

4 May 2021

Ms Elizabeth Walters

Economic Regulation Authority  
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Dear Ms Walters

## FRAMEWORK AND APPROACH FOR WESTERN POWER AA5 REVIEW

Thank you for the opportunity for Perth Energy to make a submission in response to the Economic Regulation Authority's (ERA) *Issues Paper – Framework and approach for Western Power's fifth access arrangement review*. Given the substantial cost of operating Western Power, and its significant impact on prices for end use customers, it is appropriate that wide industry input be sought. Our comments follow the headings and numbering in the Issues Paper.

### Section 2 - Regulatory requirements

In section 2 there is reference to amending the target revenue to account for:

- Costs for the development of network constraint information; and
- Costs for preparation of the initial Whole of System Plan (WoSP).

While Western Power would have incurred additional costs in providing information to AEMO and EPWA in a suitable form to meet their specific requirements it would be inappropriate for Western Power to pass on and recover the full costs. This is because a substantial amount of network constraint information would have been required to facilitate the design, and subsequent operation, of the network. Further, Western Power would require this information to safely and securely dispatch generation and other facilities, especially the Generator Interim Access Facilities. Similarly, much of the information required for the WoSP would have been required for medium- and longer-term network planning and managing connection requests.

Also noting that this was not an entirely new process requiring completely new work. Only the incremental establishment costs should be included as "new" expenditure. Once the output systems are established, then the provision of this information should not have further costs.



## **Access Code Objectives**

### Environmental Objective

A significant change to the Access Code objective's is the inclusion of environmental criteria set out in section 2.1(c). Western Power is not an environmental specialist organisation and the implementation of environmental impacts in Western Power's activities, could lead to perverse outcomes in Western Power processes or decisions, and changes to decisions made by other environmental regulators.

Western Power may interpret this objective as requiring them to show bias in favour of certain services, or connection requests, at the expense of other requests.

Perth Energy considers that where Western Power intends to amend, alter any activities (for example, planning, connection, operations or services) based on environmental impacts, then these impacts must be made transparent to market participants. This may lead to unnecessary costs incurred by market participants as a result of Western Power's interpretation and implementation of this objective. To this end, we recommend that Western Power be required to explicitly show how they have incorporated or costed any environmental considerations in their services or costs.

As far as possible, given the substantial network costs that are imposed on customers it is appropriate that high priority be given to minimising costs within the requirements of safety and supply security. In considering costs, Western Power should be looking at the total cost of electricity and services delivered to customers, not just its own internal costs.

In respect to environmental objectives, there are already legislative instruments in place that set obligations on Western Power. Western Power is not an environmental expert, and the potential impact of Western Power imposing environmental effects on services could be onerous and unnecessarily expensive. Western Power should provide a cost-benefit analysis for any proposals to go beyond these legal obligations.

Encouragement of energy efficiency and demand management could certainly be given through the design of tariffs and support of market schemes (including behind the meter services). However, the emphasis should always be on the whole delivery system from generation to customer. For example, consideration of the third (environmental) limb of the Code may be seen as justifying the use of energy storage systems to encourage renewable energy. However, the round-trip losses incurred within the storage systems will increase overall electricity production which, in turn, may result in increased line losses. A full cost analysis should always be undertaken.

## **Section 3 - Classification of Services**

Perth Energy supports the continued establishment of stand-alone power systems by Western Power as a mechanism to reduce its overall costs. (We should note that AGL, of which Perth Energy is a part, has been selected on a panel to provide these services). As more systems are installed, we would expect to see a reduction in both distribution line maintenance costs and in capital expenditure required for upgrades to supply these facilities. The resultant cost savings should flow back into reductions in Western Power's required revenue. Equally maintenance costs for these systems should not be allowed to exceed the



equivalent costs that Western Power would have received if they had connected the customer with a network solution.

On the other hand, Perth Energy considers that allowing Western Power to own and operate its own batteries is not the best overall solution for the market, and if this is allowed, a ring-fenced entity should be created to compete with market participants for provision of these solutions. Batteries can offer a number of market essential system services (ESS) which are best provided through a competitive market process rather than by the regulated network operator. As a result, the system benefit arising from any batteries that Western Power controls would be restricted.

This issue is compounded by the potential for battery investment by Western Power to crowd out investors who can use the battery for other purposes. We consider that a more efficient approach would be for Western Power to use system support contracts with battery providers who could also supply ESS thereby reducing overall system costs.

If it is determined that Western Power can own and operate its own grid-connected batteries then the issue needs to be addressed that these are more than just another technical control facility. Unlike other power control equipment, such as a capacitor bank, a battery time shifts the input and output of significant quantities of energy. This means that the value of energy in and energy out is likely to be different and some process needs to be implemented to address this. As such, these batteries need a Financially Responsible Person for their operation to be reflected in both the wholesale and retail markets, otherwise these markets will be distorted by Western Power's operations. This will be particularly exacerbated as the market moves to five-minute settlement where energy prices may be substantially different between five-minute segments.

One option would be to allow Western Power to trade in the Wholesale Energy Market but having it as a monopoly provider and a market participant would introduce many difficult issues. Alternatively, it could "borrow and lend" the energy from Synergy but, even here, the difference in value and any round-trip losses would need to be accounted for through some form of contract between the parties. Both approaches would mean that Western Power had a commercial interest in when its batteries are charged and discharged along with the quantity of energy flow. This produces a conflict of interest with its role as network system operator.

The major issue for Western Power, which would be addressed by the installation of batteries in its distribution system, appears to be the high, and fluctuating, energy flows associated with domestic solar PV systems. Perth Energy suggests that this should be reflected by Western Power notionally using this electricity in any battery installation. Western Power should purchase from Synergy any energy absorbed by its batteries at the renewable energy buy-back rate (~\$71 per MWh) and it should subsequently receive this same payment from Synergy for export back into the grid. By removing the potential for arbitrage, Western Power would be using any battery installation solely for network support purposes.



## **Section 4 – Reference services**

Perth Energy has not identified any required new reference services at this time. However, as the new communications system is rolled out to support remote meter monitoring, and as various steps in the distributed energy roadmap project are completed, new services may become desirable. We would see the need for Western Power to potentially offer new reference services prior to the end of AA5 in 2026/27.

## **Section 5 - Service standard benchmarks**

Perth Energy agrees with the ERA that excluding transmission outages from distribution reliability statistics is not appropriate. All outages are of concern. Similarly, we would support the inclusion of interruptions due to planned outages being considered so that Western Power receives appropriate signals as it develops its ongoing maintenance regime and investment decisions.

In that vein, we consider that the concept of exclusions for load interruptions caused or extended by a direction from the state emergency service should be reviewed. Any outage due to a bush fire, or similar emergency, is a real loss of value to customers. While not caused directly by Western Power, any such loss needs to be reflected back to Western Power so that it can be taken into account in planning of maintenance and, longer term, new investment. Data, including the estimated financial impact on customers, should certainly be retained to support future business cases for new investment or changed maintenance practices.

## **Section 6 – Price Control**

Perth Energy does not have a position on the preferred mechanism for overall price control. We are concerned that the requirement to minimise price shocks has been removed because we know that large stepped increases can cause potential bill shock issues for our retail customers and as a result, prefer a smoother price path. This is especially true for small and medium customers because network charges can be a substantial proportion of total electricity costs.

## **Section 7 – Investment adjustment mechanism**

We are unclear as to what is being proposed here. However, Perth Energy supports the statement that “it is desirable that the service provider keeps the benefit of any out-performance of cost forecasts and incurs the cost of any under-performance.” This would appear to be a sound approach for the ERA to adopt.

## **Section 8 – Gain sharing mechanism**

Perth Energy supports the points raised by the ERA in this section and has no further comment.

## **Section 9 – Service standards adjustment mechanism**

Perth Energy considers that there is a fundamental flaw in the arrangement to pay additional money to Western Power if it exceeds certain performance standards. These standards have been set as realistic minimum targets for end use customers to operate under and that are achievable by Western Power within its approved budget.



In theory, end use customers may gain some economic benefit from higher standards but in practice it is hard to see that benefit being significant, especially as it is unforeseen. This cost cannot effectively be passed to customers, should it occur, because energy providers have already set their charges for end use customers.

The most serious concern though is that the target is no longer the actual target but just a marker which Western Power may or may not achieve. It becomes an economic decision by Western Power as to whether it should seek to achieve the targets rather than being a firm obligation.

If retained, however, any payment for above target performance should only be paid if all targets have been met. There should not be any incentive for Western Power to game which targets it tries hardest to meet while accepting that something else can be allowed to slip.

Perth Energy would expect to see the targets for distribution reliability rise as more stand-alone systems are deployed.

## **Section 10 – Demand Management Innovative Allowance Mechanism**

Perth Energy has a concern that we are seeing mission creep with Western Power gradually moving into areas that are well beyond its remit as a transmission owner-operator. The push for multi-function assets is a good example of this along with various trials such as community batteries. We are also concerned that the recent 100 MW Challenge appeared to be initiated with insufficient thought about how it would interact with the actions of others in the market. We are therefore not in favour of assigning substantial sums to the proposed DMIA.

We consider that the proposed relatively limited sum of \$1.4 million should be adopted for this. We would also like to see the draft guidelines subject to public comment. This will ensure that Western Power is spending this allocation in ways that are genuinely beneficial for customers and are not duplicating what others are already doing in the market. We support the requirement that a compliance report be published each year which includes the results of each project. As these projects are funded by market participants this report should be made available to the market.

## **Final Matters**

In light of the Energy Transformation program, demand management initiatives and various other changes, Perth Energy considers that the linear relationship between the network operator to the retailer, and then the customer, is not fit for purpose with the expected increase in third-party behind the meter services provided to customer by parties other than their retailer.

The current linear arrangement places the risk on the customer's current retailer for the actions of the third-party providers, and equally, reduces the risk that the third-party providers operate under. This exposure may cause retailers to manage this risk potentially through their customer agreements or other forms of risk reduction, in any event this risk may be borne by all customers rather than those using behind the meter services or by those providers.



If the current relationship arrangement is retained, serious consideration should be given to having the customer's energy retailer also be the sole provider of any behind the meter services. This, however, will require a review of Synergy's exclusive supply to small customers if the full benefits of the Distributed Energy Roadmap proposals are to be realised.

Should you have any questions in respect to this submission please do not hesitate to contact me at [p.peake@perthenergy.com.au](mailto:p.peake@perthenergy.com.au) or on .

Kind regards,

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