perthenergy

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Dear Robert

Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network

Thank you for the opportunity for Perth Energy to provide submission with respect to the above topic.

While the proposed revisions to the Access Arrangement are broad reaching, we would like to limit our submission to dealing mainly with those matters which we think are most relevant to independent generators seeking to achieve access conditions that promote competition and protect the significant investment made in the Wholesale Electricity Market (WEM).

Perth Energy considers that the driving principles for the Access Arrangement should be to ensure an adequate level of services is provided in an economically efficient manner. This would normally be brought about by ensuring costs of service are reflected accurately in pricing, which is applied to those customers that benefit from these services.

In the context of the increasing penetration of intermittent generation technologies, particularly domestic roof-top solar panels, we consider it crucial that the Access Arrangement provide for appropriate and targeted cost recovery for all network investment necessary to accommodate the increased uptake of these services. Correct network access pricing will assist enormously in driving the market and Government towards making better informed investment decisions in the face of the Mandatory Renewable Energy Target (MRET) scheme and other State based programs.

We also consider this to be an opportune time for the Economic Regulation Authority (ERA) to deal with some of the inefficiencies and complexities that have materialised in the capacity market within the WEM flowing directly from the application of Western Power's capital contribution policy as set out in the Access Arrangement.

In the remainder of this submission, Perth Energy would like to submit our views on the following:

- The Capital Contribution Policy and its impact on the capacity market
- Revisions to the Applications and Queuing Policy
- The proposed Rate of Return
- The Incentive Mechanisms
- Tariff Equalisation Contributions.

Capital Contribution Policy

Perth Energy notes that there are no significant proposed revisions to Western Power's Capital Contribution Policy (CCP) with only minor changes being suggested for the treatment of distribution headworks schemes.

We have concerns over the application of the current CCP and the impact it has on investment in generation capacity in particular. There are some significant interactions between the CCP and the capacity market that require scrutiny.

Current Capital Contribution Policy

The current application of the CCP calls for a capital contribution from the connecting party in relation to all network augmentation work that is necessary to allow the connection and which does not pass the New Investment Facilities Test (NFIT). As the South West Interconnected System (SWIS) is becoming more and more constrained it has increasingly been the case that new connections to the system (in particular generation connections) have been required to pay significant capital contributions to connect to the system. Predicting the size of these capital contributions and whether they will apply at all has proven impossible for potential new projects. For new projects this part of costing has been described as a "black box". That is not positive in the context of providing clear, economic investment signals for entry of new generation.

The issue is magnified via the flow-on effects on the capacity market. The Independent Market Operator (IMO) is required each year to compile the Maximum Reserve Capacity Price (MRCP). The MRCP plays a very significant role in attracting investment in new generation capacity, and in particular in mid-merit and peaking capacity where the capacity payments that are available in the WEM are derived directly from the MRCP. Since Market Start in 2006, the Reserve Capacity Price (RCP), which is determined from the MRCP, has gone from $98K/MW to $178K/MW for the latest capacity year 2013-14. One of the more significant contributors to the variation in the price has been the capital contribution estimates on the connection cost component for a generic peaking plant connecting to the SWIS.

Due to the uncertainty in connection cost estimates, the IMO has recently opted for an arbitrary approach to lessen the annual variation in those estimates by using a moving average formula (with some overweighting of more recent years) in an attempt to provide stability. In our view, this backward looking methodology only manages to paper over those variations while creating another potentially more serious problem in producing inaccurate connection costs leading to misleading MRCP and RCP.

Generation plants are long life assets and are complex and expensive to establish. To achieve an efficient entry of new plant in the SWIS it is important that long term investment signals are accurate (cost-reflective) as well as stable.

It is imperative that resolution to instability be achieved from a rigorous review of the CCP (the cost source) rather than by averaging historical cost outcomes. This is especially so in the context of a volatile cost source framework that is exacerbated by a constrained Network that can in turn move the next cost outcome sharply away from past cost outcomes.

Proposed way forward

A potential solution is to move to a shallow-only charging policy. Under a shallow connection charging policy only those assets that are solely used by the connecting party (normally transmission lines from the power station to the sub-station and any assets within the sub-station that are specifically used only for the connecting party) are charged via connection charges (including capital contributions). All other augmentations, including deep network reinforcements, would be added to the capital base of Western Power and charged for via normal use of system charges.

This approach has been adopted in a number of other jurisdictions including Germany, Great Britain, Norway, Chile, Singapore, Texas, and to a lesser extent in Australia's NEM, New Zealand and some other jurisdictions in the United States[1]. It has the desirable effect of making connection costs quite generic and easy to predict.

This would facilitate a more level playing field for generators and take the hard-to-predict, deep connection cost factor out of the equation when considering a new project. It would also have the positive flow-on effect of stabilising and making the connection component of the MRCP more predictable.

It is possible to retain appropriate cost-reflective investment signals when moving to a shallow connection charging methodology. The elements of network investment that are not charged via shallow connection charges but that at the same time have a locational element to them could be charged via location specific use of system charges.

David Newbury et al (2005) of the University of Cambridge provide an excellent academic review of the benefits of shallow connection charging applied at the distribution level[2].

In addition to the location charging component, in appreciation of the ERA's long standing desire to apply the user-pays principle in network access charging whenever possible, Western Power could also develop a simpler formula to allocate some explicit deep connection costs to projects – "explicit" being the imperative word as this would require Western Power to pin down a number and method for making such cost clear, and not to include any unclear, undefinable or unmeasurable

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[1] See page 28 onwards of Frontier Economics (2009). *International Transmission Pricing Review. A Report Prepared for the New Zealand Electricity Commission*. The reference is available from http://www.ea.govt.nz/document/4695/download/search

[2] D. Newbury et al (2005), *Long-Term Framework for Electricity Distribution Access Charges.* Available from http://www.ofgem.gov.uk/Licensing/ElecCodes/DistCode/Mods/Archive/10146-Cambridge.pdf

items in the estimate. Then Western Power could share these explicit costs in accord with the purpose of a network user's application for access at the time of execution of the Interconnection Works Contract (IWC).

If the access is to be used for supply to general retail loads in the SWIS, ie without one or more specific foundation loads, then shallow-only charges should apply. If the access is designed for one dedicated load, the entire contribution should be made by that load. If access is for a mix of dedicated loads and general retail market then Western Power could apply a shared allocation. Western Power could apply 10% bands for allocation scales, and it could do so because it holds all the information pertaining to access applications for both market generators and market customers, and to the IWCs.

Regardless of which connection charging approach the ERA decides to adopt, Perth Energy urges the ERA to ensure that the connection cost component of any future determination of the MRCP be relatively predictable and reflective of the eventual connection costs that a generic generator connecting to the SWIS will face.

The recently implemented methodology change for determining the connection cost, hence the MRCP, by the IMO will be creating more rather than less uncertainty because such backward looking estimates will inevitably result in rising divergence between estimates and actual costs in future. This is opening up the risk of inefficient capacity investment decisions in coming years.

Revisions to the Applications and Queuing Policy (AQP)

In general, Perth Energy is supportive of any measure that seeks to streamline the process of application and queuing for access to the Western Power Network but which does not detract from the value attached to an applicant's existing place in the Access Queue under the "first in, first served" methodology.

Formal Enquiry Stage

Western Power's proposal for a Formal Enquiry Stage is a positive one but should only be progressed if it can be demonstrated to materially reduce the time and resources required to develop an access application.

In some sense, an *Informal* Enquiry Stage would be a preferable alternative to a formal enquiry in so much as Western Power should be required to provide high level detail regarding network access and capacity constraints and considerations, existing applications and network performance issues that would be germane to the deliberations of any party seeking access to the network.

The provision of greater clarity around network access issues and constraints than what is currently provided by Western Power in its Annual Planning Report should be a required first step in the revision of the Applications and Queuing Policy.

Timelines for various stages

We note the positive intent of the timelines proposed for various stages of the applications process, however, these should be supported by penalties for non-

compliance which would enable Western Power to demonstrate efficient resourcing of its applications assessment group.

As a result Western Power would then be able to justify the appropriate resourcing of this group which would further reduce the likely timeframes for the resolution of network access applications.

Competing Applications Group

Greater detail is required on the operation of a Competing Applications Group before this proposed amendment could be fully supported.

On face value there appears to be much to recommend the proposal to group similar applications in order to deal with their combined impact more effectively. However, we would like to see greater clarity with respect to the operation of this model particularly as it relates to the planned move towards a constrained generation model by the IMO.

Additionally, we need greater clarity regarding the management of the Competing Applications Group in instances where one or more of the grouped applications requires an expedited application process and where being treated as part of a group of applications may be detrimental to the commercial interests of the applicant requiring an expedited application.

We note Western Power also proposes an amendment that would allow members of a Competing Applications Group to object if one member of the competing applications group is offered an applicant-specific solution. We have concerns this may be used in a vexatious manner to hinder the progress of a competing application or to enforce participation in a joint solution that may not be in the best interests of individual applicants. Therefore Perth Energy does not support this proposed amendment.

Perth Energy would be prepared to support the majority of Western Power's proposed amendments to the AQP if the ERA, through its inquiries, is able to determine that the impact of the Competing Applications Group is both aligned with the planned move towards a constrained generation model and allows the necessary freedom for individual applicants to opt to pursue stand-alone access applications where the participation in a Competing Applications Group may hinder the progress of an access application.

Without this assurance, Perth Energy, while supportive of Western Power's intent to improve the application of the AQP and comforted by Western Power's acknowledgement that improvements are required in this important section of the utility, cannot support these amendments for the reasons stated.

Rate of Return

Perth Energy supports a level of revenue for Western Power that promotes efficient investment in network assets but that does not place an unfair burden on network

access end use consumers in the contestable market – the latter as distinct from access users on the generator side or non-contestable end use customer segment.

This distinction is due to our view that the contestable end-user market has borne the brunt of network charge increases in the last 5 years and until more rigorous review of the whole access charging regime has been undertaken by the ERA and proven to show otherwise, we believe that this segment has been carrying more than its fair share already.

In short, we do not support any further increase in network Exit Point access charges to the contestable market under AA3.

Benchmark credit rating for Government-Owned public utilities.

We view the use of benchmark credit ratings for the determination of WACC as a reasonable approach to determining the compensation for borrowing costs for organisations that source their debt from a range of sources in a competitive environment.

As the ERA points out in its Issues Paper, given that Western Power sources its funds through the WA Treasury Corporation (WATC), virtually at the State's AAA credit rating, there would appear to be little justification for using a benchmark figure when an accurate figure for the cost of debt is available from the WATC.

Where there is a risk the benchmark figure may over-compensate Western Power for the cost of borrowings, it is more reasonable to use the actual figure which would presumably be available through WATC.

Treatment of taxation

As per the previous point, where there is a risk of over-compensating Western Power at the expense of network access end-users, it is the ERA's responsibility to recommend a course of action that minimises that risk to consumers.

The ERA's Issues Paper outlines two potential alternatives for the calculation of WACC – a pre-tax calculation and a post-tax calculation.

As the Issues Paper implies, the pre-tax calculation does not adequately address the issues of tax deductibility of certain tax liabilities, therefore it would be reasonable that a post-tax calculation be used that adequately compensated Western Power for the efficient costs of running its network business without the risk of over-compensating the utility at the expense of network consumers.

Equity Beta

Equity Beta is a measure of the systemic risk faced by an organisation relative to the overall risk of the market in which it operates. We would question whether there has been any real change in these dynamics since the commencement of AA2 and therefore queries the need to revise the Equity Beta that was in place for the AA2 period.

Our own experience with Access Arrangement is that all standard form contracts with Western Power provide the utility with the ability to retain a zero-commercial risk approach to dealing with clients, the access users. Any cost associated with network connection works for instance, whether they had been canvassed and taken

into account prior to IWC execution or completely new, is payable for by the client. Western Power retains an absolute right to vary charges as it sees fit, well after quote confirmation and/or contract signing. Because it is a zero-risk business, its estimated Equity Beta should reflect this reality.

Equity Raising Costs

Western Power achieves its funding through the WATC at rates roughly equivalent to that achieved by the State. There has been no demonstrated appetite for funding of network projects on the part of Western Power through the raising of private equity and therefore it would seem inappropriate to bring this aspect into discussion.

The Incentive Mechanism

Western Power has proposed a number of revisions to the service standards under its Access Arrangement. Performance against these service standards has a direct impact on the utility's financial performance through the gain sharing mechanism. We understand that Western Power has failed to meet certain standards set out under the current Access Arrangement and as a result suffered financially.

Perth Energy considers it important that Western Power is exposed to appropriate incentives, including financial, to deliver an appropriate level of services to customers. We consider the benchmarks of AA2 to be adequate and achievable under AA3. We are open to further discussion in this regard as we would be keen to support giving Western Power an effective incentive regime. But we would not support a lowering of service standards from AA2.

It might be worthwhile the ERA considering using another layer of incentives beyond a fixed revenue cap target, such as CPI-x efficiency incentive applied to the overall revenue path for Western Power. This approach is applied in many jurisdictions for access services and provides benefits to customers through lower real prices in the long term and service providers through retention of short term efficiency improvement dividend achieved over and above the CPI-x target.

Tariff Equalisation Contributions

The Tariff Equalisation Contribution (TEC) component of the Western Power access tariffs is a social policy aimed at providing uniform electricity tariffs throughout the State. The TEC revenue flows from SWIS based customers to customers outside the SWIS to make up for the difference between the costs of providing electricity between the 2 regions.

We consider TEC not the most efficient tool to achieve this social policy. The cost of supply differential between SWIS and regional areas covered by Horizon Power is made up by more than just the cost of network access infrastructure and services. Using TEC embedded in the revenue flowing from SWIS unnecessarily distorts the

network pricing signals for SWIS based customers, potentially leading to sub-optimal economic outcomes in SWIS.

In any case, TEC as a policy doesn't equalise electricity tariffs between SWIS and non-SWIS customers. The large subsidy at best equalises tariffs within the non-SWIS region, ie between regional areas outside SWIS.

A better way of achieving this social objective of equal electricity tariffs in regional areas would be to use a Community Service Obligation funded from consolidated Treasury revenues. That would eliminate the distorted network access charge impact in SWIS. We would recommend the TEC component be removed from Western Power's cost stack for access tariffs and equivalent funding be provided directly to Horizon Power from State Treasury.

This approach would correctly set up this CSO to be supported through normal taxation rather than through a utility charge. Calling it a tax focuses the public's mind on its raison d'être. Smearing this cost in a utility charge removes Government accountability from the tax and makes it that little more difficult for Western Power (and Horizon Power for that matter) to be judged on its own performance.

We also note that Western Power has forecast a relatively steady TEC requirement at about $180 million per year over the period 2012/13 to 2016/17. The basis for the forecast of the latter years was an extrapolation of data available for the earlier years in the period. If cost pressures in Horizon Power's service area are going to be similar to those that Western Power is forecasting it is likely that the TEC forecast in the outer years will be inadequate. This will place pressure on Western Power's network tariffs, presumably via an income adjusting event increasing the allowed revenue cap to account for an increased TEC requirement.

Notwithstanding our comments above relating to the sourcing of TEC equivalent funding, we would prefer to avoid the unnecessary use of income adjusting events to increase the cap on Western Power's allowed revenue. To this end, Perth Energy suggests that the ERA and/or Western Power pro-actively seek an update to the estimates of the TEC requirement for the outer years of the next Access Arrangement period.

We would be pleased to discuss further on any part of this submission.

Yours sincerely

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