



Department of Treasury and Finance
Government of Western Australia

Our ref : 6790733
Enquiries : Chris Payne
Telephone : 9222 9165

Access Arrangement Review
Electricity Access
Economic Regulation Authority
PO Box 8469
PERTH BUSINESS CENTRE WA 6849

WESTERN POWER'S PROPOSED REVISIONS TO ITS SECOND ACCESS ARRANGEMENT

The Department of Treasury and Finance (DTF) is pleased to submit the following comments to assist the Economic Regulation Authority's (Authority) examination of Western Power's (WP) proposed revised access arrangement (AA2).

As you are aware, the Government has not signed off on WP's revised access arrangement submission to the Authority. However, as the owner, it will need to ultimately approve the level of debt that WP can raise.

Provided at Attachment A are our comments in relation to the following issues:

- expenditure levels;
- capital contributions;
- tariff equalisation contributions;
- Weighted Average Cost of Capital (WACC);
- pricing policies; and
- adjustments.

While the issues addressed in the attachment include reference to the appropriate level of expenditure by WP and pricing policies separately, I consider it appropriate to highlight the impact of these issues collectively in the context of decisions the Government is required to make on investments in other key priority areas (eg. health, education and law and order etc).

In this regard, when considering the ultimate determination by the Authority, the Government will need to weigh up a number of factors, including the sustainability of the investment required by WP in the context of its financial targets and the flow-on impact to the general public of a significant increase in the retail price of electricity.

While acknowledging the importance to the community and the economy of a reliable and secure electricity network, endorsement of the level of investment proposed by WP will leave the Government with two options. The first would be to raise net debt to unsustainable levels, thus placing constraints on the capacity to invest in other essential areas – and potentially affecting community services. Alternatively, it would have the option of increasing standard electricity charges to levels that will cause considerable hardship to the average household.

On this basis, I request you, in the interests of maintaining ongoing economic development and, at the same time, sending appropriate price signals that also remain affordable for households, to:

- carefully analyse the assumptions that WP (including but not limited to population forecasts, projects that are expected to proceed and appropriate standard benchmarks when compared to other jurisdictions) has used to determine the required level and timing of its expenditure, and assess the scope to defer some beyond the current process; and
- note the significant increase in expenditure undertaken as a result of the AA1 process and consider the impact that this investment has had on the reliability and security of the network.

If you have any queries in relation to our comments, please do not hesitate to contact Chris Payne on 9222 9165.

Anthony Kannis
EXECUTIVE DIRECTOR
INFRASTRUCTURE AND FINANCE

17 December 2008

DEPARTMENT OF TREASURY AND FINANCE'S SUBMISSION ON WESTERN POWER'S PROPOSED REVISED ACCESS ARRANGEMENT

EXPENDITURE LEVELS

Western Power's (WP) second Access Arrangement (AA2) submitted to the Economic Regulation Authority (Authority) details a number of cost drivers in the forthcoming access arrangement period that result in the need for increased transmission and distribution capital and operating expenditures. These drivers include:

- the growth in electricity demand and the connection of additional generation capacity;
- more onerous safety, health and environmental regulation;
- the continuing increase in unit costs;
- increased asset replacement requirements to replace those assets that are now due for replacement; and
- the need for new zone substations to transfer large amounts of existing network load to address the currently high level of substation and feeder loadings.

We note that, as a Government Trading Enterprise (GTE), WP operates at arm's length from Government and has considerable management autonomy. Consistent with GTE governance arrangements, the Government has not imposed any real operating expenditure constraints on WP and it has been free to allocate expenditure to recurrent items.

However, WP's capital expenditure program does have a significant impact on the Government's whole of government financial targets, in particular, maintaining its net debt to revenue ratio target. For this reason, the Government requires new capital expenditure proposals to be considered and formally approved by the Economic and Expenditure Reform Committee (EERC). While the budget for WP has been developed for specific infrastructure investments, WP has the flexibility to allocate capital expenditure within the approved limits as priorities change over the year.

In recent years, to support Western Australia's growing economy, new residential development, and asset replacement and safety programs, the Government has recognised the need for a significant increase in capital works expenditure for the State's electricity network, both on transmission and distribution. Over the budget period 2008-09 to 2011-12, WP is budgeted to spend approximately \$3.5 billion on the transmission and distribution network. This compares to \$2.6 billion and \$2.0 billion that was planned to be invested in the transmission and distribution network in the 2007-08 Budget (2007-08 to 2010-11) and 2006-07 Budget (2006-07 to 2009-10) respectively.

This expenditure represents a substantial injection and is focused on improving quality of supply in both regional and metropolitan areas, and on meeting customer driven demand for new facilities and connections.

A risk assessment for varying levels of expenditure needs to be considered, to examine the impact that various levels of expenditure has on the reliability of the network (i.e. what are the risks associated with WP's proposed increase in expenditure levels and what are the increased risks associated with any reductions in these proposed expenditure levels).

We encourage the Authority giving consideration as to whether the actual and forecast investment by WP meets the requirements of the Electricity Network Access Code 2004 (Access Code), and that forecasts for AA2 are reasonable with regard to other factors, such as WP's ability to finance the investment costs; deliver this significantly increased expenditure program; and the ongoing sustainability of the expenditure.

In recognition of changes in the Western Australian and international economies flowing from the global financial crisis, we believe that the Authority should appropriately revise WP's underlying assumptions as more information becomes available. For example, changes to economic growth and projects that are now not likely to go ahead should be recognised. Additionally, we believe the Authority should ensure, and detail, that there are mechanisms to recognise the effects of such changes within the regulatory period.

Given the significant proposed increases in expenditure, both capital and non-capital, we would encourage consideration as to whether WP's proposed service standards are reasonable, including in comparison with benchmarks in other jurisdictions.

In summary, it is considered that the critical analysis of WP expenditure levels, and consideration of the above points, is fundamental to achieving the objectives of the Access Code.

In this regard, the Access Code's primary objective is to promote economically efficient investment in the operation and use of electricity networks and services of networks, in order to promote competition in markets upstream and downstream of the networks.

If the levels and timing of expenditure and associated increases in network tariffs are accepted, and unless a significant increase in retail tariffs occurs, Synergy's retail tariffs will be significantly further from cost reflectivity than they are now. Sending appropriate price signals to customers supports the efficient allocation of resources, and provides incentives for energy efficiency. In the current environment of increasing electricity demand, increasing cost, high network utilisation and raised environmental awareness, economic and energy efficiency are of particular importance.

CAPITAL CONTRIBUTIONS

Under the current access arrangement, WP has adopted a treatment of capital contributions (Queensland model) whereby:

- capital contributions are added to the capital base; and
- the amount of capital contributions is deducted from the approved total revenue in the year in which the capital contribution is made.

✓ Effectively, WP takes out debt for the benefit of customers equal to the value of the capital contribution, and recovers this loan with interest over the life of the assets. Current customers therefore, defer paying some of the revenue requirement (price) associated with the assets they are using today.

In its proposed AA2 WP is seeking to revert to the conventional regulatory treatment of capital contributions (conventional model) whereby:

- capital contributions are not added to the capital base; and
- the amount of capital contributions are treated separately and are not deducted from the approved total revenue in the year in which the capital contribution is made.

We note that the two treatments of capital contributions available have the same implications, in present value terms, over the life of the assets, for tariff revenue and prices for network services.

As part of its submission WP and its economic consultant, NERA, detail the following benefits of the conventional model:

- it reduces WP's debt on the basis that the current model is financially unsustainable because with capital contributions increasing over time, WP will need to increase its debt to finance current expenditure requirements up to a point that WP reaches a debt limit;
- removes intergenerational equity concerns (the Queensland model lowers target revenue and prices in the short term, but leads to higher target revenue and prices in the long term);
- sends appropriate price signals (discouraging higher inefficient demand and reducing required network investment); and
- removes tariff variability from the unknown size and timing of capital contributions.

We note that moving to the conventional model will create a one-off increase in revenue and tariffs in AA2. However, for economic efficiency it is necessary to send appropriate price signals.

We recognise that capital contributions make up a relatively larger percentage of WP's asset base than other similar infrastructure providers. This fact and the proposed capital contributions methodology that excludes capital contributions from the regulatory asset base means that over time there may be a significant divergence between WP's:

- regulatory asset base (which excludes capital contributions); and
- statutory asset base (which includes capital contributions).

The regulatory asset base determines the amount of depreciation that is included in target revenue and tariffs. The statutory asset base determines the accounting depreciation shown in the statutory account and affects the level of WP's profit or loss.

Over time under the conventional model of capital contributions the regulatory and statutory asset bases (and the respective amounts of depreciation) will diverge. This may have an effect on WP's long term profitability as the statutory depreciation will increase at a faster rate than the regulatory depreciation included in target revenue.

The DTF believes that, before the conventional model of treating capital contributions can be adopted for WP, further analysis needs to be done to investigate financial impacts of this change beyond WP's AA2. As part of the analysis we suggest that the ERA assess:

- the sustainability of each model (for WP and the Government as the owner) in particular the issue of divergence between the regulatory and statutory asset base;
- the appropriateness of the price signals sent under each model; and
- which model addresses intergenerational equity.

If the conventional model is adopted, we support WP's proposal to offset/transition the initial effect of the change in treatment of capital contributions on target revenue and network tariffs by deferring recovery of part of target revenue. However, such a deferral must leave WP financially neutral compared to a situation where revenue deferral had not occurred, ensuring the recovery of any financing costs.

TARIFF EQUALISATION CONTRIBUTIONS

The Access Code provides for target revenue to include an amount of tariff equalisation contributions (TEC). The TEC ensures the financial viability of Horizon Power while enabling the maintenance of uniform electricity tariffs in areas outside of the SWIS. It is funded by payments made by Western Power from access revenue collected from network users in the SWIS.

Consistent with the Electricity Retail Market Review's (ERMR) draft recommendations that the TEC be converted to a Community Service Obligation (CSO), Western Power has not made an allowance in target revenue for TEC.

However, the final recommendations from the ERMR have yet to be submitted to or considered by the Government. As such, depending on the Government's decision the TEC may need to be included in target revenue.

WACC

We note that WP's proposed WACC is 8.95% pre-tax real. This is higher than that in WP's first access arrangement (6.76% pre-tax real). We also note that capital-related costs have recently experienced much uncertainty and variability.

In this regard, we recommend the Authority critically assess the WACC parameters proposed by WP.

PRICING POLICIES

In its review of WP's proposed tariffs we recommend the Authority take into consideration the need to avoid price shocks between succeeding years as per section 7.4(d) of the Access Code.

However, to encourage efficient investment and send appropriate price signals the DTF supports section 7.5 of the Access Code. This requires that 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 of section 7.3 to prevail over the objectives of section 7.4. Section 7.3 is quoted below:

"Subject to sections 7.5, 7.7 and 7.12, the pricing methods in an access arrangement must have the objectives that:

- (a) reference tariffs recover the forward-looking efficient costs of providing reference services; and
- (b) the reference tariff applying to a user:
 - (i) at the lower bound, is equal to, or exceeds, the incremental cost of service provision; and
 - (ii) at the upper bound, is equal to, or less than, the stand-alone cost of service provision."

WP has proposed mechanisms to transition tariffs and avoid large one-off tariff increases, including a revised side constraint for year-to-year changes in reference tariffs:

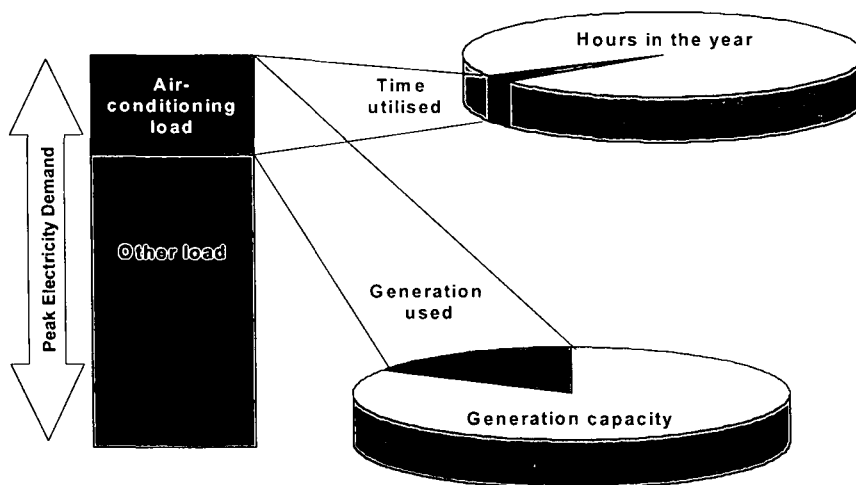
- transmission network – CPI + 37.2%; and
- distribution network – CPI + 30.0%.

In analysing the proposed side-constraints, we believe that the Authority should consider the objectives under section 7.3 and 7.4(d). Any reference tariffs should recover forward-looking efficient costs over an appropriate period.

Western Australia's unprecedented high levels of population growth and growing use of air-conditioning have greatly increased the peak period electricity load, which is of particular concern.

As a result of the high levels of load growth, WP has a substantial amount of new distribution assets to construct, now and over the course of the forthcoming access arrangement period. In addition, there is a substantial amount of augmentation work required on the existing network to cater for the additional load.

This rapid increase in peak demand is significantly affecting the cost of maintaining a reliable electricity supply. Compared to the cost of infrastructure to support this demand, the cost of an air-conditioner, for example, is fairly low. It should be noted that this cost is not recovered in the amounts consumers pay for electricity used in these peak periods.



Source: Office of Energy

Currently, the high infrastructure and running costs of providing electricity at peak periods are not recovered in the amounts paid by customers because of flat tariff rates. That is, consumption in off-peak times cross-subsidises peak time consumption.

While peak period pricing is mainly a retail pricing issue and not directly part of the Authority's review of WP's AA2, in the medium-term, peak period pricing has potential and warrants further investigation. We note that the Office of Energy's ERM is analysing the introduction of smart meters, including the various options available, which may add further pressures to WP's expenditures if there is a requirement to roll out new smart meters. However, this would support peak period pricing and efficient use of the network.

Peak period pricing or cost reflective pricing, aims to reduce the total cost of a utility's infrastructure by shifting some of the use of a utility's service from peak times to different times when that service is not in high demand. A decrease in total supply cost is possible because often a significant percentage of a utility's capital budget is used for providing infrastructure capacity (networks and generators) capable of meeting peak demand. If prices correctly signal the change of costs between peak and non-peak periods, peak pricing can assist in a more efficient allocation of resources.

ADJUSTMENTS

WP proposes the following inclusions in the AA2 new adjustment mechanism.

- Gain sharing mechanism - operates if WP's actual non-capital expenditures for the access period are less than the forecast costs for that period. Where this occurs, the average annual difference (the efficiency bonus) is added to the target revenue for each of the five years commencing from the start of the next access arrangement.
- Service standards adjustment mechanism - provides for specified reward or penalty amounts to be added to (or subtracted from) target revenue for the next access period where service standards fall below, or above the service standard benchmarks over and above specified threshold amounts.
- D factor scheme – provides for a carryover from one access arrangement period to the next of certain non-capital costs incurred by WP as a result of deferring a capital expenditure project or introducing a demand-management initiative.

We support the introduction of both the gain sharing and service standards adjustment mechanisms. This would provide WP with incentives to provide services in the most efficient way, making it accountable for improving reliability and efficiencies from their current levels.

We believe that WP's proposed D factor scheme has the potential to encourage non-network solutions, where economically efficient, and warrants further investigation.