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Economic Regulation Authority
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Submitted via: <https://www.erawa.com.au/consultation>

PROPOSED REVISIONS TO THE ACCESS ARRANGEMENT FOR WESTERN POWER'S NETWORK 2022-2027

Alinta Energy appreciates the opportunity to provide feedback on the proposed revisions to the access arrangement for Western Power's network.

Alinta Energy provides the following responses to the ERA's consultation questions and raises further issues for the ERA's consideration.

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?

and

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.

Alinta Energy is concerned by the proposed increase in capex net of asset replacement costs, especially on SCADA and IT infrastructure, and the impact this will have on customers. We consider that it is not clear whether this expenditure has a business case and would be in the long-term interest of customers per the ENAC objective. Further, we note that the equipment's short asset life, and flow-on effects to opex amplify the costs to customers. Finally, Alinta Energy questions whether the significant capex allocated to introducing more "sophisticated operating systems to enable increasing levels of renewable and distributed energy resources" as part of the "modular network",¹ and "support orchestration of DER"² would be efficient.

The AA5 proposal includes \$483.4 million of capital expenditure and \$19.5 million of operating expenditure for the SCADA and telecommunications network of which Western Power states that \$188.4 million is needed to replace equipment that is obsolete and unsupported. This is \$216.7 million (110 per cent)³ higher than the SCADA investment over AA4. The proposal also includes a 32.2 per cent increase in IT costs from \$251.8 million in AA4 to \$332.8 million in AA5.

However, the proposal does not present a business case for the expenditure net of

¹ ERA, [Proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27 – Issues paper](#) p.15

² Western Power, [Access Arrangement Information - AA5 Forecast capital expenditure report](#), p.212

³ Western Power, [Access Arrangement Information - AA5 Forecast capital expenditure report](#), p.78

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replacement costs. Consequently, it is not clear how customers would benefit (for example, through savings, or reduced outages) in exchange for the significant increase in expenditure.

The proposal notes that this SCADA equipment has an increasingly short asset life. This amplifies the impact to customers: tariffs must be higher to cover costs in a shorter timeframe, and despite the significant investment, the assets will require replacement sooner.

The expenditure also increases opex costs.⁴

Given the scale of this investment, the short asset life, and the flow on impacts to opex, Alinta Energy recommends that the ERA thoroughly scrutinise this expenditure to determine whether it is consistent with the ENAC objective and that the benefits outweigh the costs.

Alinta Energy is concerned that the SCADA expenditure allocated to “enable increasing levels of renewable and distributed energy resources” and “support orchestration of DER” as part of the “modular network”⁵ will not deliver commensurate benefits because:

- 1) Facilitating further investment in residential rooftop solar is:
 - inefficient in that it is driven by non-cost reflective retail tariffs.
 - contributing to Synergy's losses which are covered by taxpayers.
 - causing load to reach critically low levels during the middle of the day, necessitating investment in network services like Western Power's 100MW challenge (where customers are paid to use energy)⁶ and further investment in ESS capacity.
 - less beneficial to emissions reduction as it reaches excessive levels, requiring curtailment via EPWA's DPV project.
- 2) Even when dispatchable DER (like EVs and batteries) are expected to achieve scale towards the end of the AA5 period,⁷ it's uncertain whether owners will have an incentive to participate in aggregation schemes. Indeed, Alinta Energy understands that the key objective of Project Symphony is to understand whether this approach is viable. We also note that the current non-cost reflective retail tariffs may hamper participation in aggregation programs. Given this, we suggest that such significant investment in these capabilities and systems is premature, and that Western Power and Synergy should prioritise sending appropriate price signals as a more cost-effective means of ensuring DER is integrated into the system efficiently.
- 3) Installing the appropriate SCADA infrastructure to make energy assets visible and dispatchable is expensive. The recent WEM reform costs⁸ demonstrate that even for large scale, transmission-connected assets, the costs of upgrading equipment and systems to dispatch new services can cost many times the annual value of the services they enable. Alinta Energy notes that DER does not benefit from these economies of scale, given their much smaller capacity, and strongly questions whether installing SCADA systems to make such small assets visible and dispatchable is an efficient use of funds.

⁴ Western Power proposes a 'step change' in opex for an increase in SCADA and Telecommunications expenditure. [Access Arrangement Information for the AA5 Period](#) p.155

⁵ It is not clear what proportion of the SCADA investment is allocated towards this objective. While \$21.8m is explicitly allocated towards Western Power becoming a “DSO” it appears much of the remaining SCADA expenditure is justified on similar terms. For example, the proposal states “Western Power will uplift its largely obsolete SCADA and Telecommunications network during the AA5 period to support the digital network and enable the integration of DER. This investment will enable a secure transformation to a modular grid” [Access Arrangement Information for the AA5 Period](#) p.p. 20.

⁶ AFR, [WA pays business to consume surplus solar power](#)

⁷ The 2021 ESOO forecasts behind the meter battery capacity to exceed 500MW, and EVs to exceed 100,000 by 2027. [2021 Electricity Statement of Opportunities](#)

⁸ AEMO's AR6 proposal forecasts its final costs of implementing WEM reform to be ~\$90m, and the [WA State Budget papers](#) indicate that Synergy's implementation costs are expected to be ~\$28m (p.298).

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

Western Power's access arrangement states that it will "continue to evolve [its] network to safely accommodate increased renewable generation and innovate by developing products and services that support the electrification of the transport, industrial and processing sectors Western Power has an important role in facilitating WA's energy transition."

However, Alinta Energy's considers that the access arrangement lacks plans to:

- Accommodate large scale renewable generation. Alinta Energy supports the interim and 2050 emissions reduction targets, but notes that without plans for investment in transmission capacity to enable the connection of large-scale renewable generation, these targets will be untenable,⁹ especially considering the long lead times of transmission infrastructure and generation projects.

Alinta Energy also notes growing concern, including from the former ESB chair, Kerry Schott¹⁰ that traditional cost recovery methods and investment triggers for transmission upgrades will not be fit for purpose to enable the significant investment in renewable energy required to meet the 2050 net zero emissions target. Given this concern, and how critical transmission investment will be to the energy transition, Alinta Energy requests Western Power to provide commentary on this issue.

- Support least cost electrification of the transport sector. Alinta Energy considers that achieving these emissions targets will require electrification of transport. However, besides broadly outlining new EV tariffs, the access arrangement does not include a plan for the investments required to electrify transport, nor to incentivise or install charging infrastructure in places that avoid these assets increasing peak demand and system costs. Alinta Energy notes that the EV Action Plan requires Western Power to outline the "network impacts, constraints and cost estimates for network upgrades under different scenarios for EV uptake and charging behaviour" by June 2022,¹¹ and suggests Western Power incorporate this into their updated proposal to support the network integrating EVs at least cost.
- Support the electrification of industrial and processing sectors. Western Power mentions that hydrogen and sector coupling can help decarbonise hard to abate sectors¹² but does not detail how the network would need to evolve to enable this.

In absence of these plans, Alinta Energy suggests that the access arrangement's approach to addressing climate change is overly focussed on facilitating further investment in distributed renewable generation. As noted above, Alinta Energy considers that facilitating additional rooftop solar investment has diminishing returns in terms of emissions reduction. We suggest that enabling large scale renewable development and transport electrification would represent more significant and efficient contributions to supporting WA's emissions reduction target.

The ERA invites submissions on Western Power's proposed alternative cost of debt approach.

The access arrangement proposes a 10-year trailing average debt approach, allowing the rate to be updated annually and potentially increasing the cost of debt by ~\$383 million during AA5.¹³

Alinta Energy does not support this approach considering that it is inconsistent with:

⁹ AFR, *Renewable Energy Power Plays*

¹⁰ Herald Sun, *Call for rethink on funding for power transmission upgrades*

¹¹ EPWA, *Electric Vehicle Action Plan*, p.19

¹² Western Power, *Access Arrangement Information for the AA5 Period* p.23.

¹³ ERA, *Proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27: Issues paper* p.40

- the ERA's current method for calculating the cost of debt;
- 6.4(b) of the ENAC which requires the price control method to enable a user "to predict the likely annual changes in target revenue during the access arrangement period."
- 6.4(c) of the ENAC which requires the price control method to minimise "as far as reasonably possible, variance between expected revenue for the last pricing year in the access arrangement period and the target revenue for that last pricing year."

The ERA is interested in stakeholder views on the revenue path proposed by Western Power and the treatment of deferred revenue in the access arrangement review process.

Western Power proposes to accelerate the recovery of the AA2 revenue and use it as a "balancing item" so that regardless of the ERA's decision, and despite low interest rates, prices cannot decrease below AA4 levels.¹⁴ Alinta Energy notes that this was enabled by EPWA's 2021 ENAC reforms, despite industry objections.

Alinta Energy strongly disagrees with this approach, considering that it would:

- be a needless and excessive penalty for existing customers while many businesses are recovering from the economic impacts of COVID-19. Under ERA's original decision, the revenue would have been recovered over a longer timeframe and from a larger pool of customers.
- present greater risk of price distortion, undermining economic efficiency.
- circumvent the ERA and its primary objective in assessing the access arrangement: to determine whether the proposal is in consumers' best interest (according to the ENAC objective). Regardless of the ERA's decision, if target revenue results in prices decreasing below AA4, Western Power would be permitted to change tariffs as it sees fit, and regardless of the best interest of customers.

Mitigating the risk of stranded assets

Alinta Energy perceives a risk that if the access arrangement simply rolls forward the value of the RAB from the last period, customers ultimately carry the risk and costs of stranded assets. Further, Western Power does have incentive to avoid investments that may become stranded. To mitigate this risk and avoid stranded assets, Alinta Energy recommends that the ERA consider incorporating a depreciated optimised replacement cost analysis in determining Western Power's RAB.

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.

Alinta Energy supports including transmission outages in performance data, as recommended by the Framework and Approach. We consider that this will improve transparency and help identify efficient network augmentation decisions, which is critical considering the significant impacts transmission network outages have had on renewable generation during the past access arrangement period.

¹⁴ Western Power, [Access Arrangement Information - AA5 Forecast capital expenditure report](#), p.260

Consideration of underspending

Western Power underspent its capital allowance in both AA2 and AA3; and in AA4, Western Power underspent its forecast capex in the distribution network.¹⁵ Considering this history, and with such a large capital investment planned in the distribution for AA5, Alinta Energy is concerned that the proposal may be over-forecasting the expenditure that can be efficiently allocated within the period. Further, Alinta Energy is concerned that if more revenue is allocated than can be utilised conscientiously, there would be less incentive to conserve revenue and conduct sound procurement processes.

To avoid this, Alinta Energy recommends that the ERA consider Western Power's historical underspending, the scale of the proposed capex projects, and Western Power's limited resources to deliver these projects, in scrutinising the capex proposal. Alinta Energy notes that the AER has considered the underspend/overspend of capex in previous regulatory decisions when approving forecast capital expenditure.

Expediting generation connections

As discussed above, Alinta Energy notes that meeting the State Government's emissions targets will require significant investment in new renewable energy capacity.

While Alinta Energy considers that transmission planning and augmentation will be the key enabler of this, we also request that Western Power consider how the AQP, and its connection approval process can be improved to expedite new connections and avoid bottlenecks.

Alinta Energy suggests that the connection process and modelling required should be simplified considering the transition to constrained network access. Enabling further investment in renewable energy was a key objective of this reform, and Alinta Energy is concerned that if Western Power does not reform its generation connection process consistent with the forthcoming constrained access regime, this objective won't be fully realised.

We also recommend that Western Power consider prioritising connection applications based on their merits rather than 'first-in, first-serve'. For example, projects could be prioritised based on the viability, readiness, and track record of the applicant, like the merit criteria recently developed for the Offshore Electricity Infrastructure Regulations. Alinta Energy suggests that this would support the projects with the most merit being delivered as soon as possible; and avoid bottlenecks caused by non-viable applications.

Improving cost reflectivity of TR2 annual connection costs and removing perverse incentives (Q.10)

Alinta Energy strongly recommends that Western Power's *Price Setting for New Transmission Nodes Policy* and the TR2 reference service is reformed to avoid users being required to pay disproportionate costs and remove perverse incentives to inflate connection capital costs.

The current policy sets the annual connection costs (the user specific charges of the TR2) at 1.88% of the "full capital cost" of the connection.¹⁶

This method is inappropriate because it does not reflect the O&M costs of the connection. There are many capital costs that do not relate to ongoing O&M costs – for example, costs caused by contingencies during construction, including delays or costs incurred to fast-track progress. Alinta Energy considers that good industry practice for estimating maintenance cost is to apply a percentage to the capital cost of the maintainable items, rather than all capital costs. Benchmarking with the O&M costs of other networks may also improve cost-reflectivity.

¹⁵ Western Power, [AA4 Capital Expenditure Report Access Arrangement Information](#) p.18.

¹⁶ [2021 Price List Information](#) p.88

Alinta Energy would be pleased to provide details of its own transmission asset O&M costs and experience managing high voltage transmission assets in the Pilbara to demonstrate the inaccuracy of the current method compared to actual O&M costs.

Another reason why the current method requires reform is that it provides a perverse incentive to inflate the capital costs of the connection to generate higher annual O&M payments. This would present a barrier to entry for users seeking connection to the transmission network.

Transmission storage service tariff

The Tariff Structure Statement notes that "transmission storage devices will not be subject to generation or export-based charges and will be treated similar to existing loads connected to the transmission network."

Alinta Energy is considering whether this is the most efficient approach, noting that unlike customers it does not consume the electricity it withdraws (not including losses during charge and discharge cycles), potentially causing double counting when this electricity is consumed by an end use customer. We also note that in its *Integrating Energy Storage* determination, the AEMC considered that a "blanket exemption [from transmission use of service network charges] would not reflect the efficient cost of providing the service to a bi-directional unit or the benefit or cost impact it may have on the network."¹⁷ AEMC decided that transmission storage owners should negotiate network charges so that charges could reflect the locational costs to serve. While Alinta Energy agrees with AEMC's implicit principle that whether a given storage asset benefits the network should be the key factor determining whether it pays transmission charges, we are concerned that determining charges based on respective negotiations could lead to inconsistent results, causing an uneven playing field; and also cause uncertainty, presenting a barrier to entry for prospective storage investors. We reserve the right to provide commentary after the ERA releases its draft decision.

Proposed removal of DTOUL tariffs (Q.10)

Alinta Energy opposes the proposal to discontinue the time of use demand services, considering that:

- 1) We have many customers who we expect to continue using this service regardless of the proposed new TOU services; and 5.2(b) of the ENAC requires the access arrangement to "specify a reference service for each covered service that is likely to be sought by [...] a significant number of customers and applicants".
- 2) As evidenced by its wide use, we find that our customers (>50MWh p.a.) do not have difficulty understanding the service despite Western Power's rationale for the reform saying that the proposed TOU tariffs would be simpler. We suggest that business customers may be willing to accept more complexity with their energy services relative to residential customers if it allows them to avoid cost. We consider that the reference service should account for this per 7.3l of the ENAC which requires reference services to have regard to the "type and nature of those customers".
- 3) The AER citation used to support the change "that there is no clear cost reflective advantage of adopting demand tariffs over time of use tariff" was an observation limited to its "analysis of data provided by NSW distributors"; and that it also indicates there would be no benefit to cost reflectivity in removing the time of use demand services.
- 4) The cited AER report also recommends that distributors offer demand tariffs with and without

¹⁷ AEMC, [Rule Determination National Electricity Amendment \(Integrating Energy Storage Systems into the NEM\) Rule 2021](#), p.56

TOU charges (depending on their seasonality).¹⁸

- 5) The Framework and Approach required Western Power to “retain all current reference services” subject to some amendments, which did not include removing the demand component from these services.

High voltage customers’ access to energy-based services (Q.10)

The [Framework and Approach](#) recommended amending “the business energy-based reference services to allow high voltage end-use customers to access them”, considering that “the ability to access an energy consumption-based tariff if a site becomes vacant or there is a temporary drop in demand would better assist users to manage energy costs.”

Alinta Energy considers the proposed amendments are not consistent with this recommendation because:

- they only allow high voltage customers to access one business energy-based reference services (A2 – Anytime Energy (Business) Exit Service); and not the remaining energy-based services, including the TOU services.
- the proposed eligibility criteria only allow high voltage customers to access these services where they have had “throughput equal to zero for a period of greater than 12 months”, rendering customers who have had “a temporary drop in demand”, as recommended by the Framework and Approach, ineligible for the service.

To be consistent with the Framework and Approach and improve access, Alinta Energy recommends that all non-residential, energy-based services be made available to high voltage customers, regardless of their historical throughput.

Ability to change tariffs to align with AA5 commencement (Q.10)

While Alinta Energy recognises that Western Power facilitates customers changing services via 'special' requests, we recommend that the AQP (under section 10.3) be amended to formalise the ability for customers to change tariffs when a new access arrangement period begins (regardless of the 12-month wait period). This would ensure customers can access the benefits of any new services.

Suggested Clarifications to the Price List and Reference Services (Q.10)

Service	Recommendation
RT5/6	Clarifying that rolling demand periods commence when the tariff is effective (note, this is consistent with current processes).
RT5/6/19/20	Aligning the billing period with the read route so that network and retail charges are also aligned, which is important in ensuring accurate demand-based charges.
RT34/35/36/37	Unlike the existing tariffs, these new tariffs have odd numbers for the business tariffs and even for the residential. For consistency, we recommend having odd numbers for the new residential tariffs and even numbers for the new business tariffs.
N/A	Standardising tariff and service names to avoid confusion. For example, removing alternative references including 'LVMD' for the RT6.

¹⁸ [Tariff structure statement Draft decision - Endeavour Energy distribution determination 2019–24](#) p.74

Charges for de-energised sites (Q.10)

Alinta Energy notes that de-energised sites may have lower costs to serve compared to non-consuming energised sites. If is the case, Alinta Energy suggests that this be reflected in the reference services cost structure, per 7.3 of the ENAC. We note that changes to lower the costs for non-energised sites could deliver significant savings for customers using rolling demand services.

Improving Capacity Allocation Services (Q.10)

Alinta Energy considers that the capacity allocation service can benefit customers and support network utilisation, but requires clearer eligibility and approval criteria and further practical considerations, per the recommendations below, to improve its usability and realise this potential.

Clarifying the eligibility criteria

Alinta Energy suggests the following clarifications to the eligibility criteria to make it easier for customers to identify whether they are eligible for the service:

Eligibility criterion	Recommendation
1	Referencing 10.5 of the AQP which outlines this application and approval process (if this is the approval to which this criterion refers).
4	Consideration of whether this criterion is necessary, noting that CMD is relevant for many reference services and that this criterion would significantly limit usability.
9	Clarifying whether the 'operating document' would be a separate set of requirements, or incorporated into an updated ETAF, reflecting updated CMD values.
11	Consideration of whether these further requirements for users at the same connection point are necessary.

Clarifying the approval process

Alinta Energy recommends clarifying the approval process to help customers understand where the service may be viable. We suggest that including the following information could help achieve this:

- Key criteria Western Power would consider in approving an application – for example, contracted maximum demand, historical demand profile, geographic area.
- Broad outlines of areas of the network where the service is viable and where it isn't, if possible.
- Whether any testing is required for approval – for example reducing demand at the connection point allocating capacity.

Practical recommendations

Alinta Energy makes the following practical recommendations to avoid operational issues in using the service:

- Consideration of how details of any active ancillary services will be transferred to the incoming FRMP. For example, this could be provided via standing data requests (we note that this would require amendments to the standing data procedure).
- Consideration of how customers with grouped multiple points of supply could access the

service, for example whether the supply points could be treated as a single site and therefore liable for a single charge.

- Allowing use of the service with an indefinite end date. Alternatively, waiving or reducing the application fee for extensions.
- Consideration of whether a template application form could be provided to outline the key requirements for this service.

AQP Fees in Price List

To improve transparency, Alinta Energy recommends that the "variable fees" are explicitly defined in section 9 of the Price List.

Sufficient time to implement new services and invoicing arrangements

Alinta Energy notes that when a new access arrangement amends reference services and their invoices, retailers require time to ensure their systems can be updated to correctly bill and offer these services to customers, and to reconcile them.

For example, during AA4, metering changes were implemented part way through the period and due to insufficient time permitted to update systems retailers were not able to invoice and reconcile these services.

To avoid this re-occurring, Alinta Energy recommends Western Power and retailers agree reasonable implementation timeframes for new or materially amended reference services.

Practical issues impacting invoicing and reconciliation

Alinta Energy recommends the following changes in Western Power's B2B processes to improve customers' ability to identify, invoice and reconcile their network charges:

- Including the extended metering charges in the charge files. This information currently comes in a PDF with supporting MS Excel documents, making it difficult for customers to identify the metering services they received or the charges for these discrete services. Alinta Energy notes that this undermines the intent of ERA's requirement for AA4 that metering services should be provided as separate reference services to allow users to acquire only the services they required.

Thank you for your consideration of Alinta Energy's submission. Should you wish to discuss this further please contact me at [REDACTED] or on [REDACTED]

Yours sincerely

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