

20 April 2022

Ms Elizabeth Walters
Economic Regulation Authority
Level 4, Albert Facey House
469 Wellington Street, Perth WA 6000
Lodged electronically at: <https://www.erawa.com.au/consultation>

Dear Ms Walters

Issues paper on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27

Change Energy welcomes the opportunity to comment on the Economic Regulation Authority's (ERA's) issues paper on Western Power's fifth access arrangement (AA5) review.

Change Energy is a small electricity retailer, with customers connected to Western Power's network. Change Energy is also part of the Solargain family of companies, which has installed over 35,000 solar photovoltaic (PV) systems in Western Australia over the last decade. Our comments on Western Power's proposal are made in this context.

We are broadly supportive of Western Power's proposed investment program, and in particular consider the proposed upgrade of the metering system in combination with the roll out of advanced metering infrastructure is prudent. However, we do not consider Western Power has provided sufficient publicly available information for stakeholders to make an assessment as to whether the proposed program of work has been arrived at on a reasonable basis and can be considered the lowest sustainable cost.

We recommend the ERA considers whether Western Power's proposal:

- provides appropriate services to network users (i.e. generators and retailers) such that they are able to minimise the overall cost of the supply of electricity in the south west interconnected network (SWIS);
 - includes tariffs reflective of the use of the network for each service and charges them on a causer /beneficiary pays basis. In this respect, we recommend charges are considered in the context of the increased uptake of solar PV and anticipated increase in electric vehicles and battery storage systems;
 - adequately demonstrates the disconnection of customers from the SWIS (as is anticipated in Western Power's proposed modular network) is cost effective and does not prohibit contestable customers from receiving competitive service offerings from multiple retailers;
 - adequately justifies the prudence and efficiency of each of the programs and projects in a detailed business case with alternative options considered. Particular scrutiny should be given to those projects that are new, discretionary and/or rely on the net benefits test (e.g. undergrounding power lines, Project Symphony); and
 - includes a return on assets reflective of the risk profile of a Government-owned and controlled entity.
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These points are discussed further in the following sections.

Services should be designed for network users, not end use consumers

Western Power's AA5 proposal outlines its plans for pricing signals, service performance measures and customer contracted curtailment services as they relate to end use customers. While on the face of it this makes sense, the problem is that end use customers are not the users of Western Power's network – retailers and generators are. With the continued use of a linear rather than triangular contracting relationship, retailers will remain solely responsible for all commercial and contract negotiations as well as meeting all network obligations on behalf of end use consumers.¹

Change Energy recommends the ERA considers the proposed services, prices and service performance measures in terms of whether they meet the requirements of network users rather than end users. This will ensure Western Power's proposed services are fit for purpose and able to be used, and will allow retailers to pass on appropriate price signals to end use consumers in the form of innovative and low-cost retail products, and make better use of the constrained network.

We consider Western Power should be limited to only provide network supply services to and through network users.

Western Power should offer retailer-friendly services

Western Power's proposed services do not meet the requirements of retailers. Specifically, Change Energy recommends Western Power's AA5 proposal should include:

- services that better align with solar production periods;
- more cost reflective tariffs to promote equity between those consumers with and without solar PV – this would ideally be based on maximum demand, but could also be a fully fixed, tiered tariff structure as a more simple proxy for maximum demand;
- improved service performance measures that reflect the services provided to network users² rather than end use consumers; and
- contract terms and conditions³ that better facilitate meter data sharing and contracting for behind the meter services including solar PV, electricity storage resources (ESR) and electric vehicle (EV) charging installations.

Tariffs should be recovered on a causer/beneficiary pays basis

Change Energy considers network services should be recovered from users and subsequently end use consumers on a causer/beneficiary pays basis.

Currently in the SWIS, causers of various problems are actually being compensated (by all network users) to fix the problem they cause. For example, Western Power is currently paying large commercial and industrial consumers who have low consumption during peak solar periods to increase their consumption (via the 100MW

¹ An example of where Western Power's direct contact and commercial negotiations with end use customers is the flexibility services, piloted through the '100MW Challenge'. Western Power engaged with our commercial and industrial customers to trial a network service that allowed Western Power to provide signals to consumers directly to increase or decrease consumption from the network. This is problematic as the retailer is the party taking the commercial risk for those consumers and must balance their portfolio of energy demand and supply at any point in time.

² We highlight that Western Power frequently surveys network users. However, services for network users are not currently included in the access arrangement for the purpose of setting minimum performance measures or financial rewards and penalties. Moreover, many of the network user measures captured (e.g. net promoter score) are not relevant given Western Power is a monopoly service provider and retailers have no other option for electricity transport services.

³ For example, in the fourth access arrangement review process, Western Power included proposed changes in section 3.8 of the Applications and Queueing Policy that would allow connection points to be included in multiple contracts to facilitate multiple trading relationships. However, this change was rejected by the ERA in its final decision on the basis the change could affect pre-existing contractual rights to contracted capacity at connections points if it were to be used by multiple users. Change Energy is advocating for sharing of meter data rather than capacity sharing, and does not see any contractual issues with such a change. See required amendment 57 of the ERA Final Decision, available at: <https://www.erawa.com.au/cproot/19496/2/WP%20AA4%20-%20Final%20Decision.PDF>.

challenge). More often than not the reason they have low load is because they have significant behind the meter solar PV generation. These costs are caused by those consumers with solar, and paid primarily by consumers without solar PV.

If not addressed, we expect the problems caused by the increased uptake of EVs and other ESR in the SWIS could result in similar inequitable cost recovery arrangements.

Western Power should demonstrate clear benefits of moving to a modular network

Throughout the AA5 proposal, Western Power highlights its intention to move to a ‘modular network’. This involves disconnecting individual end use consumers and potentially entire regional communities from the network. Western Power purports this is more efficient in terms of network investment over the long-term and therefore benefits end use consumers.

Western Power does not appear to have considered the costs and benefits of alternatives such as investing more in the network to build out constraints to increase the ability of the SWIS to transport low cost renewable energy to areas of demand, which we expect would in most instances provide an overall economic benefit to the state. We expect the move to a modular network in fact adds to the exponentially increasing problems maintaining system security, reliability and affordability in the context of decarbonising the energy sector.

Change Energy supports any initiative that reduces the cost of supply of electricity sustainably over the long term. However, we do not consider Western Power has adequately demonstrated that disconnecting customers from the network, and creating smaller, disconnected networks is in fact in the long term interests of end use consumers. We recommend the ERA seeks an economic assessment of Western Power’s proposed network strategy, together with the alternative options considered. In particular, we expect Western Power to fully consider and calculate the costs and benefits of building out the network constraints, and present an unbiased comparison against a similar cost benefit analysis of the modular network. Given the potential cost and implications of making such a dramatic shift in network strategy, we consider a robust business case, tested with stakeholders, is a reasonable prerequisite.

We cannot see how a stand-alone power system supplied by a combination of expensive diesel and solar power, that would have a maximum design life of 15 years can be value for money when compared with 60-year traditional network assets and electricity supplied through a geographically diverse, competitive Wholesale Electricity Market (WEM). However, we are open to being persuaded if Western Power can demonstrate that the numbers stack up robustly (i.e. make economic sense subject to sensitivity analysis).

Perhaps a bigger issue for the ERA – and Energy Policy WA – is how contestable customers and network users may be affected by Western Power’s proposed move to a modular network. Any end use consumers disconnected from the grid and who must be supplied outside of the WEM and using a specifically designed, local generation and network assets are unlikely to be attractive for retailers other than Synergy. This would drastically limit competition⁴ of generation and retail services for any contestable end use consumer who becomes exiled into to a modular network, and is likely to dissuade investment in any regional town that becomes disconnected.

Western Power has not provided sufficient information about the supply arrangements to support the modular network future. We expect at this stage end use consumers being disconnected from the network are non-contestable, and therefore are being supplied by Synergy. This raises many questions, the most significant of which are:

- What commercial arrangements exist between Western Power and Synergy to provide generation services?

⁴ This will also result in the State Government owned retailer Synergy retaining, or even gaining contestable customers in these modular areas of the network. This would appear to be contrary to the intent of the Energy Transformation Strategy and associated reform program.

- What will happen when a non-contestable customer supplied by an independent retailer is disconnected from the network, and therefore cannot access generation from the WEM?

Change Energy strongly recommends the ERA requests a formal cost benefit assessment on all projects that are intended to enable the move to a modular grid to ensure they result in a network benefit over the long term over the electricity supply chain as a whole. We also recommend the ERA seeks clarification on how Western Power expects to promote or even maintain the current level of competition for generation, and the resulting low wholesale prices benefitting consumer in the SWIS over the long term. This is inconsistent with the *Electricity Networks Access Code 2004* (Access Code) objective⁵ and Wholesale Market Objectives (a), (b) and (d)⁶.

As a retailer, the move to a modular network will reduce our ability to manage the supply for our customers. For example, if a customer in a disconnected regional town was looking to reduce their carbon footprint, but there were no uncontracted, local renewable generation options, that customer would have no option than to buy electricity from the owner of that local generator. Similarly, if a customer like an IGA was looking to establish a new location, it is unlikely they would choose a disconnected regional town with limited low cost energy options, and/or few competitive retailers. This could significantly hinder development of that town.

Is Western Power's proposed overall expenditure reasonable?

Change Energy appreciates the proposed capital and operating expenditure program is only used to set the revenue able to be recovered by Western Power from its users, and that the ERA will conduct a full ex-post review of capital expenditure after investment has occurred. We note Western Power does not appear to have conducted any benchmarking other than in relation to its proposed productivity factor. We recommend the ERA considers comparative services and tariffs in other jurisdictions to test (at a high level) the reasonableness of Western Power's proposed program of work and determine whether it represents value for money for network users.

We also provide the following high level comments on critical aspects of Western Power's proposed program:

- The roll-out of advanced metering infrastructure (AMI) is positive and will enable increased innovation and efficiency in the SWIS. We do however note there has been a significant increase in the number of new technologies and suppliers in recent years. We therefore encourage the ERA to satisfy itself the proposed solution is efficient and maximises benefits across the electricity supply chain.
- Western Power's metering system has not had a significant upgrade since the mid-2000s. This project should be prioritised and completed to ensure the industry gets the maximum benefit from the rollout of AMI. This will involve significant engagement with the Australian Energy Market Operator and all network users. We therefore recommend the ERA approves the proposed metering expenditure subject to Western Power demonstrating the estimated costs are efficient.
- Project Symphony, on the face of it, appears to be trialling the coordination of multiple loads as a virtual power plant to provide ancillary services. While we acknowledge this trial is an important step forward,

⁵ Clause 2.1 of the Access Code states "The objective of this Code ("Code objective") is to promote efficient investment in, and efficient operation and use of, services of networks in Western Australia for the long-term interests of consumers in relation to:

- a) price, quality, safety, reliability and security of supply of electricity;
- b) the safety, reliability and security of covered networks; and
- c) the environmental consequences of energy supply and consumption, including reducing greenhouse gas emissions, considering land use and biodiversity impacts, and encouraging energy efficiency and demand management."

⁶ Clause 1.2.1 of the WEM Rules states: "The objectives of the market are:

- a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- e) to encourage the taking of measures to manage the amount of electricity used and when it is used."

we question who should be paying for the project (as the beneficiary), and whether the estimated costs are efficient. As the government energy organisations are the participants in this project, and there are no demonstrative benefits of the project at this stage, we recommend the ERA satisfies itself that the project will deliver an overall net benefit (i.e. the project is value for money), and that any benefits achieved can be attributed to all network users before these costs are included in Western Power's revenue requirement (and passed on to customers). Moreover, we encourage the ERA to make the recovery of any revenue from network users to be subject to transparency of all project documentation to ensure the future development of, and innovation in the market is not impeded by independent retailers being excluded from the trial.

- Cyber security has become a significant risk in the energy industry, in particular with an increase in remote operations⁷ such as remote disconnections. The upgrades proposed by Western Power appear prudent, but as we have seen across the industry, IT projects are prone to scope creep and cost blowouts. We recommend the ERA satisfies itself the proposed costs are market tested and reflect a prudent scope of works.
- The increased uptake of EVs in the SWIS will change the maximum demand and load profile in the SWIS over time. With a concerted effort by Government to reduce carbon emissions and facilitate an uptake in the use of EVs in the state, we expect a significant investment in the distribution network is required in the short to medium term. Western Power's AA5 submission does not include investment anywhere close to the order of magnitude we expect is required to facilitate even a modest uptake in the number of EVs in the SWIS. We therefore recommend the ERA seeks further information on Western Power's proposed funding model⁸ to facilitate the connection of EV chargers in the SWIS, to ensure the necessary distribution upgrades are planned and factored into network prices appropriately, with other projects deferred as required to moderate overall network tariffs.
- Service performance measure as they stand are inappropriate to measure the performance of Western Power's network in relation to the provision of network services to users. Both benchmarks and targets are based on historical performance. Historical performance of the network under an unconstrained network access framework cannot be expected to set either a benchmark or target on which Western Power should justify its investments to maintain because:
 - the network access framework has moved to a new, constrained network approach under which we expect lower levels of network availability than historically. This was a conscious decision by the State Government, and should be implemented by the ERA through amended minimum network service performance measures and incentive targets;
 - users with constrained access contracts were excluded from the calculation of network performance measures as they were considered abnormal, however, with constrained network access now standard, they should be included to ensure we have an accurate representation of service actually provided;
 - the proposed suite of network service performance measures is largely reflective of the end use consumer's experience, and although somewhat helpful to determine the service provided on behalf of a retailer should be more heavily skewed towards network users (i.e. generators and retailers); and
 - the proposed suite of network service performance measures does not adequately capture the breadth of services expected to be offered in the future, nor do they provide sufficient granularity to reflect the level of service to our customers – instead they present very high level averages and therefore appear to be unable to be used by Western Power as a direct driver of investment.

⁷ For example, an increase in the use of remote disconnections increases the risk of a cyber-attack resulting in the disconnection of a significant number of connections in the SWIS.

⁸ We appreciate it is currently not clear which party/parties should be funding this type of work.

- The continued undergrounding of electricity infrastructure assets does not represent value for money, and should not be prioritised over necessary works to maintain service performance at a reasonable cost.

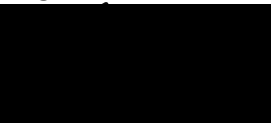
Comments on other aspects of Western Power's AA5 proposal

Change Energy provides the following comments on other aspects of Western Power's AA5 proposal:

- Western Power is a regulated government-owned utility with minimal risk. We consider the weighted average cost of capital (WACC) and therefore Western Power's return on assets should reflect this level of risk.
- Western Power has proposed a number of changes in relation to the regulated lives of its network assets. While most appear reasonable, we are concerned the proposed asset lives of assets such as stand-alone power systems are too long. In our experience, the actual life of these assets is the lowest asset life rather than an average or maximum. This is because it is likely that once one critical element of an asset is replaced, it is likely that the new version of that asset will no longer be compatible. This is already most often the case with solar PV installations – when an inverter needs replacing, so to do the solar panels. The overstated asset lives will similarly overstate the value proposition of these as alternative options to traditional network assets. We therefore recommend the ERA considers shorter asset lives in its assessment of the business case for stand alone power systems and investment in the move to a modular network.
- Change Energy recommends the ERA considers whether Western Power's regulatory settings and commercial arrangements are appropriate. We highlight all other regulated utilities are incentivised to invest in network assets where it is prudent to do so, and maximise the use and therefore value of existing assets where they are able, whereas Western Power appears intent to decommission existing assets and avoid future network investment even where it is considered prudent and efficient.
- As with each access arrangement, there is a step change in tariffs borne by network users. This period, the step change has been reduced by way of the State Government allowing Western Power to offset the expected decrease due to the regulated price path and depressed market conditions and associated return on assets with an increase through the expedited recovery of deferred revenue. However, we also expect the rebalancing toward a higher fixed component of network tariffs is not only becoming more cost reflective (per our comments above) but also should reduce the interim step change going forward. Should we transition towards a fully fixed tariff as we recommend, the problem will be fully resolved.

If you have any questions, or would like to arrange a meeting to discuss any aspect of this submission, please contact me on [REDACTED] or at [REDACTED]

Regards



Geoff Gaston

Change Energy