western Power's published fifth access arrangement submission and the ERA's Issues Paper

## 1.0 Summary

There are many positives in Western Power's AA5 submission, including the proposed introduction of new better-structured super-off-peak reference tariffs RT34 - RT37, and grandfathering/transitioning from existing tariffs that are not structured efficiently. These new network tariffs should allow retailers to offer tariffs that help customers better manage their energy costs at the same time as reducing upstream costs of energy supply.

The ECP has concerns about Western Power's proposal to substantially increase the fixed charges of residential and small business reference tariffs, as well as some other aspects of the proposed reference tariffs. The ECP's responses in this submission to the ERA's Issues Paper 'questions for stakeholders' also address Western Power's consultation on tariffs and its tariff structure statement (TSS) proposals.

Western Power's pricing structures for cost recovery are always an important matter for customers. Network charges make up a significant component (~45%) of the final bills customers pay and so greatly affect 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. It is important that electricity tariffs provide signals that are in the long-term interest of consumers as the Access Code objective requires.

The following recommendations summarise a number of aspects commented on in more detail in the body of this submission.

## 1.1 Recommendations

The ECP recommends that:

1. The ERA and Western Power examine practices that may have increased, or are continuing to increase, the RAB value above what it should reasonably be
2. The ERA and Western Power ensure that all reasonable steps are being taken to address climate change impacts on, and from, Western Power facilities and functions, including proactively managing network line losses
3. The ERA and Western Power ensure that Western Power's approach to safety is appropriate and adequately takes into account the cost and supply reliability effects on consumers of its approach, particularly when it involves turning customers' power off.
4. As discussed in the ERA's issues paper, network reliability is appropriately incentivised and improved in poor reliability areas of the network
5. Western Power improves its communication with consumers, particularly in planned and unplanned power outage situations
6. Western Power modifies certain proposed network reference tariffs as discussed below, and continues to offer time-based-demand tariff options as additional options for residential and small business consumers
7. The ERA and Western Power include the ECP in the tariff and tariff structure statement improvement discussions

8. The ERA and Western Power ensure that Western Power has an effective, ongoing proactive operational productivity improvement program
9. The ERA and Western Power ensure appropriate demand management and non-network solutions resourcing and capability development occurs in Western Power to efficiently manage demand drivers that would otherwise result in less-efficient capex on network capacity augmentations.

## 2.0 Ensuring the Regulated Asset Base (RAB) value is not too high

As Western Power earns the regulated rate of return on the ERA-approved RAB, which in turn affects network tariffs, the ECP questions the rate of increase of the RAB proposed by Western Power, compared to various growth indicators - e.g. customer numbers, and relatively flat network peak demand growth.

Western Power's proposed capex is one cause of the proposed RAB increase. We acknowledge that the ERA endeavours to ensure that only efficient capex is added to the RAB.

The ECP still wonders whether there are potential causes that could make the RAB higher than it should be, such as:

- Does the RAB still contain the residual value of assets that have been removed from service, such as when assets are rebuilt, or replaced by stand-alone power systems (SPS) or disconnected microgrids, or does that residual value get written off and deducted from the RAB?
- If Western Power spends capital on a project, and then something causes that asset to be re-worked, does the total capex get added to the RAB - i.e. the original capex plus the re-work capex?
- Does the residual value (in the RAB) of the meters being replaced by advanced meters get deducted from the RAB? We understand from the ERA's Issues Paper that this is being considered.

The ECP considers that any residual value of assets removed from service should not continue to earn a return for Western Power as these assets provide no value to customers. This reality (writing off the residual value) reinforces one of the risks of replacing assets too soon or investing in assets that may become stranded or superseded due to technology changes or other changes in the market, and so their residual value becomes worthless and needs to be written off.

Capex on community batteries, stand-alone-power systems (SPSs), microgrids etc. would be adding to the RAB, but should be deferring higher-cost conventional network replacement or augmentation, to offset the capex of the former over time.

## 3.0 Investment strategy in an uncertain future

### ERA questions 1 & 2:

*1. Is the network strategy Western Power has proposed to reconfigure and modernise the network, and the associated investment for AA5, reasonable, properly timed and based on sound cost estimates?*

The ECP is not able to confirm this because it does not have access to the information needed to demonstrate that the proposed strategy is best, and in the long term interest of consumers. The ECP's consultant, Dynamic Analysis, has questioned whether some of Western Power's assets are being replaced too soon, and whether they could remain in service ("sweated") for longer in order to reduce the proposed capex increases.

*2. Are uncertainties about the future of the electricity system giving rise to a risk that Western Power's network strategy and transformation initiatives could result in expenditure/assets that are not required or not fit for purpose?*

Yes, the more uncertain the future is with regard to the best means of supplying consumers' energy needs, the greater the risk of unsound network investments and network assets becoming stranded or not being fit for purpose.

Where future needs are uncertain, it would be best to defer expenditure if possible and reasonable until as late a date as is prudent, because there will be more certainty about what is needed at a later date. There are risks to this too (reliability, later costs being higher ...), but we need to avoid over-investing and stranded or inappropriate assets being built.

#### 4.0 Western Power's proposed approaches to addressing climate change

**ERA question 3.** *The ERA is seeking stakeholder views on Western Power's proposed approaches to addressing climate change during AA5.*

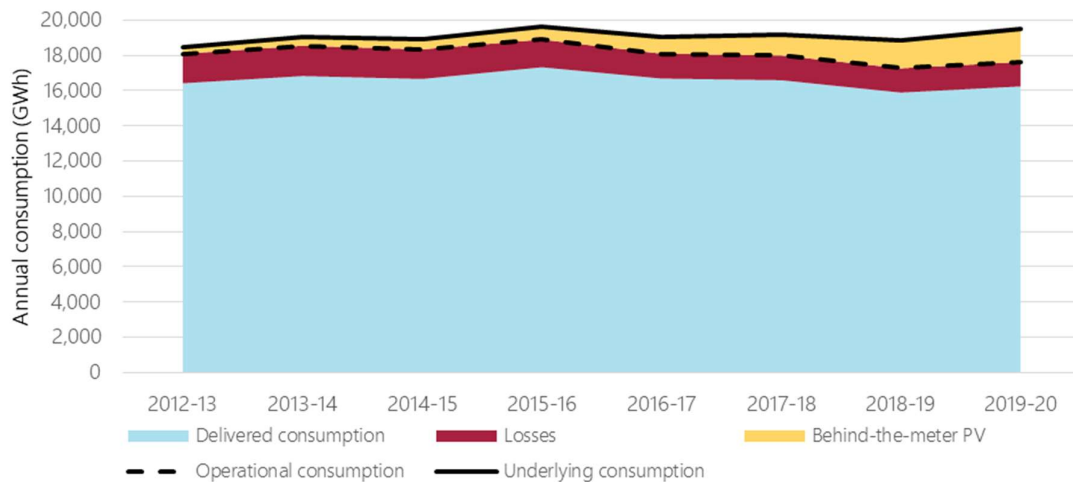
Besides the measures Western Power plans to undertake to improve the network's resilience to extreme climate events, it is important that Western Power also reduces the greenhouse gas emissions that result from its network and other assets, and its operational practices.

Western Power's electricity network and its buildings, vehicles and other assets are significant contributors to greenhouse gas emissions in total. The chart on page 25 of Western Power's 2021 Annual Report illustrates that network line losses are by far the dominant cause of Western Power's total estimated 732 thousand tonnes of CO<sub>2</sub> equivalent scope one and two emissions per annum.<sup>1</sup>

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<sup>1</sup> Page 25 of 2021 Annual Report, Western Power - <https://www.westernpower.com.au/media/5756/western-power-annual-report-2021-20211001.pdf>

According to the data used by AEMO for its chart below, losses were around 7.9% - 1,389 GWh/annum - of generator sent-out electricity in the South West Interconnected System (SWIS) in 2019-20.<sup>2</sup>



To put the magnitude of these line losses into perspective, the 2019-20 AEMO data used in this chart indicates that the AEMO-estimated line losses were equivalent to 74% of the energy generated by all customer behind-the-meter solar PV installations that year.

Western Power can influence the magnitude of line losses by its choice of conductors, transformer efficiencies (e.g. low-loss transformers), and other design and operational practices. For example during low demand periods, Western Power could switch additional transformers out of service to reduce losses where the remaining circuits provide adequate security of supply. More distributed generation closer to customer loads reduces line losses. Managing high demand reduces line losses because losses increase in proportion to the square of the current in a circuit. I.e. doubling demand on a circuit increases the losses fourfold.

Under present market arrangements, Western Power does not pay for the electricity lost in its network as line losses, and so has no financial incentive to reduce line losses. Retailers and wholesale customers pay for the line losses in their purchases of wholesale electricity sent out from generators in the WEM. Contestable customers usually have the costs passed through to them by retailers.

Should Western Power be financially incentivised to reduce line losses?

Western Power could reduce its greenhouse gas emissions resulting from all Western Power assets and operational activities through an ongoing, proactive program to do so. It may need to engage external expertise to advise on how to do this effectively. We understand from Western Power's annual report that it is "working with the Department of Water and Environmental Regulation to build out our net-zero transition plan" for 2050.

In addition to emissions from Western Power's own assets, Western Power can facilitate emissions reductions in the SWIS by its approaches to assist others in their emissions reduction endeavours.

<sup>2</sup> Source: AEMO 2021 WEM ESOO Data Register - Figures spreadsheet, Figure 18 (above) at: <https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/wem-forecasting-and-planning/wem-electricity-statement-of-opportunities-wem-esoo>

## 5.0 Western Power's approach to safety

**ERA question 4:** *The ERA is interested in stakeholder views on Western Power's approach to safety, including any work practices it has adopted to ensure the safety of its workforce and the community.*

The safety of Western Power's workers, customers, the public and the environment is of paramount importance. This safety must not be sacrificed. At the same time, it is necessary to ensure that the decisions made in relation to safety are appropriate, as any practices put into place have an impact on the continuity of a customer's electricity supply and its cost.

The recent independent review of the Christmas 2021 power outages has recommended that more consideration be given to the impact on customers of prolonged outages in very hot weather as follows:<sup>3</sup>

"The Review was also told by customers and their representatives that outages during extreme heatwaves not only inconvenience customers by the lack of refrigeration, cooling and lighting, but can also impact on their health and safety. For example, heat related health issues are increased and extreme heat can exacerbate mental health and social issues such as family violence".

Following an outage in these circumstances, current policies and practices effectively result in Western Power being prevented from restoring power supply until the fire danger index is lowered by the Department of Fire and Emergency Services (DFES). This often means power will not be restored until the temperature cools down in the evening, or even next day if Western Power cannot patrol the powerlines.

"The extended outages (for example those longer than 12 hours) were largely due to the higher fire risk conditions. Western Power takes additional actions during these conditions to prevent its network starting a fire. The actions are set out in a number of Western Power procedures and are largely based on what has been agreed between Western Power and the Department of Fire and Emergency Services. They apply equally to urban and rural areas.

For example, Western Power's fire risk management procedures include the requirement to inspect the power line to identify the cause of the fault before the line can be re-energised on higher fire risk days. The activities under these procedures can add many hours to the power restoration process".

To ensure that customer impacts are adequately taken into account in decisions that affect customers, they should be reflected through service standard measures and how they are calculated. For this reason, in the calculation of network reliability, the ECP considers that the time the power is off due to restrictions by other agencies, such as DFES, should be included in network reliability calculations even though the ERA has stated in the Issues Paper that: "Western Power can exclude time when it is unable to access a site due to a total fire ban or directions from emergency services".

By including these external restrictions in the service standards calculations, Western Power will be incentivised to try to improve restrictive policies or practices of other agencies so that they are not unnecessarily restrictive and cause unnecessarily long outages. It would also encourage innovation by Western Power to reduce the length of outages.

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<sup>3</sup> Independent Review into Christmas Power Outages, Michelle Shepherd, March 2022:  
<https://www.wa.gov.au/system/files/2022-03/Independent-Review-Christmas-2021-power-outages-Report-Final.pdf>

As an example: Western Power could make greater use of drones to inspect lines, or use vehicles that are designed to not start a fire if driven through combustible vegetation, instead of just accepting the status quo of not being able to re-energise lines until it cools down.

### 5.1 Silicone treatment of insulators with the lines turned off

Western Power proposes to adopt a new practice of turning off power lines when applying silicone to insulators.<sup>4</sup> Siliconing is done to reduce the incidence of pole-top fires, and the power outages that result while repairs are done.

From a trial of this in 2020/21, Western Power estimates that this practice will cost three times as much to do (per unit) as the past practice of insulator washing and silicone application while the lines are still energised and in service.

If turning off a power line to do this work cannot be done without interrupting supply to customers (e.g. by supplying them from an alternative network path or other methods), then Western Power needs to ensure that the impact of the power outages on customers is adequately taken into account, similarly to the discussion in the previous section.

The ECP considers that Western Power's proposed de-energised-line silicone application practice should be reviewed independently. Considering the high cost associated with this measure, it is important to ensure that there is a genuine improvement in safety for workers and a reduction in the risk of pole top fires.

In quite a few situations Western Power could keep the power on for customers while doing maintenance work, if it used live-line techniques, standby generators, rolled out cables on transportable reels to bypass the section of line being worked on so it can be isolated, and other methods. Other network utilities have adopted such practices.

## 6.0 Measures to improve network reliability in outage-prone areas

**ERA question 5:** *The ERA is interested in stakeholder feedback on whether the revised access arrangement should incorporate measures focussed on reliability performance in specific areas of the network where reliability is below or tracking below the benchmark.*

The ECP considers that reliability performance in some areas is below what is acceptable to customers and so supports consideration of how to improve reliability in these areas, without resulting in significant costs to customers. This is also supported by the recommendations of the independent review into the Christmas 2021 outages. Western Power's stand-alone-power systems (SPS) trial and rollout is a very positive response to the ageing network and poor reliability experienced by remote small-use customers.

The service standard benchmarks for reliability average the performance over many customers and so small numbers of customers in poor reliability areas do not affect the reliability results sufficiently to incentivise solutions for these areas. The ECP considers that the benchmarks should be reviewed and modified where appropriate. Service standards could be introduced that focus on the worst reliability areas in a more granular way.

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<sup>4</sup> Western Power Access Arrangement Information, page 152:

<https://www.erawa.com.au/cproot/22418/2/Access-Arrangement-Information-for-the-AA5-Period-1-February-2022-.pdf>

At the same time, it is important that a balance is found such that incentivising improved reliability does not lead to unaffordable electricity prices for consumers and resulting disconnections from an inability to pay.

## 7.0 Western Power communication with customers

**ERA question 8:** *The ERA is interested in stakeholder views and experience of how well Western Power communicates with customers and whether current service standards are adequate or any improvements are needed.*

The ECP supports the recommendations of the independent review into the unplanned Christmas 2021 outages with regard to Western Power improving communications with customers in a number of circumstances covered by the report. These recommendations could also be applied to other circumstances requiring better communication with customers.

Western Power is already working on this, and recently briefed the WA Advocates for Consumers of Energy (WA ACE) Forum (on 26 April 2022) on work it is already planning, to better understand customers' communication needs and to put its findings into practise.

The ECP and WA ACE Forum members made it clear that we are very willing to assist with such consultation.

Planned outages often cause considerable inconvenience to customers, particularly if business customers are not given adequate notice to plan for the outages. It would be helpful if Western Power advised customers sufficiently in advance of a planned outage, and provided a means for seriously affected customers to respond to Western Power to outline the effects on them before Western Power commits to the outage. It may be possible for the outage to be rescheduled to a less problematic time, but without customer feedback Western Power cannot make an informed decision.

## 8.0 Western Power's consultation on network tariff changes

**ERA question 9:** *Was stakeholder consultation on the proposed tariff structures adequate and were stakeholder views taken account of to ensure the proposed tariff structures accommodate the reasonable requirements of users and end-use customers?*

The ECP acknowledges the significant effort Western Power made to consult with consumers and other parties in part for the preparation of its first tariff structure statement (TSS). The consultation was a major effort as demonstrated by the report submitted as part of Western Power's AA5 submission: AAI - Attachment 4.1 - Community & Customer Engagement Program Report.<sup>5</sup>

Western Power representatives met twice with the ECP as part of this consultation, and unfortunately the ECP found that its consultation expectations as a consumer representative panel were not met.

Attachment 2 to this ECP submission is a 10 November 2021 ECP submission (including Attachment A – 'Pricing directions: A stakeholder perspective') provided to Western Power after the two meetings, outlining the ECP's views on the consultation.

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<sup>5</sup> <https://www.erawa.com.au/cproot/22436/2/AAI---Attachment-4.1---Community-Customer-Engagement-Program-Report.pdf>



Western Power did canvas stakeholder views on a number of aspects of tariffs but seemed to have made its mind up beforehand that it was going to propose significantly increased fixed charges in the tariffs. The ECP consultation seemed to take the form of (main points in summary):

- These are our cost structures and these are our existing network tariff components and their proportions of typical customer bills, and so
- We propose significant increases to the fixed charges and reductions to the variable charges
- We have consulted extensively with consumer groups and others on: “how would you prefer that we introduce these (pre-determined, without consultation) changes”?

The ECP considers that further discussion is required on tariff structures and the methods for fairly and equitably charging customers for their use of the network. The ECP would like to be part of those discussions with Western Power, the ERA, and Synergy and further consultations with customers.

## 9.0 Network tariff structures and price signals

### **ERA question 10:**

*The ERA is seeking:*

- *Stakeholder views on the proposed new tariffs and new tariff structures, including whether they will facilitate the connection of storage and electric vehicle charging stations and encourage demand patterns that will minimise the need for network augmentation.*
- *Stakeholder views on, and any information to assist in the review of, the tariff structure, future cost estimates, cost allocation and rebalancing of tariffs.*

### 9.1 New super off-peak tariffs RT34 – RT37 are supported

Western Power’s proposed introduction of these new, better-structured super-off-peak reference tariffs, and grandfathering/transitioning from existing tariffs that are not structured efficiently, is a positive change and is supported by the ECP. These new network tariffs should allow retailers to offer retail tariffs that help customers better manage their energy costs at the same time as reducing costs of supply.

### 9.2 Concern about increasing the fixed charges

The ECP has serious concerns with Western Power’s intent to substantially increase the fixed charges of residential and small business reference tariffs, as well as with some other aspects of proposed tariffs.

Contrary to Western Power’s statements in the Tariff Structure Statement (TSS) documents, high fixed charges are simply not economically efficient. Increasing the fixed charges is not in the long term interest of consumers because the fixed charge is an ineffective, inefficient charge that customers cannot respond to, to help lower forward-looking long-run network costs as well as customer bills.

All other things being equal, higher fixed charges will see bills fall for households with high electricity consumption, and rise for households with low electricity consumption. 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 households, such as an elderly pensioners, 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:

“While 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 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).”<sup>6</sup>

To reflect network cost drivers it is more appropriate to charge for customer network usage through a demand charge (ideally a coincident kVA demand charge<sup>7</sup>), or time-of-use kWh energy charges (like the new super off-peak tariffs), rather than applying the same higher, unfair and inequitable fixed charge to all RT1 and RT2 customers irrespective of their actual network usage, and ability to easily afford an increase in costs without detrimental impacts on other daily needs being met.

The existing RT1 and RT2 flat, energy-based reference tariffs for residential and small business customers, although poorly structured in terms of reflecting the main network cost driver – coincident demand, do at least differentiate to some degree between these customers’ use of the network through those energy charges when they are a larger proportion of the total bill like at present. Energy (kWh) used in a time period (billing period, or time-of-use period in a billing period) is equivalent to the average demand (kW) in the period.

$$\text{Average (kW) demand in the period} = \frac{\text{Energy used in the period (kWh)}}{\text{hours in the period}}$$

This average demand at least provides better differentiation between customers, on the basis of their average demand as a proxy for their 'use of network' capacity, than higher fixed charges that are the same for all customers in the group.

Moving to a higher fixed charge proportion of the bill, with reduced energy proportion, diminishes the 'use-of-network-capacity' differentiation between customers - such as between a large mansion's network usage versus a small residence's network usage.

Higher fixed charges are simply not fair or equitable for many customers as they provide no effective signal to customers to help them manage their use of network capacity when it matters. Small network usage customers will pay more than is fair, and large network usage customers will not pay enough for their usage.

### 9.3 Demand-based tariffs for residential and small business customers

In AA4 Western Power introduced new time-of-use energy and demand reference tariffs RT19 and RT20 for residential and small business consumers respectively. This was a positive move - to introduce more cost-reflectively structured tariffs with a demand component. However the time windows for

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<sup>6</sup> 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](https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018_0.pdf)

<sup>7</sup> **Coincident kVA demand** - an individual customer's kVA demand at the time of the annual peak demand of the network elements supplying that customer - is the main long-term driver of network costs. It determines the capacity required and so the cost of the network elements that must be built, operated and maintained in order to supply that customer at that time.

the different charging periods of RT19 and RT20 were not consistent with demand profiles that exist now (e.g. low middle-of-the-day demand) nor with the time periods of the new super off-peak tariffs proposed for AA5, as now required by the ERA. So RT19 and RT20 need to either be modified or replaced with tariffs that have the correct time periods.

Ausgrid's tariff structure statement includes a number of demand-based tariff options for residential and small business customers.<sup>8</sup> Additional discussion of Ausgrid's approach to tariffs is in Attachment 2 of the ECP's submission.

Unfortunately, Western Power has not proposed to continue with the AA4 RT19 and RT20 demand-based tariffs by modifying them, or replacing them. The ECP recommends that Western Power does offer these tariffs with a demand component to give residential and small business customers a second choice of time-based tariff (new super off-peak as proposed, and new TOU energy and demand tariffs).

The ECP suggests that the proposed super-off-peak time-of-use energy tariffs also be offered as a second alternative, with a coincident demand component and lower on-peak energy rates.

#### 9.4 Coincident demand charges

Coincident demand charges are a more efficient signal to customers, of the capacity of the network they use when it matters to the network and drives network costs. They are a better alternative than the proposed higher (same) fixed charges applied to all customers irrespective of their network usage, to cover network capacity costs.

Western Power states in footnote 17 on page 18 of the TSS Overview:

*<sup>17</sup> Outside of periods of very high demand, additional demand typically does not cause an increase in our future costs, because it can be served by existing, excess capacity*

Western Power has acknowledged in the extract below from the TSS Overview (footnote #9) that: "... demand-based prices better reflect the principal driver of our future costs" ... which goes on to say: "but can also have adverse effects on the diversity in the timing of customers' demand and can be perceived as less easy to understand".

Unfortunately, Western Power has dismissed the introduction of new TOU energy and demand-based reference tariffs in AA5. See the following extract from Western Power's Appendix-F.1---Tariff-Structure-Statement---Overview-1-February-2022:

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<sup>8</sup> Ausgrid 2019 Tariff Structure Statement: <https://www.ausgrid.com.au/-/media/Documents/Regulation/Reports-plans/Ausgrid-approved-TSS-2019-24.pdf>

We will introduce a time of use energy version of the super off-peak period tariff for both residential and small business customers. Since our customers value clarity and simplicity, and these tariffs comprise an advanced charging window structure, we have adopted time of use energy (rather than demand) structures, since price signals based on energy are generally better understood by customers.<sup>9</sup>

This also reflects the AER's conclusion that:<sup>10</sup>

<sup>9</sup> Western Power, Feedback on issue paper – Framework and approach for Western Power's fifth access arrangement review, May 2021, p 15.

<sup>9</sup> For residential and small business customers peak energy and peak demand are closely related, and each approach has its merits. For example, demand-based prices better reflect the principal driver of our future costs, but can also have adverse effects on the diversity in the timing of customers' demand and can be perceived as less easy to understand. On the other hand, peak energy closely aligns with peak demand, is a concept that is generally better understood by customers and results in a price signal that encourages customers to shift load outside of the on-peak period.

<sup>10</sup> AER, Draft Decision | Ausgrid Distribution determination 2019 to 2024 | Attachment 18 Tariff structure statement November 2018, p 70.



*...we consider that there is no clear cost reflective advantage of adopting demand tariffs over time of use tariffs.*

The ECP agrees with the AER statement that “there is no clear cost reflective advantage of adopting demand tariffs over time of use tariffs” with respect to the *typical* demand tariffs used in Australia, which charge for anytime maximum half-hourly demand - in a billing period, or between certain hours of the day in a billing period, or a rolling 12-month value - and which are not focused on coincident demand. Charging for demand in milder months or at lower network demand times does not drive reductions in demand at times that matter to the network and affect network costs.

However, an annual coincident demand component in network tariff structures, that would typically be applied during very-hot-day evening peaks or, for winter peaking networks during very-cold-day evening peaks, would directly focus customers to manage their discretionary demand (from dishwashers, washing machines, clothes dryers, pool pumps etc.) during those times (that matter to the network and drive capacity costs).

The coincident demand charge could charge for the customer's additional demand over and above their average demand during the on-peak period – average demand as measured by the energy consumed during that period divided by the hours in the period. These are relatively simple to determine from the interval meter data that is increasingly available from advanced meters being rolled out.

The ECP considers that Western Power should explore this option further, preferably through a series of discrete pilots so that the impacts on customers can be understood. This will be particularly necessary for customers who are found to not be able to respond to the signals that such charges send for whatever reason, with appropriate supports and measures included to ensure they are not disadvantaged. This would likely include retaining access to a flat-rate tariff option in case it is cheaper for some consumers.

Introducing more cost reflective tariff options should be undertaken in concert with reforms to electricity concessions. This reform should introduce a percentage-based primary concession, thus households with higher energy needs receive a higher level of support. As a result, customers in financial hardship would be less likely to be negatively impacted by the introduction of a coincident demand tariff.

Where appropriately targeted, a coincident demand charge component, with TOU energy charges, encourages extra attention to reduce demand particularly on the relatively few critical high-demand days of the year in the evening - which TOU energy tariffs that apply throughout the year will not effectively encourage.

The ECP recommends that Western Power consider charging for coincident demand as the basis for its demand charges in its demand-based reference tariffs, and liaise with the ECP on this.

#### 9.5 New tariffs (RT40 and RT41) for dedicated electric vehicle charging stations based on the existing RT5 and RT6 reference tariffs, and a new high voltage distribution storage service tariff (RT39) based on RT5

Western Power is proposing that the new reference tariffs for dedicated electric vehicle charging stations be based on the existing RT5 and RT6 anytime maximum demand reference tariffs.

Western Power is also proposing that the new high voltage distribution storage service tariff (RT39) be based on the existing RT5 anytime maximum demand reference tariff.

The ECP asks the ERA and Western Power to not prolong the deficiencies in the current RT5 and RT6 tariffs by basing new EV charging station or storage tariffs on them, but rather to improve the RT5 and RT6 tariffs so that they are a suitable basis for the new tariffs, or to offer new, better-structured tariffs for these new applications.

The ECP supports the more extensive comments on this matter made in Noel Schubert's individual submission to the ERA.<sup>9</sup>

#### 10.0 Operational productivity improvements

**ERA question 11:** *The ERA is interested in stakeholder views on Western Power's proposed operating and indirect expenditure and any information stakeholders may have to inform the ERA's assessment of the efficiency of the proposed expenditure.*

The ECP considers that there are significant opportunities for Western Power to improve its operational efficiency and productivity to lower costs. ECP members are aware of the following examples of field work that illustrate some practical opportunities.

1. Western Power engages contractors to carry out line work in its network. The contractors - probably paid on a schedule of rates - bring a variety of mobile plant and equipment to a job in case it is needed (which may seem prudent), and then charge Western Power the minimum charge (say four hours) for that plant and equipment even if it turns out to not be required for the job. The incentive seems to be to 'over-service' at Western Power's cost because of the commercial arrangements with the contractor.
2. Field staff often report having to wait on site to do jobs because of delays. Delays can be due to such things as delayed switching of circuits, delayed permits, missing materials and equipment that should have been pre-purchased, and basic scheduling practices. It seems that often when there is a delay to one job, no other useful 'fill-in' work has been scheduled so

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<sup>9</sup> Noel Schubert submission to the ERA, page 4 at: <https://www.era.gov.au/cproot/22601/2/Noel-Schubert1.pdf>

people just wait around, often at remote sites where transport to site and accommodation is costly.

3. Three Western Power vehicles (with drivers) arrived to replace a single damaged green dome rather than one qualified person doing the job safely.

These are just a few practical examples, but there would be many more areas where procedural and process efficiencies could be improved. Western Power has, and does, continually seek to improve its efficiencies through many projects, but the ECP has not seen evidence of an ongoing, strong productivity improvement program or focus.

Service standard benchmarks and incentive schemes exist for some services Western Power provides, but the ECP is not aware of any overarching drivers and continuous improvement programs to improve other operational efficiency.

Benchmarking, and additional performance measures and incentives, could enhance productivity improvement.

#### 10.1 Ensuring Western Power's quotes for works are reasonable

The ECP has been made aware of the concerns from some customers who have sought quotes for works that only Western Power is permitted to carry out.

Some customers, for example, who have sought to get an extension of power lines to new locations on their properties (for bores or sheds or other uses) have reported receiving quotes from Western Power that have varied significantly when requested at different times say six months or a year apart.

It is important that customers can be sure that the quotes they receive from Western Power are reasonable and reflect efficient costs.

#### 11.0 Managing peak and minimum network demand to defer capex

**ERA question 12:** *The ERA is interested in stakeholder views on the proposed capital expenditure and any information stakeholders may have to inform the ERA's assessment of the efficiency of the proposed expenditure.*

Compared to Energex and Ergon in Queensland, Western Power currently does not have an established, experienced capability of delivering a range of demand management or non-network solution programs effectively (including appropriately-focused network tariffs) to manage low network demand in the middle of the day in mild weather, or peak network demand that occurs in very hot weather such as we have had in recent months.<sup>10</sup>

These recent more extreme weather conditions have revealed higher electricity demand than was forecast or expected in some network areas, and parts of the network have become overloaded and tripped off causing concerning power outages.<sup>11</sup>

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<sup>10</sup> The exception is Project Symphony for which Western Power has engaged some experienced people to manage the project together with AEMO and Synergy.

<sup>11</sup> Independent Review into Christmas Power Outages, Michelle Shepherd, March 2022:  
<https://www.wa.gov.au/system/files/2022-03/Independent-Review-Christmas-2021-power-outages-Report-Final.pdf>

Now Western Power will be planning to reinforce or upgrade parts of the network in response, adding to capital expenditure. Some of this expenditure could be deferred or avoided by effective peak demand management programs, at lower cost than the augmentations, had such programs been implemented earlier.

From past experience, typical Western Power plans and business cases are now most likely to dismiss demand management/non-network solutions as feasible options, and choose normal network solutions or batteries to provide extra network capacity, because it takes time to implement effective programs to achieve the required demand reductions. This approach then negates the need for having the fundamental capabilities and programs, plus better tariffs, in place for future peak demand management.

Energex and Ergon in Queensland have well established demand management programs in place which incentivise proponents and customers to take up opportunities to reduce network peak demand in highly loaded parts of the network before they become overloaded.<sup>12</sup> For example refrigeration, lighting, air-conditioning and other upgrades are financially supported at a cost lower than the cost of network augmentation. Energex and Ergon between them have approximately 20 full-time staff working on such programs, plus many more contractors and supplier staff helping to deliver the solutions.

The concern is that the above Western Power 'do nothing to manage demand, build more capacity and continue to do nothing' cycle just continues and results in higher demand and then higher capex than is efficient, increasing the RAB which then translates into higher charges to customers over time.

A key reason Western Power may find it more difficult to do effective demand management/non-network solutions programs could be the 'linear' contracting arrangements in the SWIS (network – retailer – customer) where the retailers rather than Western Power are expected to be the parties dealing with customers. However Western Power is doing some programs like its Flexibility Services pilot, and Project Symphony pilot with AEMO and Synergy that involve Western Power interacting directly with customers.

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<sup>12</sup> See: Energy Queensland (Ergon and Energex) Demand management plans and reports:  
<https://www.ergon.com.au/network/network-management/demand-management/demand-management-plans-and-reports>  
Ergon Demand Management website including links to programs and initiatives offered:  
<https://www.ergon.com.au/network/network-management/demand-management>  
Energex Demand Management website including links to programs and initiatives offered:  
<https://www.energex.com.au/home/control-your-energy/managing-electricity-demand/demand-management-plan-and-initiatives>