Nicola Cusworth, Chair
Economic Regulation Authority
PO Box 8469
PERTH BC WA 6849

11 December 2017

Dear Ms. Cusworth

WACOSS Submission to the Proposed Access Arrangement for the AA4 Period

WACOSS
WA COUNCIL of SOCIAL SERVICE
Ways to make a difference

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The Western Australian Council of Social Service appreciates the opportunity to provide a submission to the Economic Regulation Authority's review of *Western Power's proposed access arrangement for the AA4 period (2017-2022)*.

WACOSS is strongly interested in the review on electricity network, distribution and pricing issues because of its impact on the balance between the affordability and reliability of electricity energy for the people of Western Australia. The AA4 needs to be a modern and practical access arrangement for the Western Power network that minimises utility hardship while meeting the diverse and changing needs of our wider community.

We view this as an opportunity to strengthen customer affordability and value for money in the electricity market and make our recommendations in relation to the need for greater customer focus in essential services known. As the peak body for community services sector, this review directly affects the disadvantaged and vulnerable citizens we represent whose specific needs and requirements need to be balanced against those of the wider community and this submission comments on the relevant changes proposed in the review process.

In preparing this submission, WACOSS was relied on information received in recent consultations across the State of its member services to identify community sector priorities, and specific consultations with the Community Relief and Resilience Network on those issues affecting households in financial stress. We have sought to gather what input we can on the proposed access arrangements, but our capacity to do so has been limited by the lack of any resourcing provided by the WA Government to ensure customer views are represented in the WA electricity market and our reliance on voluntary contributions from relevant stakeholders. WACOSS looks forward to participating in the review process to the best of its capacity.

Please contact Chris Twomey on (08) 9420 7222 should you have any queries regarding this submission.

Yours sincerely,

[redacted]

Louise Giolitto
Chief Executive Officer, WACOSS

WACOSS Submission:
Western Power's Proposed AA4 Access Arrangement

WACOSS[1] is the peak body of community service organisations and individuals in Western Australia. WACOSS stands for an inclusive, just and equitable society. We advocate for social change to improve and assist the wellbeing of Western Australians, particularly those with low-incomes or who are disadvantaged, and to strengthen the community sector service that supports them.

For households doing it tough, a utility bill can represent the choice between paying their rent and buying food, or keeping the lights on, the fridge running and being able to heat or cool their home. As a result, low-income earners may be forced to forsake services such as water or electricity, which are essential to maintaining a reasonable standard of living, in order to feed themselves or to keep a roof over their head.

Western Power's access arrangements have an impact on electricity retail prices for households. While this is only one component of the retail tariff (representing between 36% to 46% of the average residential bill)[2], any potential increases will put upward pressure on the cost to customers and therefore need to be contained as much as possible.

Effective regulation and advocacy is fundamental to ensuring access to a reliable, safe, affordable supply of electricity that is fair and equitable and in line with community standards. Western Australia remains the only state in Australia without funded consumer research and representation in the regulation of our energy market.

Despite this, WA's regulatory systems for electricity, gas and water were all designed with an expectation that consumer representation would be an active component of market regulation and policy development. This advocacy is just as important in our energy markets, where rising costs and hardship, changing policy and significant shifts in distributed generation and consumer engagement make the issue even more pressing.

WACOSS welcomes the provision of more comparative information from Western Power in its submission and recent reports, but notes that the lack of commensality between the AER benchmark reporting standards and those currently used by Western Power and the ERA substantially limits our ability to make meaningful comparisons across jurisdictions to evaluate comparative performance and value for money.

While we recognise that there remains some policy uncertainty within Western Australia about future directions on market reform, WACOSS is of the opinion that whatever happens on future jurisdictional regulatory responsibility, it would be of value to further align WA benchmarking and reporting requirements with those in the NEM to improve comparability.

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[1] WACOSS acknowledges *Mr. Luke Berry of Engineroom Consulting* for his valuable contribution to this submission.

[2] The 36% estimate comes from the Western Power and the 46% figure from the *2016 Report on Residential Electricity Price Trends* from AEMC.

Affordability & Hardship:

In July 2017, the McGowan Government announced a suite of household fees and charges to be increased in the aim of State budget repair. In particular, a significant 10.9 per cent rise in electricity fixed charges for Western Australian households was announced, which impacts disproportionately on low-income households.[3]

In 2015-16, there was a significant increase in electricity and gas customers seeking assistance from their energy retailer, and a rise in direct debit terminations due to default. In electricity, 11 per cent or more than one in ten residential customers were granted more time to pay a bill (payment extension), up from 8.7 per cent in 2014-15, with the proportion of residential electricity customers on instalment plans reaching a six-year peak in 2015-16 at 4.7 per cent or nearly one in five.[4]

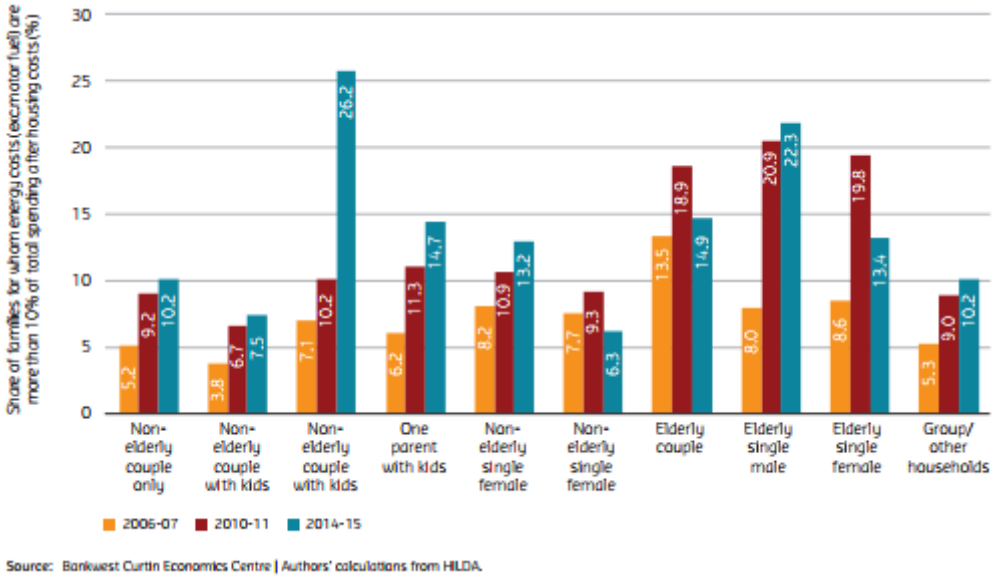

Figure 1: Shares of WA households with more than 10 per cent of expenditure on utilities by family type 06-07 to 14-15[5]

[3] This is particularly the case for aged pensioners, who generally ration their electricity use to remain within a fixed budget, often putting their health and well-being at risk as a result. While the fixed charge does help to recover more of the network costs for households with grid-connected solar PV, the lack of any protection or compensation for concessional households means it represents a disproportionate impact on their limited disposable income.

[4] Economic Regulation Authority (2016) – *Annual Performance Report on Energy Retailers*, p. 3

[5] Bankwest Curtin Economics Centre (August 2017) – *Power to the People: WA's Energy Future Report, p. 3*

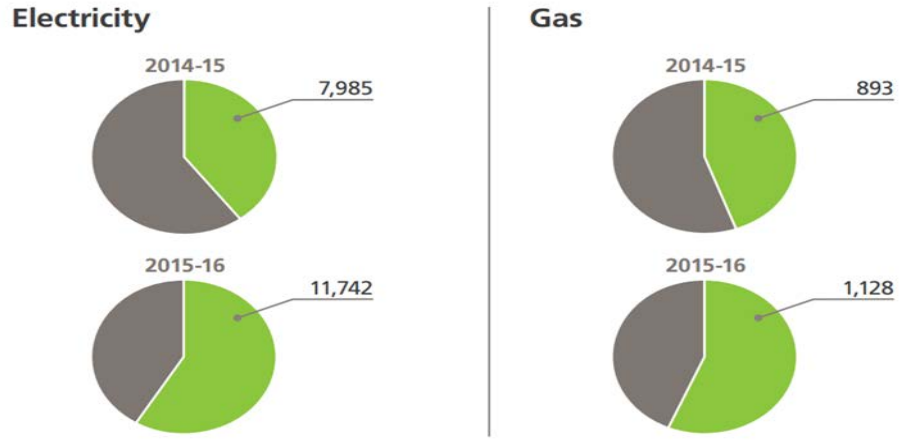

Figure 2: Residential Direct Debit Cancellations[6]

In their annual performance report of energy retailers, the Economic Regulation Authority directly quoted Synergy as explaining:

> *2015-16 was a difficult year for residential customers, with increasing demands on their disposable income due to a decline in economic conditions.*[7]

This statement of concern from the retailer came prior to the 10.9% increase in the fixed charge for electricity supply in July 2017. The pressure on living costs from energy prices is not expected to decrease. Forecasts show continued steep rises in electricity prices over the next year.

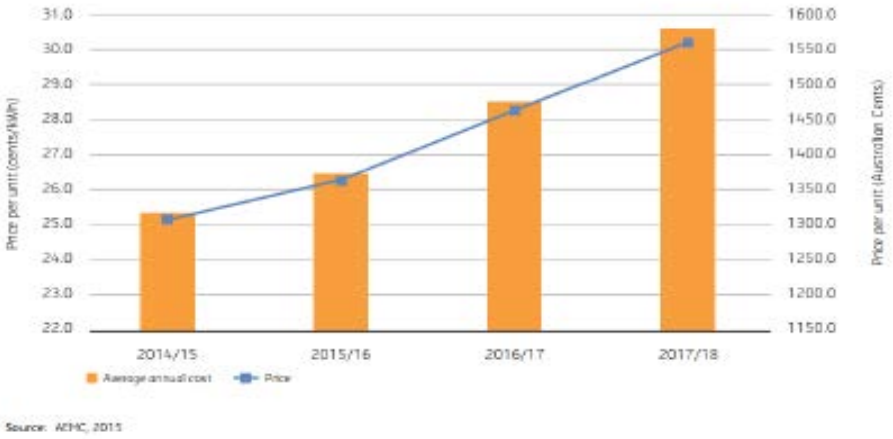

Figure 3: Projected trends in residential electricity prices and annual costs in WA[8]

The Hardship Utility Grant Scheme (HUGS) provides financial assistance to those in financial hardship in order to pay their utility bills. An average of 109 people a day applied for HUGS over the last financial year, with approximately 30,000 Synergy customers making applications to HUGS in 2016/17.[9]

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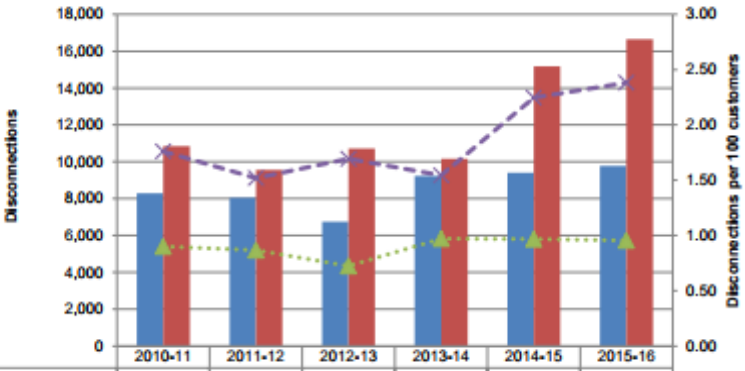
[6] Economic Regulation Authority (2017) - *Snapshot of the small use energy market in WA*
[7] Economic Regulation Authority (2017) *2016 Annual Performance Report – Energy Retailers*, p. 9
[8] WACOSS (2017) – *Cost of Living Report 2017*, p. 40
[9] WACOSS (2017) – *Cost of Living Report 2017*, p. 40

Despite the deterioration in economic conditions, the overall proportion of residential electricity customers disconnected for non-payment was almost the same as last year. In 2015-16, the overall residential disconnection rate was 0.96 per 100 customers, compared to 0.97 in 2014-15.

Horizon Power's residential disconnection rate increased from 2.83 per 100 customers to 4.38 per 100 customers. The proportion of these customers who were disconnected more than once in the past 24 months at the same supply address was also higher, up from 16.7 per cent in 2014-15 to 27.9 per cent in 2015-16, indicating a significant proportion are experiencing ongoing financial hardship.[10]



	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Electricity	8,295	8,051	6,746	9,235	9,412	9,774
Gas	10,848	9,557	10,724	10,165	15,184	16,649
Electricity (per 100 customers)	0.90	0.87	0.72	0.97	0.97	0.96
Gas (per 100 customers)	1.76	1.52	1.69	1.55	2.25	2.38

Figure 4: Total Residential Customer Disconnections[11]

We note that the timing of AA3 coincided with the WA resources boom and as such contained projections for both population and consumption growth that were necessarily higher than those actually experienced. We appreciate that Western Power revised their projections for demand and scaled back their capital expenditure during the AA3 period, but note that comparison to benchmarking targets based on those projections has led to incentive payments to Western Power to be recouped during this access arrangement – imposing additional costs on households counter-cyclically when they are less able to afford them.

Looking forward we note that current projections for economic, wages and population growth all remain flat in the short to medium term, and advise that provisions for growth should be conservative. We note the growth projections in the recent BCEC report *Power to the People*[12] remain fairly flat and are arguably more realistic than Treasury projections in the 2018/19 State Budget.[13]

[10] Economic Regulation Authority (2017) *2016 Annual Performance Report – Energy Retailers*, p. 17
[11] Economic Regulation Authority (2017) *2016 Annual Performance Report – Energy Retailers*, p. 16
[12] Bankwest Curtin Economic Centre (August 2017) *Power to the People: WA's Energy Future*.
[13] Western Australia State Budget 2017-18. Budget Paper 3. Economic and Fiscal Outlook.

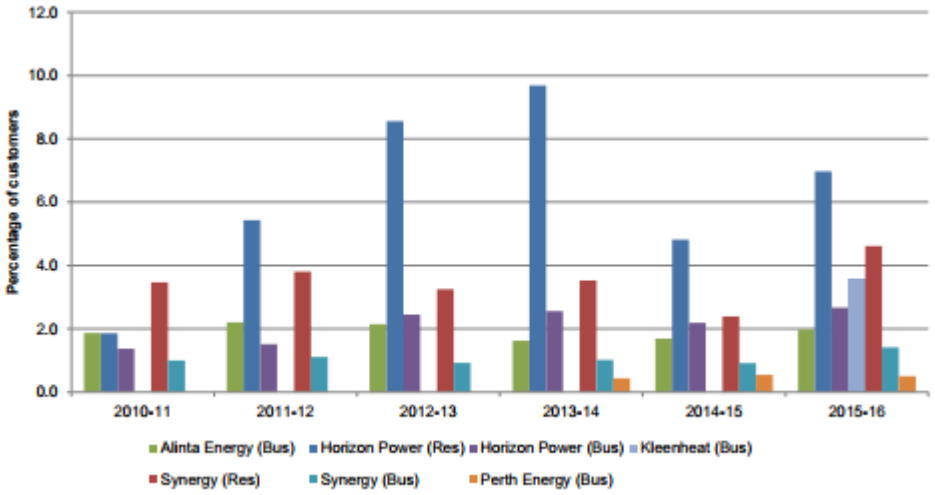


Figure 5: Percentage of electricity retailers' residential and business customers on instalment plans[14]

WACOSS notes the evidence of rising rates of financial stress within particular vulnerable populations, as documented and analysed in the recent *WACOSS 2017 Cost of Living Report*[15] and BCEC Report *The Price is Right?*[16]

In particular, analysis of ABS HES data demonstrates that, while expenditure of housing and utilities has risen as a proportion of weekly expenditure for the average Australian household, this rise has been proportionately higher for low income and vulnerable households (including low resource households, single parent households and single person households). This means that any rise in the cost of essential services impacts disproportionately on lower income and vulnerable households both because it represents a bigger proportion of limited income and because they have left discretionary expenditure they can redirect (Figure 6 & 7).

[14] Economic Regulation Authority (2017) *2016 Annual Performance Report – Energy Retailers*, p. 10
[15] WACOSS (2017) Cost of Living Report 2017. www.wacoss.org.au
[16] Bankwest Curtin Economic Centre (2017). *The Price is Right? An examination of the cost of living in Western Australia.*

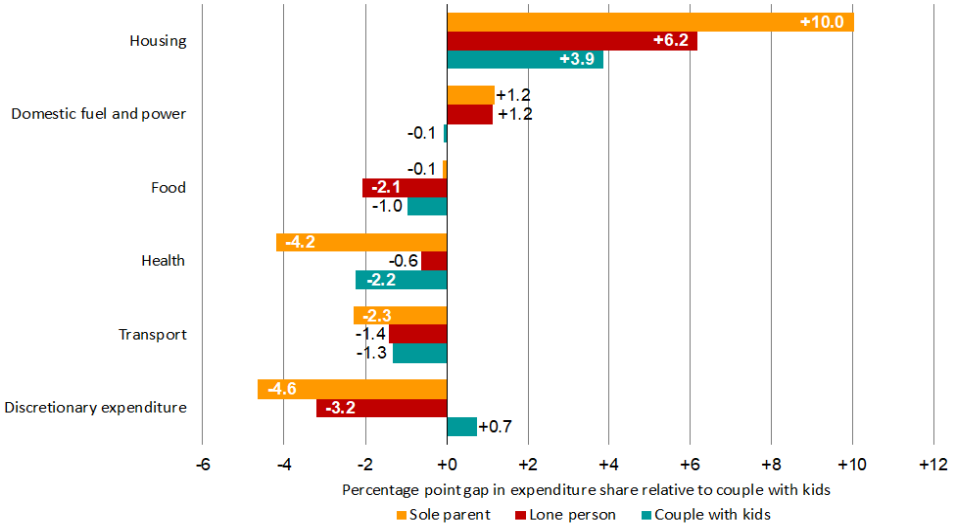


Figure 6: Gap in expenditure shares in WA by household type relative to couples with no children 2015-16[17]

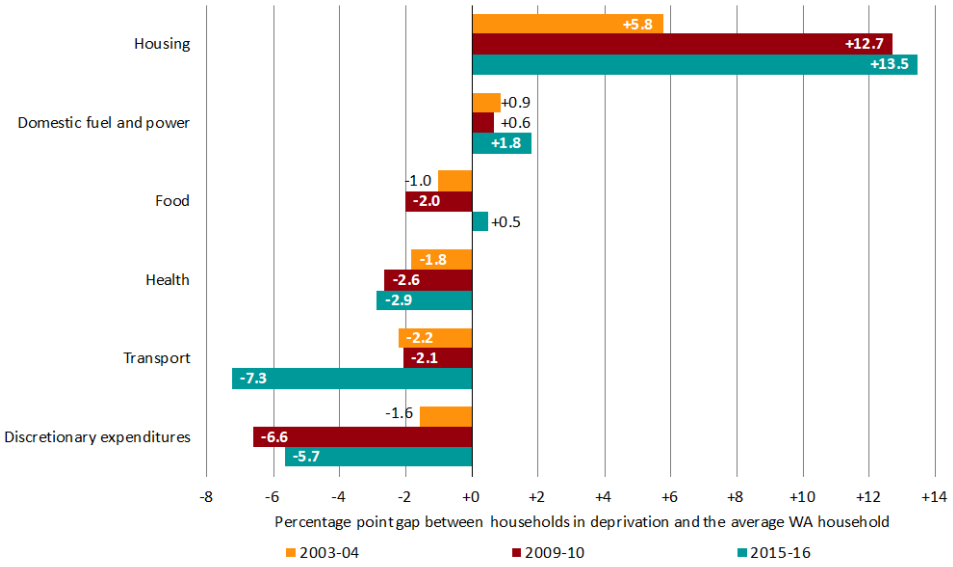


Figure 7: Gap in expenditure shares in WA by expenditure category by year relative to couples with no children[18]

WACOSS compiled income and expenditure data provided by the WA Financial Counselling Network of 265 households who sought assistance from financial counsellors in the week of September 4-10, 2017. This revealed the real-life living cost pressures being faced by households in our state experiencing financial hardship and stress. The data demonstrated that households in financial hardship had housing and utility costs significantly higher again than the ABS low income and vulnerable households (Figure 8).

[17] Bankwest Curtin Economic Centre (2017). *The Price is Right? An examination of the cost of living in Western Australia. Page 60.*

[18] Bankwest Curtin Economic Centre (2017). *The Price is Right? An examination of the cost of living in Western Australia. Page 60.*

	ABS Household Expenditure Survey					Financial Counselling Data				
	All	Mortgagee & Renters	Lowest quintile*	Highest quintile	Low resource	All	Wages-only	Centre link	Rent only	Mortgage only
Housing	26.0	35.9	41.2	33.2	39.1	48.5	50.9	46.3	44.2	55.2
Food	18.0	15.2	17.1	13.1	17.3	18.1	15.1	20.2	20.5	15
Transport	10.0	8.9	6.2	10.0	7.5	10.3	11.2	9.8	10.4	9.9
Utilities	4.0	3.3	5.0	2.2	4.3	5.5	4.5	6.3	6.4	4.3
Recreation	11.0	8.9	6.1	11.3	6.1	4.7	7.6	4.6	5.1	4.1
Health	6.0	4.5	3.4	4.7	3.6	3.6	6.4	3.4	3.5	3.5
Communication	4.0	3.4	4.1	2.7	4.0	2.1	2	2.3	2	2
Education	2.0	2.0	0.6	3.5	1.3	1.6	2	1.4	1.5	1.5
Clothing and footwear	2.0	2.0	1.4	2.3	2.1	1	0.8	1.1	1.1	0.7

Figure 8: Comparison of spending patterns of households from ABS Household Expenditure Survey versus Households seeking Financial Counselling in 2017.[19]

Consideration of expenditure patterns show significant variation in the distribution of utility consumption, indicating that some lower income households are consuming significantly more electricity than average. Evidence from other reports (e.g. *Energy Poverty in Australia*) suggests that this is most likely to be linked to poor quality housing and appliances as well as a lack of understanding of opportunities to change behaviour to reduce consumption. What this means in practice is that increases in energy costs impact disproportionately on vulnerable households in circumstances where they have few if any options to improve efficiency or reduce consumption (due to lack of capacity/ownership, lack of capital, lack of education/awareness). The 2016 BCEC Energy Poverty survey found that a number of low-income households were resorting to different measures in order to reduce their power bills (Figure 9).

[19] WACOSS (2017) Cost of Living Report 2017. www.wacoss.org.au

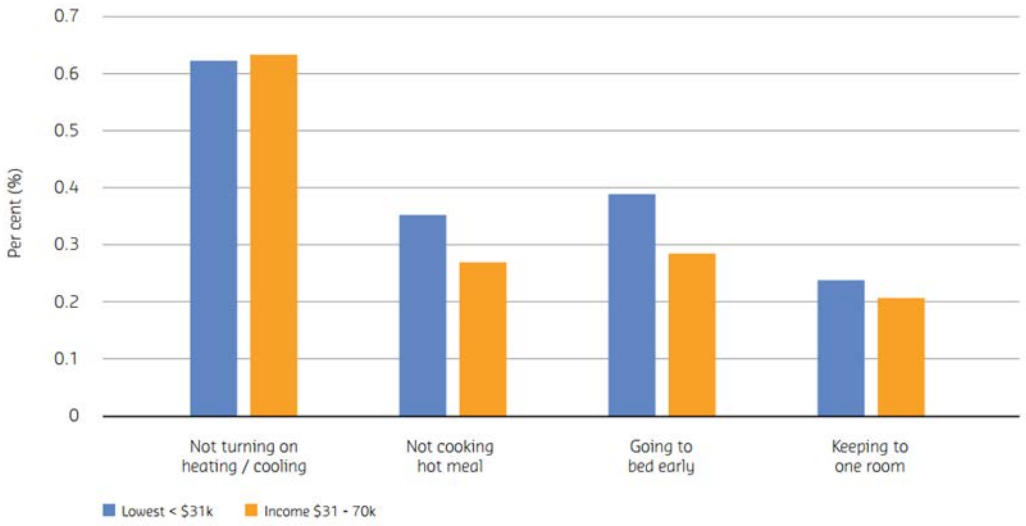


Figure 9: Proportion of low income households reporting use of cost cutting measures[20]

The report found that rental households were dramatically less likely to be insulated, meaning that those on low incomes were more likely to be using more power to regulate the temperature in their dwelling (Figure 10).

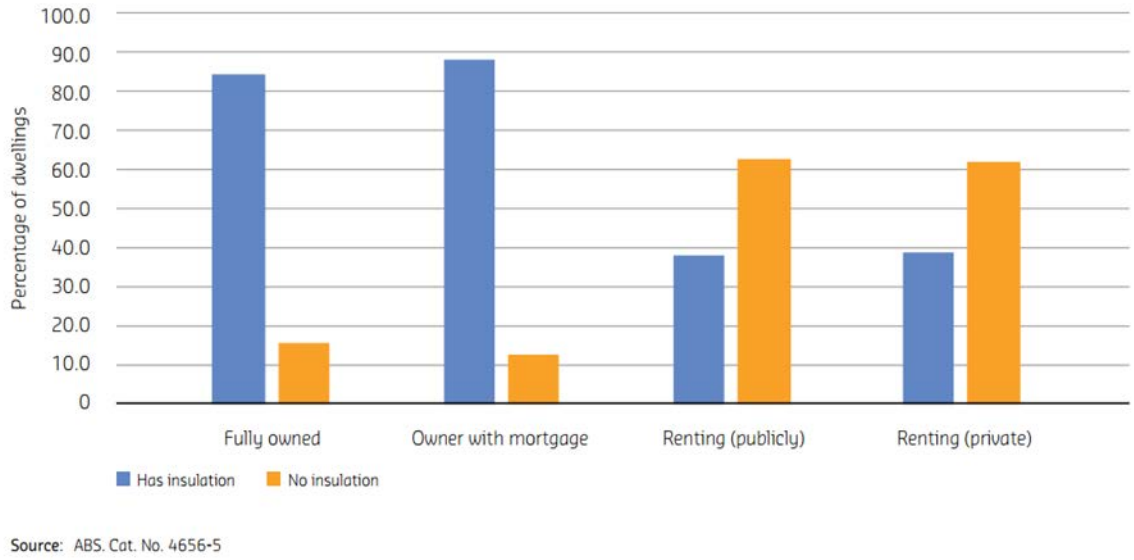


Figure 10: Percentage of dwellings with insulation in Perth 2009/2010 (per cent)[21]

As those households on average or better wages who own their own home are increasingly investing in solar energy and battery storage systems to reduce their electricity costs, fixed and network charges may continue to rise to maintain network profitability. This is likely to result in an increased impost on

[20] Bankwest Curtin Economics Centre (June 2016) – *Energy Poverty in Western Australia, p*. 50
[21] Bankwest Curtin Economics Centre (June 2016) – *Energy Poverty in Western Australia*, p. 59

those on lower incomes and in rental properties who have neither the means nor the choice to invest in photovoltaics, insulation or efficient new appliances.

In summary, social justice and equity considerations apply to setting targets and allowable costs – given that additional costs impact disproportionately, and reliability and quality considerations matter less and impact less on vulnerable households.

The relevance of hardship to AA4 is that it needs to be considered in setting service quality targets and incentives, in the balance of exercise of judgment about whether to take apparently 'low-risk' and 'conservative' positions on issues such as demand forecasts and rate of return components such as the cost of equity, and in setting pricing mechanisms. Distribution prices were significantly higher in the AA3 period than forecast in part due to energy volumes being lower than forecast.[22]

Service Quality

Western Power's service quality report shows that, judged against the benchmarks set for AA3, Western Power has performed well. The AA3 access Arrangement decision set service standard benchmarks (SSBs) and harder-to-achieve service standard targets (SSTs).

The ERA noted in its press release that "Western Power has exceeded all 17 service standard benchmarks for the transmission and distribution networks."[23]

Of the seventeen SSBs, in 2016/17, Western Power's performance significantly exceeded the service standard target (SSB) for 11 of the SSTs and exceeded the benchmark in the other six SSBs.[24] In addition to this, Western Power met or exceeded 16 of the 17 SSTs, again significantly so in most cases. Examining Western Power's service quality performance in the period since 2012/13, Western Power has rarely failed to beat the SST, except perhaps in rural long SAIDI and SAIFI and transmission average outage duration.

The ERA press release note that "Western Power has calculated the total reward for its service standard performance during the current access arrangement period to be $255 million."[25] This reward is about 4.8 per cent of the $5,360.0 million total smoothed transmission and distribution revenue[26] set for Western Power in 2012. Even adjusting the Western Power revenue cap by 2 per cent inflation over 5 years since 2012, the reward still represents over 4.3 per cent of Western Power's revenue cap.

This raises questions about whether an appropriate balance has been struck between service quality and price. It may be that the incentives to meet service quality standards are pushing prices too high. We note for example that the settings for the incentive mechanisms under AA3 to provide financial rewards where WP has exceeded its benchmarks means in practice they will be recovering half a billion

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[22] ERA 2017, *Issues Paper on Proposed Revisions to the Western Power Network Access Arrangement*, p. 33.
[23] ERA Notice, 15 November 2017, *Western Power Access Arrangement – Service Standard Performance Report 2016/17*
[24] Western Power 2017, *Electricity Networks Access Code 2004 - Service Standard Performance Report* for the year ended 30 June 2017, September, Table 13, p. 18
[25] ERA Notice, 15 November 2017, *Western Power Access Arrangement – Service Standard Performance Report 2016/17*
[26] ERA 2012, Further Final Decision on Proposed Revisions to the Access Arrangement 5 for the Western Power Network, November, table 1, p. 6

dollars in profits from customers over AA4 ($270m on cap ex and $230m on op ex), which will mean in practice an additional $5 per year to the average household bill.

We also note that problems during AA3 with the application of the building blocks model meant a significant under-recovery of costs from transmission customers, which in effect has meant a greater level of cross-subsidisation from small use customers (see Table 2 page 33 of the ERA Issues Paper).[27] Analysis by Stephen Davidson's submission to this inquiry suggests costs for distribution users declined by 40% over the AA3 period while those borne by transmission users rose by a similar amount.

We note that the ERA faces a difficult trade-off in considering Western Power's AA4 proposal to limit increases to transmission customers to below 10%. While such an increase will be counter-cyclical and potentially challenging for the existing business models of some transmission customers, the alternative is that small use customers continue to cross-subsidise them during a time of increasing financial hardship. To put this in context, transmission customers twice received 10% decreases in electricity prices during the AA3 period, while distribution customers twice faced rises of more than 10%.

The question of the trade-off between service quality and price needs to be considered in terms of consumers' willingness to pay for service quality levels, and the hardship experienced by some customers of the network.

Service standards are a critical driver of costs, with higher service standards incentivising utilities to lift performance (and increase costs). This may lift service standards above the point where customers are willing to pay for improvements in service.

Often governments and regulators select service standards with little reference to customer preferences. There needs to be a conversation with customers to determine what service standards customers want.

It is critical for service standards to be set based on customer preferences gained from customer feedback, observations of customer behaviour, surveys, and other authoritative indicators of customer choices. There is no purpose to lifting service standards to the point where significant numbers of customers disconnect due to hardship or unreasonably ration electricity use to the point where customer amenity is significantly impacted.

WACOSS recommends careful examination of customer willingness to pay in setting service standards and SSBs/SSTs so that an appropriate balance is struck between service quality and price.

Energy & Peak Demand Forecasts

AEMO released an ACIL Allen report on total energy consumption and peak demand forecasts in the Western Power network.[28] It forecasts only slightly increasing residential demand over the next five years of the AA4 period.[29] It forecasts overall demand adding in business-related demand to grow relatively flatly. It forecasts growth in demand to be 2.8 % (low growth) to 5.0% (expected growth) to

[27] ERA 2017, *Issues Paper on Proposed Revisions to the Western Power Network Access Arrangement*, p. 33.
[28] ACIL Allen 2017, *Peak Demand and Energy Forecasts for the South West interconnected System – Western Australia*, June
[29] ACIL Allen 2017, Figure 6.1 at p.48

7.3% (high growth) in the period to 2021-22 compared to 2015-16, the most recent period with actual consumption data available.[30]

As peak demand is a more significant driver of network investment, ACIL Allen analysed 90 Power Over Ethernet (POE), 50 POE, and 10 POE growth in peak demand across the low, expected, and high growth scenarios. The five-year average growth forecasts ranged from just 0.6% under the low growth scenario to 1.4% under the expected scenario to up to 2.4% under the high scenario. The 10-year average growth scenarios were very similar. This means there is not expected to be significant growth in peak demand over the 5 years of AA4.

In considering the appropriate demand forecasts, there are a number of factors to consider.
First, the downturn in the resources industry will tend to dampen forecasts. Second, emerging technologies such as solar panels and batteries are likely to reduce demand for electricity distribution services and lower future demand forecasts. The output from growing demand for solar panels installed at residential and business premises needs to be considered carefully in estimating the need for augmentation capital expenditure, and the need for replacement capital expenditure for assets that are lightly used.

Overall residential, commercial, and small industrial demand has been flat across Australia since around 2010, due to a mix of factors including increased installation of residential and business solar panels, greater energy efficiency, and higher prices driving lower demand.

Reductions in demand due to installation of solar panels is likely to curb use of the distribution system. Partly this is due to the pricing structure of tariffs, which encourages installation of panels to offset grid supply, compared to the feed-in tariff, which discourages export of electricity from panels through the grid.

The A1 rate of 26.474 cents per kWh makes it attractive for residential customers to install solar panels to displace electricity from the distribution system. However, the feed-in rate of 7.135 cents per kWh plus GST for residential customers offered by Synergy[31,32] is not sufficiently attractive to encourage residential customers to install solar panel systems big enough to export electricity to the grid. Residential customers are instead likely to size their systems to offset their peak daytime demand.
Overall this means that the distribution system is less likely to carry electricity to supply households and at the same time unlikely to carry significant exported solar generation.

Third, there are a range of emerging services and business models that are disrupting demand for electricity transmission and distribution services. Emerging energy services include:

- Portable/storable energy services;
- Specific purpose/use services (e.g. hot water, electric vehicle, cooling and heating); and
- Energy management and sending power to the grid, demand response, information services.

Portable energy services such as batteries are rapidly becoming economic to install. For example, a $6.7 million pilot project of large-scale battery storage for households with solar panels has started in the new Perth suburb of Alkimos Beach as part of Synergy's efforts to embrace technological change.

[30] ACIL Allen 2017, p.50
[31] Synergy 2017, *Solar connections, REBS & upgrades* - https://www.synergy.net.au/Your-home/Manage-account/Solar-connections-and-upgrades
[32] Up to 40 cents per kWh to customers who connected solar panels before July 2011.

Under the trial, the take-up of solar panels is mandatory, and in addition a 1.1.MW battery will be connected to the line from Western Power's grid that feeds the Alkimos subdivision.[33]

In addition, a range of new services are arising to complement current or new forms of supply. These include energy management, demand response, and information services. Energy management involves managing use by a suite of tools that test and implement ways to reduce usage. For example, several smart appliances are being developed that can use energy more conservatively.

Many of these tools are more feasible to implement with new software and electronic systems. For example, demand response can be automated to make it easier to implement. For example, air-conditioners can be set to turn down when prices rise past a threshold. Smart meters can help to move usage to off-peak times.

Traditionally, demand response options have been limited because many types of demand are costly to move. However, some new sources of demand such as electric vehicles may be relatively more able to move in response to prices.

Fourthly, in more remote parts of the grid, Western Power has signalled a desire to evaluate standalone power systems as an alternative to network connection. Western Power has submitted a rule change in the NEM supportive of this position.[34] [35] This initiative from Western Power is to be welcomed as a way of only adding grid investment where standalone supply is reliable and cheaper than grid supply.

We are also watching with interest the proposed Kalbarri micro-grid trial, combining grid-scale storage and local renewable supply to tackle the problems faced by a community at the end of a long (132 km) single wire connection to the SWIS. Potentially application of smart meters combined with communications capacity and incentives for active demand management during line outages may significantly assist in extending recovery time. We note there may be opportunities to apply the learnings from the current Horizon Power trials relating to Power Plans.

Research currently being conducted by BCEC, WACOSS and Horizon Power[36] analyses the responses of vulnerable households to proposed electricity tariff structures ('power plans' with a peak consumption rate allowance, similar to mobile phone contracts) designed to encourage reduced peak consumption. The product links smart meter data to a mobile phone app to send an alert to consumers when they are approaching their peak consumption rate allowance, prompting them to reduce consumption or risk losing a financial reward.

The trials suggested that, while the majority of consumers including vulnerable consumers could benefit from this approach, there was a third of vulnerable customers who struggled to maintain

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[33] Mercer, Daniel 2015. The West Australian, *Suburb to test battery storage of solar power*, 16 November 2015

[34] AEMC, 2017 - *Alternatives to grid-supplied network services draft determination*. AEMC is supportive of the intention of the rule change, but its draft determination is not to support the rule change in the absence of clear consumer protections.

[35] COAG Energy Council, 2017 – *Energy Market Tranformation*. The Energy Market Transformation Project Team is currently examining issues around best practice regulation of customers supplied by off-grid systems under the auspices of the COAG Energy Council. http://www.coagenergycouncil.gov.au/council-priorities/energy-market-transformation

[36] Tom Houghton & Chris Twomey (2017) *Power plans for electricity: The impact of tariff structure changes on energy vulnerable households.* BCEC. (in press)

reduced consumption and would be financially worse off. It also highlighted increased anxiety among some vulnerable consumers, and the risk that some may suffer excessive discomfort in an effort to stay within their peak allowance, potentially putting their health and well-being at risk.

It is also likely that investment at the end of the grid will to be affected by the same economic drivers. For example, many new suburbs around Australia are being planned for solar and battery supply, with relatively minimal network connection and supply. For example, Alkimos Beach in northern Perth and Aura in Queensland are planning to supply more of their own power and to operate inset grids that will not be gifted to the network operators.

Overall, WACOSS considers that the ERA needs to be careful not to over-estimate future demand, leading to excessive capital spending allowances. Such allowances would have two effects – they would raise prices and they would shrink demand. As demand fell but prices rose, revenues would have to be collected across a narrower base, which could cause a further fall in demand and a vicious downward spiral in demand and rise in prices. This experience has started to emerge in eastern states jurisdictions. As noted earlier, distribution prices in the AA3 period were higher than forecast due to lower than forecast energy volumes.

Offpeak Tariff Arrangements

At present, the main tariff is the A1 tariff, which is a flat tariff irrespective of the time of consumption. Synergy has a Smart Home plan which is based on time of use.[37] However, consumption at should times (7am to 3pm on weekdays and weekend daytimes) is almost the same as under the A1 plan, while consumption at peak times (3pm to 9pm on weekdays) is about twice the price (50.3471 cents per kWh compared to 26.474 cents per kWh under the A1 tariff). The discount at offpeak times (9pm to 7am) is only about 50%. The high peak charge, the tiny discounts at shoulder times, and the modest discount at offpeak times mean the Smart Home Plan is unlikely to be attractive to many customers.

As already discussed, that work is being done by Curtin University/Horizon Power to shift peak use to offpeak times through new tariff arrangements on the Horizon Power network. Initial data highlights that the majority of consumers are likely to be able to respond effectively to and benefit from these arrangements but that a subset of vulnerable customers are potentially worse off.

A recent report *Heatwaves, homes and health: Why household vulnerability to extreme heat is an electricity policy issue* by the Centre for Urban Research at RMIT[38] highlights the significant risk posed to vulnerable households by the increasing prevalence of extreme heat, particularly in our tropical northerly climactic regions. It raises concerns about policy initiatives in the National Electricity Market (which does not include WA or NT) that aim to reduce peak electricity demand via 'price signals' which would make energy significantly more expensive during heatwaves, indicating significant risks to the health and well-being of vulnerable population groups (including seniors, infants and those with medical conditions such as themo-regulatory dysfunction).

Consideration needs to be given to alternative policy arrangements, protections or concessions for vulnerable customers to ensure they are not unduly disadvantaged under such arrangements, or their health put at risk.

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[37] Synergy (2017) – Synergy Smart Home Plan, https://www.synergy.net.au/Your-home/Energy-plans/Smart-Home-Plan

[38] RMIT, Centre for Urban Research – Heatwaves, homes and health report

We note that Western Power has included a business case for advanced metering in the AA4 arrangements, that smart meters are now the default under current AER regulations, and the SWIS is effectively lagging behind the rest of Australia in this regard. At the same time we note there is a need to balance consideration of who benefits from the wider roll-out of new metering technologies versus the proportionate share of the costs borne by low income households. We suggest that the benefits of smart metering are mostly delivered in relation to their distribution across a local area (new developments, edge of grid), in relation to the adoption of new technologies (domestic PV and battery storage), or where there is a business case for targeted roll-out to manage an network reliability problem or reduce the need for additional infrastructure (isolated micro-grids like Kalbarri).

Western Power should be encouraged to introduce and popularise offpeak tariffs to incentivise residential users to move demand from peak to offpeak times. Metering arrangements such as smart metering enhance the ability of users to switch to time-of-use arrangements to reduce the height of evening peak use. Alternatively, offpeak tariffs could be introduced through supplying power on separate circuits within accumulation meters, as is done in Queensland.[39]

Pricing Arrangements

The Electricity Network Access Code provides that access arrangements may contain pricing methods. Western Power's proposed revisions contain price control principles and methods in chapters 5 and 6.[40] The ENAC provides little guidance on setting prices for network services apart from providing that they should be between incremental and stand-alone cost.[41]

In setting prices, the following factors should be considered:

- As discussed above, residential customers are not contributing to rises in demand or peak demand. Non-residential users are the main contributors to rising demand and peak demand.
- Residential customers are, on the whole, not contributing to or benefiting from rises in costs stemming from improvements in service quality. Residential customers on rural short and rural long circuits are experiencing service quality above SSTs but less so than in CBD areas. Service quality outcomes in rural long and rural short circuits are closer to the SST targets. Service quality outcomes on urban circuits significantly exceed SSTs but less so than CBD circuits. Users in CBD areas are predominantly business customers, especially when measured in consumption terms.
- Residential customers may place a lower value on current service quality levels or improvements in service quality levels than business customers.
- Increases in consumption charges may lead to reductions in use that affect residential amenity and also load revenues on to decreasing revenue bases.
- Increases in fixed charges fall disproportionately on low income and vulnerable customers, who cannot save significantly by reducing use.

Conclusion:

[39] In Queensland, Energex and Ergon operate offpeak and super offpeak tariffs by turning on and off supply during the day (generally at peak times) to appliances connected to offpeak circuits in a home's accumulation meter. The offpeak tariff guarantees supply for 18 hours per day and the super offpeak tariff guarantees supply for 8 hours.

[40] Western Power (October 2, 2017) - Proposed revisions to the Access Arrangement for the Western Power Network

[41] Electricity Network Access Codes (2017) - Sections 7.3 to 7.4

WACOSS trusts that the above comments and recommendations will be fully considered in finalising the regulatory decisions for Western Power's AA4 access arrangement. As the cost of living for everyday households is rising and the energy market is transforming, there needs to be increased consumer advocacy and focus regarding policy development to ensure that affordable and reliable essential services for our most vulnerable citizens are safeguarded.

The new access arrangement will not resolve all issues and inefficiencies in our State's electricity market. More progress will need to be made in future arrangements to further strengthen customer protection and hardship prevention. This will ensure a more inclusive and equitable market that will be effective in a systematic and sustainable way.

WACOSS also considers the implementation stage of the access arrangement to be critical in guaranteeing the best outcomes for both the providers and customers. WACOSS is overall supportive of Western Power's proposed access arrangement for the AA4 period and generally satisfied with the progress made in advancing customer protection for electricity services. WACOSS again appreciates the opportunity to be a part of the review process and encourages more holistic reviews are undertaken in the future to continue to evolve the utilities market in the interests of at-risk customers and households.