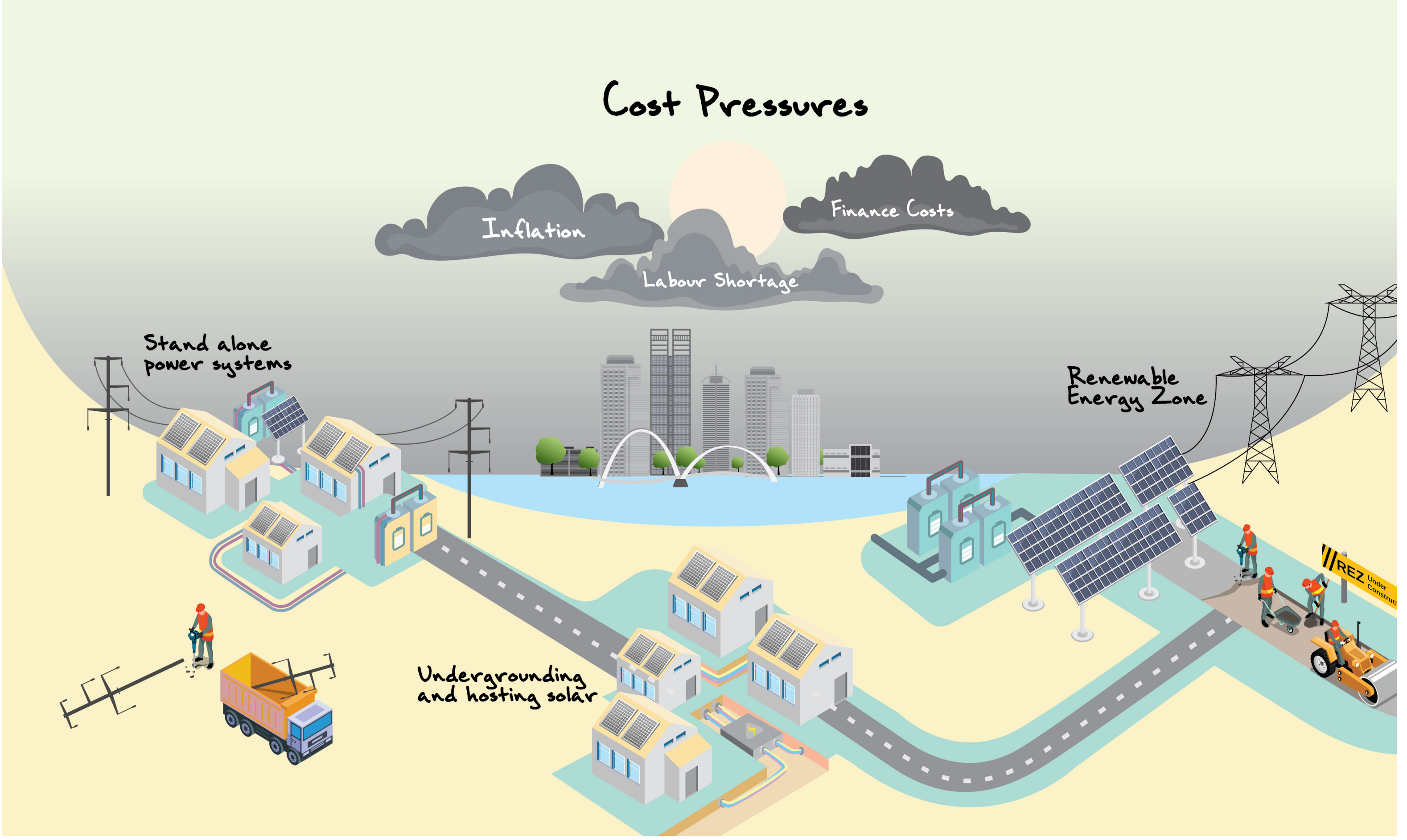

Advice to WA Expert Consumer Panel

WA Electricity Access Arrangement - 2022-27

Dynamic Analysis
12 December 2022

Dynamic Analysis

The purpose of this advice is to inform the WA Expert Consumer Panel's (ECP's) review of the Economic Regulation Authority's (ERA) draft decision on the proposed access arrangement for 2022-27 and Western Power's subsequent revised proposal. Attachment A identifies key issues raised in this advice.

This project has been funded by the Government of Western Australia (Energy Policy WA) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and gas. The views expressed in this document do not necessarily reflect the views of the Government of Western Australia, Energy Policy WA or the Expert Consumer Panel.

Dynamic Analysis has considerable experience in developing and assessing regulatory proposals in the National Electricity Market. We have provided regulatory advice to 8 networks and have provided similar technical advice to the Energy Consumers Australia (ECA) on regulatory proposals of 3 other networks. We have specialist experience in developing expenditure proposals and engagement processes.

Our review is limited to a strategic (high level) assessment of key public documents including ERA's draft decision and Western Power's revised proposal. Our lens is to identify whether the access arrangement is broadly in the long-term interests of WA customers in terms of affordability of electricity services, reliability of the network, and an efficient transition to renewable energy.

Our submission focuses on the key issue in this access arrangement – balancing the need for significant expenditure programs at a time when Western Power faces significant cost pressures. We also provide a review of the key elements of the access arrangement including capital expenditure (capex), operating expenditure (opex), rate of return, and tariff structures.

1. Striking the right balance – need for expenditure vs cost pressures

In our initial advice to the ECP, we noted that Western Power would likely face higher interest rates in the decades ahead and this should be a factor in considering the optimal level of capital expenditure for this access arrangement. Higher interest rates impact the cost of borrowing and the subsequent revenue associated with long-term investments.

Since that time, both interest rates and inflation have gone well beyond the expectations of economists. This has resulted in a much higher calculation of allowed revenue in the ERA draft decision and Western Power's revised proposal. The ERA's draft decision calculates that average prices will rise by more than 7 per cent each year over the period of the access arrangement, although we note Western Power considers the impact to be more minimal due to higher forecast energy sales and lower actual capital delivery.

We also note that the labour and material costs of investment will likely be much higher in the short-term due to labour shortages and global supply chain issues.

The cost pressure surge coincides with a period when the network needs to ‘ramp up’ expenditure to meet new challenges. We agree with the ERA’s assessment that Western Power needs to consider stand-alone power systems and renewable energy hubs to efficiently transition the WA power system to a clean energy future. We also see the need for undergrounding critical assets in response to more extreme weather events such as the recent summer of bushfires. Western Power also needs to keep pace with replacing assets to maintain reliability and security of the network in the long term.

ERA’s draft decision

In our view, the ERA’s draft decision is pragmatic, balancing the need for increased investment while ‘putting the brakes’ on areas of investment that can be deferred with tolerable risk. This includes:

- Encouraging Western Power to undertake stand-alone power systems (SAPs) and undergrounding, but safeguarding customers by only allowing recovery of delivered works. This is a pragmatic solution that should be adopted more broadly in the National Electricity Market.
- Allowing a significant portion of the proposed replacement, but identifying programs where there is insufficient evidence of need such as the replacement of communications.
- Ensuring that Western Power is provided with sufficient step changes in operating expenditure to support new investments but driving efficiency in other operations.
- Providing a fair return on investment that has mechanistically applied the rate of return calculations, rather than try to artificially reduce revenue outcomes. This leads to trust in the regulatory framework.

Western Power’s revised proposal

We have also reviewed Western Power’s revised proposal, and consider it is a responsible and mature response to the ERA’s draft decision. We would encourage the ERA to consider the arguments put forward by Western Power on capital and operating expenditure, but also retain its approach of balancing needs and costs.

We consider that two new aspects of Western Power’s revised proposal demonstrate a need for higher expenditure. This includes activating the recommendations of the Shepherd report and funding the new renewable energy zone(s). We also note that cyber security is vital in a worsening cyber landscape, and that Western Power should keep pace with networks in the NEM. While we see a need for expenditure, we consider scrutiny should be placed on the efficiency of solutions.

Potential improvements to regulatory decision making

While we consider the draft decision reflects a sound regulatory process, we consider there are improvements that could be advocated by the ECP to improve transparency and regulatory outcomes for customers. These include:

- Customer preferences – Western Power should re-test customer preferences on new areas of investment given the higher than expected indicative prices from changes in financial environment. We note that the ERA has made a commendable effort to reach out to regional areas.
- Deeper interrogation of efficiencies - More analysis of operating expenditure functions and activities to identify where efficiency targets could be met by Western Power. Our concern is that efficiency targets are arbitrary, and that a business needs the support of a regulator in uncovering areas of inefficiency.
- Portfolio ranking - We would like to see more emphasis on a portfolio approach to capital programs that is able to rank projects based on risk and value. This would help show that the final program is optimal.
- Delivery incentives – ERA could consider applying the new 'Investment Adjustment Mechanism' to all capex. We are concerned that Western Power has reported lower actual capex compared to estimates in the original proposal suggesting labour shortages and supply chain issues may be impacting deliverability. Customers should only pay for projects that are completed.
- Innovation incentives – We consider there has been minimal demonstration of Western Power showing how improved data and technology can drive better performance. For example, there is little discussion on using smart meter data to make better asset management decision or reviewing aspects of planning such as dynamic line ratings. These small improvements help curb long-term costs and improve customer service. We strongly consider that Western Power should be provided incentives to pursue innovation.
- Electric vehicles – Our analysis in the NEM indicates that electric vehicles provide the greatest opportunity to lower long term electricity prices, through improved utilisation. Networks will need to consider how to encourage use in off-peak times of the day.
- Smoothing price shocks – The current volatility in financial markets has caused a sudden increase in revenue and prices. We consider there may be mechanisms to avoid recurrences in the future such as an annual cost of equity adjustment.

2. Capital expenditure

The ERA's draft decision has allowed most of Western Power's proposed capital expenditure but has applied reductions to the proposed replacement capex and growth capex. It should be noted that the proportion related to SAPs and undergrounding can be recovered by Western Power if they are able to deliver the projects.

We consider that the draft decision is a reasonable outcome for WA customers. The ERA's reasoning to allow investment in SAPs is sound, and we agree with the ERA that customers should not bear costs if Western Power is not able to deliver the projects. We have also undertaken a review of ERA's basis for rejecting elements of Western Power's replacement capital expenditure. We agree with the logic that the projects should not be allowed if there is insufficient evidence of need, as seems to be the case with the replacement of communication assets.

Western Power has provided reasoning for why some projects should be re-included in the allowance, and has also proposed new areas of expenditure related to new information. We consider that the ERA should review these projects, but only accept amounts where there is a clear demonstration of need, options and cost efficiency.

There are two issues we consider the ECP may wish to raise with the ERA. Firstly, most jurisdictions in the NEM are reporting lower actual capex than the allowance, meaning customers are funding the financing costs for deferred investment. Western Power's revised proposal has also indicated that actual capex is lower than estimated in the revised proposal, suggesting that the same deliverability issues associated with labour shortages and supply chain issues are also impacting WA infrastructure providers. In this case, we see some merit in applying the concept of the ERA's new 'investment adjustment mechanism' to all areas of capex including non-network capex.

A second clear issue for customers is the lack of information on the relative value between projects. Peer networks are moving towards a portfolio view of investment where projects are ranked in terms of avoided risk or value. We consider this would provide a quantitative basis for evaluating the relative value of projects, and enable both the regulator and informed stakeholders to understand the overall value and risk of portfolios, and how this will change with time.

3. Operating Expenditure

In our previous advice, we noted that Western Power does not appear to be an outlier in terms of efficiency based on econometric benchmarking. However, the level of proposed efficiency of 0.25 per cent per annum through the 2022-27 access period appeared low, and would mean that opex significantly rises due to new step changes.

We agree with the ERA's approach to seek advice from their technical consultant (Engevity) on whether higher levels of efficiency could be achieved to limit the increase in forecast opex. The ERA's draft decision reflects Engevity's advice that an annual 2 per cent efficiency target appears appropriate given that Western Power has not been subject to such a stretch target over the last decade.

We support the ERA's approach in principle but consider that more information should be provided on areas of potential efficiency gain. We are concerned that Western Power may make unsustainable cuts in front line staff or engineers to meet their targets. We would like the ERA to undertake deeper analysis of the functions and activities performed by Western Power, and areas where there is scope for efficiency. This could include:

- Maintenance practices including time between inspections, type of inspections, and intensity of vegetation management cycles.
- Overhead (indirect) costs which could look at potential duplication in roles, opportunities for IT systems to reduce staff, and unnecessary corporate functions.
- Professional services fees including whether the same service should be provided by internal staff.

- Scheduling and workforce management including whether new systems can drive staff reductions, and efficiency between maintenance tasks.

4. Rate of return

In our initial advice, we noted the likelihood for higher interest rates to place significant upward pressure on revenues, and that Western Power should have provided more sensitivity analysis in its proposal. This has come to light in the draft decision where higher interest rates and global uncertainty have impacted the cost of equity through the risk-free rate.

This is difficult for customers to digest and there is a temptation to take a 'short cut' by artificially reducing other rate of return parameters. We agree with the ERA's approach of not taking this approach as it does not lead to trust in the regulatory framework.

We note that the current framework requires deeper consideration on whether the current approach to setting the cost of equity leads to potential price shocks. The cost of equity is set for five years, based on current market conditions. We question is there is a mechanism to allow for an annual update to the cost of equity so that there is less chance of volatility in the estimates. This may be an issue the ECP could raise with the ERA.

5. Tariff structures

We agree with the ERA that Western Power needs to provide more detail on the proposed tariff structures. Overall we consider that the direction of tariff reform is appropriate including lower network prices during the day and higher prices in the evening peak.

This is particularly important to implement ahead of the expected increase in electric vehicle charging. In our work in the NEM, we have highlighted that electric vehicles provide the greatest opportunity to lower electricity prices in the long run, provided that customers charge their vehicles in off-peak periods. This is due to the utilization benefits of higher energy sales at times when the network has spare capacity. We consider electric vehicles should be a focus area of networks, regulators and policy makers due to the 'one-off' opportunity to lower network prices over the next 20 to 30 years.

We note that Western Power's revised proposal appears to have made amendments that provide additional information on allocating costs between tariff classes, and a more gradual transition of re-balancing fixed and variable costs. A key issue for stakeholders is that Western Power's proposal does not seem very clear on the specific amendments it has made, so it is hard to assess whether the ERA's concerns have been addressed.

Similar to our initial advice, we would recommend that Western Power devote more resources to developing simpler explanations of the tariff structure process. We note that other networks use infographics to help stakeholders understand the process and concepts.

12 December 2022
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