Government of **Western Australia**
Office of **Energy**

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Mr Tyson Self
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Dear Mr Self

SUBMISSION ON THE ISSUES PAPER ON WESTERN POWER'S PROPOSED AMENDMENTS TO ITS ACCESS ARRANGMENT FOR THE THIRD REGULATORY PERIOD

The Office of Energy (the Office) is pleased to submit the following comments in response to the Economic Regulation Authority's (the Authority) Issues Paper of 7 November 2011. We appreciate the opportunity to provide comment. I apologise that the submission was not in time to meet your deadline and hope that it can still be considered.

The Issues Paper has highlighted a number of areas in which we have a view on the application of the *Electricity Networks Access Code 2004* (Access Code) or implications on the deliverability of the proposed Access Arrangement (AA3). This includes the following:

- the position of the Authority that Western Power, the Government and consumers are indifferent between cash flow today or in the future when adjusted for the time value for money does not consider the Government's financial constraints, nor higher long-term prices;
- the discussion of the Weighted Average Cost of Capital does not make any reference to the Government's opportunity cost of capital, nor the impact of limiting funding options;
- consistency of the use of regulatory practices in Western Australia and across Australia;

It is in this context that we submit preliminary comment for your consideration on the following issues, which are discussed in more detail in Attachment A:

- rate of return issues;
- deferred revenue;
- taxation treatment;
- inclusion of disallowed capital;
- headworks charging policies;
- model electricity transfer access contract;

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- network tariffs;
- applications and queuing policy; and
- smart metering.

The Office reserves the right to provide further comment on these or other matters.

If you have any queries in relation to our comments, please do not hesitate to contact Peter Hawken on 9420 5758.

Yours sincerely

[redacted]

MICHAEL KERR
A/COORDIANTOR OF ENERGY

ATTACHMENT A

OFFICE OF ENERGY'S SUBMISSION ON THE ISSUES PAPER ON WESTERN POWER'S PROPOSED AMENDMENTS TO ITS ACCESS ARRANGEMENT FOR THE THIRD REGULATORY PERIOD

Rate of Return Issues

The Office of Energy (the Office) observes that to date, regulatory practise around Australia for electricity network service providers has been to be adopt a market based approach in calculating the regulated return a service provider can obtain on its capital investments.

In its Issues Paper, the Authority raises the question on whether the rate of return (or weighted average cost of capital – WACC), should instead be calculated based on the particular circumstances of an individual utility, in this case Western Power. For example, the Authority poses whether such parameters as the actual cost of debt should be used rather than an industry benchmark level.

This represents a significant shift away from current regulatory practise, both within the State and across Australia. The Office considers that such a fundamental shift in regulatory policy should be the subject of a separate study with extensive review and consultation. It would appear to be inappropriate to include consideration of such a policy shift as part of the review of the proposed amendments to Western Power's access arrangement. In fact to do so could be seen to introduce a level of regulatory uncertainty and risk for the service provider's business and its owner. This may in turn have impacts, perceived or real, on other Western Australian regulated businesses.

The Office also offers the following preliminary comments on this matter.

It is likely that the WACC would be reduced through the adoption of Western Power's actual debt cost (typically the Western Australian Treasury Corporation's [WATC] borrowing rate at a AAA credit rating plus a 20 basis point margin), rather than an efficient industry benchmark of a credit rating of BBB to BBB^{+}. This would in turn reduce access tariffs, other things being equal. However, this would have the following implications and in fact may not be appropriate.

- While WATC debt can be obtained at a AAA credit rating, this does not necessarily reflect the risk faced by Western Power as a separate organisation. Western Power bears risk through its income being independently regulated and its investments tested for their suitability for inclusion in the regulated asset base after the fact (*ex-poste*).

- Adoption of an actual cost of debt is in effect a policy decision about how expenditures can be funded and would preclude other funding options. This is particularly important given the large network expenditure requirements going forward.

  For example, it would preclude leveraging private investment in efficiently expanding and enhancing the network for the benefit of consumers. In 2010/11 Western Power's net debt makes up some 37% of total Government net debt. The Government is keen to reduce debt in this area so its limited funds can be spent in other essential areas. While such private funding of infrastructure may be at commercially efficient competitive rates, it is unlikely to be cheaper than AAA Government debt and so would be discouraged.

  Given the Government's current financial constraints to ensure the delivery of AA3 it is important that all options are available. To do otherwise reduces the Government's

ability to fund required network investment and/or reduces the Government's ability to fund other Government priorities (such as health and education).

- The Issues Paper notes that setting the costs of debt, and hence the WACC too high could create incentives for a government owned public utility to pursue inefficient investment. The Office notes that such an incentive is not specific to government owned utilities and would apply to any service provider. It is also noted that the Regulatory Test and the New Facilities Investment Test specifically protects against inefficient investment.

- The owner of Western Power is also the banker and provider of its debt facility. The Government currently faces financial constraints and has a range of expenditure requirements, and this tension provides an additional level of control with regard to inefficient investment.

- It is recognised that the main argument against an overly high WACC is its impact on the costs to users.

- Of concern however is that if the WACC is set too low that there will be a disincentive to investment and in turn this may impact on service standards. This also creates the potential for future price shocks. Also lowering the WACC lowers the revenue received by Western Power and so will increase its needs for debt, which in turn increases pressure on Western Power's ability to fund expenditure.

Having said the above, the Office encourages the Authority to continue its efforts to determine a WACC that meets the objectives of the Code and balances the tension between funding network infrastructure and minimising the costs to users of the network. A WACC that solely focuses on funding or on minimising costs has the potential to lead to adverse outcomes.

Deferred Revenue

The Office notes that the Authority's original preference was that recovery of the amount of deferred revenue occur over a period equal to the average life of network assets (some 40 to 50 years).

Though neutral in present value terms, the decision is not commercially neutral for Western Power because it fails to recognise the current funding constraints experienced by Western Power and the negative cash flow implications that would result. If funding is not available this would mean that Western Power would have to reduce its expenditure elsewhere or other Government priorities (such as health and education) may have to be reduced.

The Office notes that the amount of deferred revenue to be returned is expected to grow with CPI and the time value of money. This compounding growth means that by the end of the AA3 period (30 June 2017), the original amount of $528.7 million in 30 June 2009 dollars will have grown to over twice this amount or $1,109.4 million in nominal terms (at a notional average CPI of 2.5% and real WACC of 7%) if none was returned over the AA3 period. Western Power's debt levels would also have to increase by similar amounts, potential impacting its ability to fund expenditure.

From a consumer perspective in nominal terms deferring revenue lowers target revenue and prices in the short term, but quickly leads to higher target revenue and prices in the long term. Thus sending inappropriate signals and encouraging higher inefficient demand and increasing requirement network investment.

The Office supports Western Power's concerns that recovery over much longer periods of time could distort intergenerational equity in that future users will be paying for services enjoyed by but not paid for by current users. This may be viewed as not being efficient.

The Office notes that section 7.5 of the Access Code requires the Authority, in reconciling any conflicting objectives for the pricing methods, or determining which objective should prevail, should have regard to the Access Code objective and should permit the objectives 7.3 to prevail over the objectives of 7.4 (including avoiding price shocks). Section 7.3(a) state an access arrangement must have the objectives that reference tariffs recover the forward-looking efficient costs in providing reference services.

We believe that Western Power's measured recovery of deferred revenue is appropriate and should be approved by the Authority.

Pre-Tax or Post-Tax

A service provider's tax liability is a business cost which needs to be included in its revenue requirement.

While either a pre-tax or post-tax approach can be used, the Authority has consistently used a pre-tax real WACC approach with Western Power's Access Arrangements and in relation to the Access Arrangements for WA Gas Networks and the DBNGP.

The Office understands that there are techniques available to allow for taxation, but these introduce additional complexity. It is apparent that an organisation's accounting books are of necessity different from its regulatory books. While it may be possible to make allowance for tax in a notional way, this would be on a generic basis. The actual taxation of an organisation is typically complex and dependent on a number of commercial factors that are not recognised in the regulatory environment. Therefore it is probably not helpful or desirable to try to replicate a particular organisation's actual tax payable within the regulatory environment.

The Office notes that changing to a post-tax approach can potentially result in the loss of value of taxable revenue through the complicated conversion methods that are generally applied, depending how close the outcome mirrors the real tax position of Western Power. This is also likely to require extra administrative costs on part of the Authority to convert the AA3 proposal.

The Office therefore supports the continued use of pre-tax real WACC to calculate the rate of return for Western Power in the AA3 regulatory period. Should a decision be made to move to a post-tax approach, recognition of the practical difficulties would need to be made now to ensure sufficient governance and testing arrangements are in place at the right time. Also, it would be helpful for stakeholders for the Authority at an early stage to

undertake and present detailed analysis with examples of the methodology used to adopt a post-tax approach and to transition from a pre-tax approach.

Inclusion in Asset Base of Capital Previously Disallowed from AA1

Western Power has put forward a proposal to include $244 million in the opening capital base for AA3 for expenditure in AA1 that the Authority decided in its AA2 determination did not meet the requirements of the New Facilities Investment Test.

Given the general reasons for the initial disallowance, the Office supports the view that new information presented by Western Power in its AA3 proposal in relation to past new facility investment warrants thorough consideration by Authority. The Office is of the view that Western Power has made some assumptions in relation to the value of the amount to be rolled into the capital base, based on extrapolated findings which the Authority should assess in greater detail.

The Office supports the notion of assessment of speculative investment under the Access Code as such an assessment aligns itself with the notion of the *ex-poste* assessment of investment by the Authority. The Office is of the view that the roll in of lost capital expenditure that can be shown to meet the speculative investment provisions will promote the efficiency of the business if the assessment is conducted in a transparent and consistent manner.

It is noted that the Access Code provides little guidance as to the management and governance of the Speculative Investment Fund and the Office makes itself available to the Authority to assist with consideration of this previously unused provision.

Headworks Charging Policies

Western Power has three documents that deal with its proposed treatment of charges for the provision of headworks: Appendix C1 – Contributions Policy, Appendix C2 - Distribution Headworks Methodology and Appendix C3 - Distribution Low Voltage Connection Scheme Methodology.

The Office points to some possible inconsistencies with these policies.

- The Contributions Policy defines 'headworks scheme' as meaning 'the scheme described in clause 6 of this *contributions policy*'. Clause 6 only refers to the distribution headworks scheme. This definition therefore does not include Western Power's distribution low voltage connection scheme which is described in clause 7 of the contributions policy.
- It would be helpful if Western Power provided reasoning for its amendments to the Code definitions of 'transmission system' and 'distribution system' in its Distribution Headworks Methodology.
- Western Power explicitly states that '[the] methodology document explains how the requirements of sections 5.17D(i), (ii) and (iil) [of the Access Code] have been met in

the Contributions Policy. It makes no mention of the requirements under 5.17D)(iv) and (v). What are Western Power's reasons for not considering these requirements?

- The Distribution Headworks Methodology states that 'headworks has the same meaning given to it in the Contributions Policy'. However, the definition in the Distribution Low Voltage Connection Scheme Methodology does not contain the reference to HV (or high voltage) like the Contributions Policy definition does. The high voltage reference may have implications for the classification of the proposed distribution low voltage connection scheme as a headworks scheme.

Model Electricity Transfer Access Contract

The Office considers that further amendments need to be made to the proposed model Electricity Transfer Access Contract (ETAC) to adequately recognise the evolution of the electricity market and in particular the substantial increase in the use of small generation systems powered by renewable energy, especially photovoltaic (PV) systems. The following summarises the main areas the Office believes need attention.

The Office notes that the limitation of liability clause (clause 19.5(b)) of the ETAC is not clearly drafted and that the intent of this clause is not clear. It is recommended that as part of the AA3 review process that this clause be redrafted.

Clause 19.5(b) places an upper limit on the annual liability of a User and Indemnifier to Western Power. This limit is the lesser of $80 million and a formula based on the User's number of connection points within each of five categories of connection points. In practice the Office understands that, when applied to retailers, the formula is unlikely to return a value of less than $80 million.

No sub-limits are set for a User's liability in respect of individual events at the various types of connection points. Therefore, the maximum liability accruing to a User in respect of a liable event at any of its connection points will be the annual liability cap set by clause 19.5(b).

If a retailer wished to effectively pass through all liabilities associated with all customer connections, it would need to ensure all its customers were insured for liable damage to the network up to $80 million (or as otherwise determined under 19.5(b)). This is not feasible for small connections and while retailers may require small customers to indemnify them, they will not check for insurances in most cases. In any event, it appears it would be unrealistic to expect many small customers to insure against an $80 million liability.

For small connections, it appears retailers enter into supply contracts on the assumption that the plausible liability associated with those customers is much less than $80 million. However, retailers have shown themselves unwilling to make the same assumption in relation to small customers with renewable energy systems, because grid connection of small renewable generation equipment is a relatively new phenomenon.

The Office considers that Western Power should be encouraged to estimate the upper limit of the damage to the network that may arise from a single liable event for the main different classes of connections, including bi-direction customers. Ideally, these estimates would then be used to establish sub-limits to liability for individual events in each connection class, under the ETAC.

The Office considers that as part of AA3 review process and approval of the ETAC, the Authority consider the issue of the circumstances where liability arises, who is the most appropriate party to manage that liability and what a realistic limit on that liability should be. An inappropriate assignment of liability and its quantum can act as a barrier to use of the network.

Network Tariffs for Bi-Directional Services

The Office notes that published tariffs do not exist for non-reference bi-directional services, including for plant larger than 1MVA. This could leave the proponents of such systems at a disadvantage in negotiating contracts with Western Power. It would be helpful for Western Power to publish pricing guidelines for such non-reference services.

Application and Queuing Policy

The Office is concerned that the detailed mechanics of the proposed Application and Queuing Policy (AQP) may not have been fully developed or may have not have been adequately communicated to and understood by stakeholders.

The Office proposes that Western Power should provide a series of workshops to interested stakeholders to allow for a better understanding of the proposed changes to this policy. The workshops should better explain the rationale for the changes, how the modified rules would work in detail when applied to various real-world scenarios and the desired outcomes under various scenarios. This would facilitate a more informed discussion of the merits of Western Power's proposed AQP.

Smart Metering

The State Government needs to consider and decide on the merits of deploying smart meters and associated infrastructure in main grid-connected areas in the State. It will also have to report to the Standing Council on Energy and Resources on this matter in 2012. Smart meters are a component of an emerging technology that will need to be carefully considered, planned for, and adopted if there are clear net benefits. The Government will need to be satisfied that there is sufficient evidence to clearly demonstrate net benefit if it is to agree to a full roll-out of smart meters. This work is not sufficiently advanced to report on in this forum.

Accordingly, at this time, the Office is not in a position to be able to comment on the merits, or otherwise, of Western Power investing in smart metering infrastructure during AA3.

However, it is noted Western Power has a statutory obligation to replace 280,000 three-phase meters because they do not meet the regulated accuracy requirements. The Office understands there is little cost difference between three-phase smart meters and the current standard electronic three-phase meter that Western Power installs.

Smart meters can operate as a standard electronic meter but can also provide enhanced functionality at a later date if needed albeit at a significant additional cost as the meters cannot be retrofitted *in situ* and have to be removed, upgraded and reinstalled with the required technology. Therefore, as a risk mitigation measure and to future proof against the possible full roll-out of smart meters throughout the SWIS at a later date, the 280,000 non-compliant meters could be replaced with smart meters at a similar cost compared to replacing them with standard electronic meters. The chief consideration is whether the decision is taken to fit the communications component initially to enable the functionality to be engaged at a future date.

The Office encourages the Authority to assess Western Power's proposed meter replacement program and its benefits. The Government will also be keen to learn from the comment and analysis that flows from the Authority's consideration of this matter, as an input into the Governments consideration of the broader question of a full roll-out of smart metering technology.

Office of Energy

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