# WACOSS Submission on the ERA's Draft Decision on Western Power's proposed revised Access Arrangement





Ways to make a difference

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# Glossary

AA3	Access Arrangement Period 3
AWCC	average weighted cost of capital
Capex	capital expenditure
DSM	Demand Side Management
ENAC	Electricity Networks Access Code
ERA	Economic Regulation Authority (The Authority)
GBA	Geoff Brown and Associates (technical report to the Economic Regulation Authority)
IT	Information technology
Opex	operating expenditure
LFAS	Load Following Ancillary Services
RAB	regulated asset base
SAIDI	System average interruption duration index
SAIFI	System average interruption frequency index
SWIS	South west interconnected system
TEC	Tariff equalisation contribution
WACC	Weighted average cost of capital
WACOSS	Western Australian Council of Social Service (The Council)
WEM	Wholesale Electricity Market (WA)

### **Executive summary**

The Western Australian Council of Social Service (the Council) is vitally interested in the work of the Economic Regulation Authority (the Authority) on electricity distribution pricing issues because of its impact on the affordability of electricity for Western Australian residents.

Western Power's proposal for the third access arrangement period starting in July 2012 would have resulted in price shocks and imposed genuine hardship on electricity users. The Authority's draft decision reduces Western Power's revenue cap proposal considerably, but the Council considers that the reduction is justified in light of the findings of the Geoff Brown and Associates report and the Authority's analysis. The extent of the reduction in the Authority's Draft Decision compared to Western Power's proposal does not in itself suggest any aspect of the Draft Decision is wrong.

Western Power has exhibited a history of over-estimating future demand and pulling forward projects, and has arguably done so again in its proposal for the third access arrangement period. It has also exhibited inefficiency in the governance of its capital works programs. On this basis, the Council supports the reductions proposed by the Authority in Western Power's capital works program. Without these reductions, Western Power would arguably not have sufficient incentive to improve its performance.

In relation to its proposed operating expenditure, Western Power is significantly above the average level of interstate distributors. This is true even though Western Power has been compared with the State averages, which would tend to advantage a more urban-based distributor such as Western Power. The Council supports the Authority's decisions to reduce Western Power's operating expenditure proposals and to set an operating expenditure efficiency dividend. The Council considers that a 3 per cent operating expenditure efficiency dividend is appropriate as it will drive Western Power over the course of the third access arrangement period to near the average of the current benchmark performance for the interstate comparator group. Western Power needs this incentive in order to move towards average benchmark performance levels.

The Council considers Western Power's credit rating should be set at A+ or AA based on a comparator group of government energy networks and with Synergy's credit rating. Western Power's business model is inherently low risk, and the Electricity Networks Access Code provides a number of features such as pass-through arrangements for changes in underlying costs that further insulate Western Power from risk. The Council considers it would be useful as an input for the Authority's consideration to have a credit rating of Western Power undertaken by an independent credit rating agency.

The Council considers the revenue deferred due to the change in the treatment of capital contributions should be recovered over the useful life of the assets. This approach is consistent with the general approach to recovery of capital and avoids the potential for price shocks in final user tariffs, or price shocks that might arise from acceleration of the wooden pole replacement program or changes in side constraints.

The Council supports the move to minimum service standards coupled with incentive targets. The Council considers that to improve targeting of worst performing feeders, Western Power should

publish data on the performance of the worst 10 or 15 per cent of feeders in each of the categories of CBD, urban, rural short, and rural long feeder categories.

The Council considers the Authority's final decision should contain a mechanism to match the estimated tariff equalisation contribution with the actual tariff equalisation contribution when the actual tariff equalisation contribution is gazetted by the Government. As a policy matter the Council considers the tariff equalisation contribution should be removed because of the distortion it imposes on electricity use both within and outside Western Power's network area. The contribution should be funded by government from consolidated revenue and directed as a direct payment to those users outside Western Power's area that are most in need.

The Council considers that the side constraints on changes in relative tariffs among tariff class es should be set at a real rate of change of 1 per cent rather than the 2 per cent proposed by Western Power. Western Power has not demonstrated that current tariff levels contain cross-subsidies or are otherwise inappropriate. Permitting 2 per cent real rebalancing of tariffs might result in the movement of costs to those customer classes where users are less able to avoid tariff increases in the short term. This would result in less efficient tariff structures.

## Introduction

The Western Australian Council of Social Service (the Council) is a not-for-profit, member based organisation and the peak body for the social service sector in WA. Since 1956, the Council has been developing and strengthening the non-government community services sector's capacity to assist all Western Australians. At the heart of its activities, lies the belief that the mark of a civilised community is the support and help it gives to those most in need. The Council and its members are committed to a socially just and sustainable society for all West Australians. We share a vision of an inclusive, just and equitable society now and in the future.

As electricity is an essential service, the Council is vitally interested in ensuring it is affordable. Transmission and distribution tariffs are a key element of final electricity prices for residential customers. This submission responds to the Draft Decision by the Economic Regulation Authority on Western Power's Proposed Revised Access Arrangement for the period from July 2012 to June 2017 (AA3 Proposal).

The Council is generally supportive of the Authority's Draft Decision. The Council also supports the savings identified in the Authority's Technical Review of Western Power's Proposal by Geoff Brown and Associates (GBA). Having said that, the Council considers that there are some opportunities for further cuts to the revenue cap that would provide stronger incentives for Western Power to become more efficient but would not imperil its ability to provide services at an acceptable standard.

The Council considers that Western Power's proposal submitted in September did not meet the criteria for acceptance under the Electricity Networks Access Code (ENAC). Western Power's AA3 proposal would have imposed very real hardship on residential electricity consumers. The contemplated real increases in transmission and distribution tariffs of 16.4 per cent in the first year, and thereafter over 11 per cent in real terms, if accepted, would have led to large rises in final electricity tariffs.

Graph 1 below shows the impact in real terms of Western Power's proposal compared with the Authority's Draft Decision on transmission and distribution tariffs for a notional \$1000 level of expenditure in the current 2011-12 financial year. Graph 2 below shows the impact in real terms on final residential tariffs of Western Power's proposal compared with the Authority's Draft Decision. The cumulative *real* increase in Western Power's transmission and distribution tariffs would have been almost 79 per cent, while the cumulative *real* increase in final residential tariffs would have

<sup>&</sup>lt;sup>1</sup> Assuming transmission and distribution tariffs are 40 per cent of final residential electricity bills.



Graph 1: Projected real changes in transmission and distribution tariffs over the AA3 period



Graph 2: Projected real changes in final residential tariffs over the AA3 period

Note: Based on the assumption that Western Power's transmission and distribution tariffs equate to 40 per cent of final residential tariffs.

These tariff increases would, if implemented, result in a very substantial price shock for residential electricity users. The Council would be very concerned about any move in the Authority's final decision back towards Western Power's AA3 proposal.

As an associated point, the Council considers that while the Draft Decision cuts Western Power's revenue cap from the revenue proposed in its AA3 proposal, this reflects that Western Power's starting point in its AA3 proposal was too high. In itself the reduction proposed in the Draft Decision to the revenue cap compared with Western Power's AA3 proposal does not suggest the Draft Decision is wrong.

This submission comments on the following matters considered in the Draft Decision:

- Capital expenditure;
- Operating expenditure;
- The rate of return;
- Deferred revenue;
- Service standards;
- The tariff equalisation contribution; and
- Tariff design.

# **Capital expenditure**

The Council supports the Authority's decision to reduce Western Power's proposed capital expenditure (capex) budget over the AA3 period. The reductions are in the order of \$710m over the AA3 period.

The Authority noted that it was being cautious in considering Western Power's required level of capex. The Council support the Authority's reasons for being conservative in approving Western Power's capex budget since:

- It appears Western Power in the AA1 and AA2 periods has consistently over-estimated its capex requirements, and in particular because it is not necessarily accurate in estimating the costs of new projects or in estimating future growth in demand;
- It appears from the GBA report that Western Power appears to have over-estimated its capex requirements substantially during the AA3 period;<sup>2</sup>
- These over-estimates result in revenue caps higher than they should be. As noted in the Draft Decision, users paid more than necessary during both the AA1 and the AA2 periods due to these over-estimates. The estimation techniques are within Western Power's control so it is appropriate to carefully scrutinise them and take a conservative approach in order to sharpen Western Power's incentives to better forecast and plan its capex program.

As a more general point, the Council considers that the risks in awarding too much capex in the AA3 period are greater than risks of awarding Western Power too little capex. Awarding Western Power too much capex will blunt its incentives to minimise expenditure on specific projects, to defer new investments or replacement capex until the appropriate time, or to implement cost savings in relation to corporate costs. If too little capex were to be awarded, Western Power may either have to defer projects to the AA4 period (i.e. no more than five years), or, if it incurs expenditure during the AA3 period, lose the return on that expenditure for a short period.<sup>3</sup> The risks are clearly greater in awarding too much capex during the AA3 than too little.

Given the history of inefficient capital spending during the AA1 and AA2 periods, and Western Power's lack of progress in improving efficiency (noted by the Authority in the Draft Decision), there is a very real risk that if Western Power is awarded too much capex it will act inefficiently in the management of its capex budget. The Draft Decision noted significant evidence of inefficiency in risk management and the targeting and management of the capex budget. For example, the Authority excluded \$261m at end of AA1 due to weaknesses in Western Power's "planning, design and governance of investment expenditure and inefficiencies in cost estimation processes".<sup>4</sup> The GBA

<sup>&</sup>lt;sup>2</sup> GBA, chapters 6-9.

<sup>&</sup>lt;sup>3</sup> It may not even lose the return for a short period if it can justify the capex to the Authority or otherwise justify its pass-through. The Council notes that special arrangements are in place to bring forward capex on wooden pole replacement.

<sup>&</sup>lt;sup>4</sup> ERA Draft Decision p. 9, paragraph 45.

report highlighted major capex over-estimates in Western Power's AA3 proposal, and recommended the exclusion of \$710m or around 15 per cent of the capex sought by Western Power. Western Power's over-estimates arose mainly by over-estimating the strength of demand during the AA3, and thus bringing forward projects that could be deferred to the AA4 period.

The Council also considers it would be useful for the Authority to benchmark the efficiency of capital projects against interstate comparators to provide users and other interested parties within insights into the efficiency of Western Power's capital spending. For example, Western Power could publish data on the cost of construction per kilometre of line in greenfields and brownfields situations for a range of voltages. This would help users to comment on Western Power's performance at the next access arrangement period. At present, GBA's technical commentary in relation to capex mainly focuses on an analysis of Western Power's capital governance processes, evaluation of the new facilities investment test for particular projects, and an assessment of whether projected demand growth over the access arrangement period supports proposed projects. There is only very limited benchmarking in the GBA report, with brief use in chapter 6 in critiquing inventory levels.

The Council supports the Authority's approach to Western Power's wooden pole replacement program of permitting Western Power to recover any increased expenditure on its program from the time of expenditure rather than from the start of the AA4 period. Having said that, the Authority's approach does raise the prospect that if Western Power accelerates its wooden pole replacement program, as may be expected given the EnergySafety directive, Western Power's revenue cap may grow faster than projected in the Draft Decision. This would have implications for affordability and for price shocks. The Council has made suggestions for managing the risk of price shocks in the sections below dealing with deferred revenue and tariff design.

The Council specifically support the Authority's decision to disallow the \$261m excluded at the start of the AA2 period on the basis that this approach incentivises Western Power to improve its capex governance processes. This is something within Western Power's ability to do.

The Council considers there is scope for a capex efficiency dividend over the period of the AA3 access arrangement similar to the operating expenditure (opex) efficiency dividend proposed in the Draft Decision. A capex dividend is justified by project management efficiencies and new technological developments that offer the very real prospect of substantial savings in particular projects. For example, metal cross-arms on poles can reduce replacement capex over time, horizontal drilling techniques can save on the cost of laying underground lines particularly in the area of surface reinstatement, better quality global positioning systems data and field tracking can assist in quicker location of assets for replacement purposes, and greater mechanisation can speed up pole placement. Western Power needs incentives to seek out these savings. The enhanced risk management systems that Western Power is planning to introduce as part of its IT program will help Western Power to improve the efficiency of its capex spending. Without a capex efficiency dividend Western Power will have little incentive to pursue more efficient means of executing capital projects.

Recommendation 1: Require a capex efficiency dividend for Western Power.

# **Operating expenditure**

The Council supports the position taken by the Authority in the Draft Decision to reduce Western Power's AA3 opex allowance in its revenue proposal on the basis of the recommendations of its technical consultant, GBA. The reductions are in the range of \$520m over the AA3 period.

The Authority presents the results of a benchmarking study comparing Western Power's opex efficiency performance against the State averages for five other jurisdictions (Queensland, NSW, Victoria, South Australia, and Tasmania).<sup>5</sup> GBA uses three benchmarks:

- Opex/km line;
- Opex/customer; and
- Opex/RAB (regulated asset base).<sup>6</sup>

The Council considers that these benchmarks are well chosen. While benchmarking has inherent limitations as noted by GBA, the benchmarks selected by GBA are simple, transparent, clear, and capable of normalisation. More importantly, they relate to key cost drivers within electricity networks. The Opex/Km Line benchmark is an appropriate benchmark as line length represents the size of the network. The size of the network is a direct influence on the size of the maintenance effort. The Opex/Customer benchmark is an appropriate benchmark as customer numbers have a direct effect on metering, connections, customer services and billing costs. The Opex/RAB benchmark is an appropriate benchmark as the RAB is the most immediate and relevant proxy for the replacement cost of the network and is a measure of the size of an electricity network. The physical size of the network drives the number of operations and maintenance activities required.

Accordingly, the Council considers the opex benchmarks should be considered closely in setting the opex allowance and in determining the scope for efficiency savings over time. It is appropriate to place reasonable weight on the benchmarks and to undertake a normalisation process when comparing Western Power's network to the interstate comparator group.

When considering the results of the benchmarking it is worthwhile to note that the benchmarks would tend to favour Western Power because Western Power is compared with State average performance in these three benchmarks in each of the five comparator States.<sup>7</sup> The State averages include widely dispersed country areas (particularly in Queensland and NSW) where benchmark performance is reduced by the distances that service crews have to travel to maintain the network. These travel costs drive up opex and reduce performance against the benchmarks considerably. Within Western Australia, the extent of this tendency could be verified by comparing Western Power's performance against Horizon Power's performance.

<sup>&</sup>lt;sup>5</sup> ERA Draft Decision, table 11, p. 58.

<sup>&</sup>lt;sup>6</sup> ERA Draft Decision, table 11, p. 58.

<sup>&</sup>lt;sup>7</sup> ERA Draft Decision, p. 58, table 11.

The Council considers that a truer picture of Western Power's relative performance would emerge by comparing it with distribution entities with substantial urban networks, such as Ausgrid and Endeavour Energy in NSW, Energex in Queensland, ETSA in South Australia, Citipower and United Energy and Jemena in Victoria, and Aurora in Tasmania. This comparison would be likely to reveal a relatively poorer performance by Western Power.

In any event, the Council considers that Western Power's performance against the benchmarks highlight both significant scope for improvement and also the importance of imposing strong incentives on Western Power to improve its performance. Western Power's history of performance during AA2 would suggest that simply providing Western Power with time to improve without simultaneously placing incentives on it to improve may not lead to improvements. Specifically, the Council notes that:

- The benchmark comparison shows Western Power is second worst on the opex/km line benchmark, second worst (and almost worst) on the Opex/Customer benchmark, and the worst on the Opex/RAB benchmark;
- The capex spending on wood pole replacement should provide scope for opex savings as the old wood poles are replaced with new assets with inherently lower maintenance costs; and
- Better condition-based risk management and other IT-supported efficiency measures should provide greater efficiencies.<sup>8</sup>

The Council considers that, as a result, it is appropriate to provide strong incentives in the AA3 for Western Power to move towards greater efficiency. Accordingly, the Council would argue for the Final Decision to lift the efficiency dividend from the 2 per cent proposed in the Draft Decision to 3 per cent.

It is worthwhile to examine the impact of a 3 per cent efficiency dividend on Western Power. Table 1 presents the impact of a *two* per cent year-on-year improvement Western Power's performance against the three opex benchmarks. Table 2 presents the impact of the *three* per cent year-on-year improvement.

Western Power performance for year ending:	Opex/Km line	Opex/Customer	Opex/RAB (%)
2012-13	4417	424	7.1%
2013-14	4329	416	6.9%
2014-15	4242	408	6.8%
2015-16	4157	399	6.6%
2016-17	4074	391	6.5%
Average current performance in the comparator group	3994	374	5.7%

#### Table 1: Modelling a *two* percent cumulative opex efficiency improvement (\$ real, 2012)

<sup>&</sup>lt;sup>8</sup> ERA Draft Decision, p. 79, paragraph 311.

Source: Averages drawn from GBA, p. 115 reproduced at ERA Draft Decision, p. 58, table 11. Western Power's performance improved by 2 per cent each year from the performance reported in table 11.

Western Power performance	Opex/Km line	Opex/Customer	Opex/RAB (%)
for year ending:			
2012-13	4372	420	7.0%
2013-14	4241	407	6.8%
2014-15	4113	395	6.6%
2015-16	3990	383	6.4%
2016-17	3870	372	6.2%
Average current performance in the comparator group	3994	374	5.7%

Table 2: Modelling a three	percent cumulative or	pex efficiency im	provement (\$ real, 2012)

Source: Averages drawn from GBA p. 115, reproduced at ERA Draft Decision, p. 58, table 11. Western Power's performance improved by 3 per cent each year from the performance reported in table 11.

It is clear from table 1 that a two per cent improvement each year will leave Western Power at the end of the AA3 period in 2016-17 above the average of the comparator group on all three benchmarks. For example on the Opex/Km line benchmark, Western Power will in 2016-17 be at \$4074/km line compared to the current average performance of \$3994/km line length.

Table 2 shows that a three per cent efficiency dividend will drive Western Power to just under the current average performance for Opex/Km line and Opex/Customer, and still above the average for Opex/RAB. This suggests that a three per cent efficiency dividend is more appropriate. Even with a 3 per cent annual efficiency improvement, Western Power would only be approaching the historical level of efficiency of the comparator group. This historical level of efficiency is in turn drawn from data as old as 2008, as can be seen from the sources identified in the GBA report.<sup>9</sup> Even if Western Power catches up to this historical average, it is likely still to be lagging best practice by a margin given improvements by the comparator group up to the end of the AA3 period in mid-2017.

The Council's view is that a three per cent efficiency dividend will move Western Power's benchmarked performance closer to the average of the interstate comparisons. A two percent efficiency dividend would not do enough to drive Western Power towards the average performance level, especially as that average is likely to have improved over the period of the AA3 access arrangement.

#### Recommendation 2: Require a 3 per cent opex efficiency dividend for Western Power.

<sup>&</sup>lt;sup>9</sup> GBA, p. 115, sources identified at foot of table 10.2.

### Rate of return

The Council supports the use of a post-tax weighted average cost of capital (WACC) in determining the rate of return on Western Power's capital base. This approach avoids any windfalls that might arise from Western Power's tax position.

The Council notes that the position in the Draft Decision is that Western Power's credit rating should be A-. The Council considers that Western Power's credit rating should be higher, at either A+ or AA. The Council would support a formal credit rating of Western Power by an independent, wellrecognised credit agency as an input for the Authority to determine an appropriate credit rating for Western Power.

It is significant that Synergy was rated A+ in 2010 by an independent rating agency.<sup>10</sup> Synergy achieved this credit rating at a time of market turmoil, in a competitive market with regulated tariffs set at far below cost, where both its revenues and its costs were subject to much greater volatility than Western Power.<sup>11</sup> As a monopoly or near monopoly in the provision of transmission and distribution services, Western Power's revenues are much more predictable than Synergy's. The volatility of Synergy's revenues and costs implies in finance theory a lower credit rating and a higher level of risk. Under reasonable circumstances, Synergy should be assessed as a riskier proposition than Western Power. This indicates Western Power should be rated with credit rating at least as high, if not higher, than Synergy's A+ rating.

The Council supports the use of an appropriate comparator group of power companies to estimate Western Power's credit rating. The Council considers that the most appropriate comparator group companies are publicly owned energy network companies. This group shares the most characteristics with Western Power. The average for this group, drawn from Table 70 in the Draft Decision, is AA.

In assessing Western Power's credit rating, it is notable that under the Electricity Networks Access Code (ENAC), Western Power has the ability to pass-through unanticipated costs, costs arising from safety directions, and costs arising from changes in taxes or the regulatory environment. The Draft Decision notes that:

The price control also includes provision for adjustments to revenues from one access arrangement period to the next, including provision for adjustments for unforeseen events and technical rule changes, and adjustments under the investment adjustment mechanism and capital contributions adjustment mechanism.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup> ERA Draft Decision p. 174, paragraph 738.

<sup>&</sup>lt;sup>11</sup> The fact that regulated final tariffs for users under 50 MWh per year are below cost somewhat protects Synergy from competition but only because such tariffs are not profitable. As tariffs move towards competitive levels Synergy will be exposed to greater competition and volatility in its revenues.

<sup>&</sup>lt;sup>12</sup> ERA Draft Decision, p. 34, paragraph 160.

Additionally, under the Draft Decision, Western Power would have the ability to immediately earn a return on any increased costs arising from acceleration of the wooden pole replacement program. These arrangements assist in making Western Power's revenues more predictable and lower risk.

Recommendation 3: Require an independent credit rating of Western Power. Western Power's credit rating based on an appropriate comparator group is A+ or AA.

# Systemic Efficiency Improvements.

The Council would like to suggest introduction of a further measure to assess a reasonable rate of return for investment by Western Power in Future periods.

The Council notes the absence of particular financial incentive in the Average Weighted Cost of Capital (AWCC) rate of return for Western Power to invest for future improvement to the technical efficiency of power services delivery to the domestic customer through investment in Smart Grid technology. Moreover small domestic customers are currently excluded from the WEM. Providing an opportunity for customers to participate in the low cost intermittent renewable and overnight thermal power will address a significant market failure of the WEM. Domestic consumers are dispersed and generally considered uneconomic for inclusion in commercial Demand Side Management (DSM) aggregation.

Real time Smart Grid technologies are currently available to enable dispatch on the demand side and the inclusion of small customers as part of the balancing and Load Following Ancillary Services (LFAS) function<sup>13</sup>. Western Power as the regulated network provider and system operator has the opportunity to address this market failure and provide technology to aggregate and distribute the benefits of technical efficiency gains to participating consumers. The Council supports the ERM Power submission advocating the inclusion of constrained connection as a severance service<sup>14</sup> and advocates further for the continued development of Smart Grid technologies with upgradeable capacity to permit real time system management of consumer loads on an opt in basis.

Whilst acknowledging significant work already done in the area of smart metering and curtailable loads, the Council would welcome development of a framework to consider financial incentives that would encourage Western Power investment to facilitate:

- Consumer level participation in the in the Ancillary Service Markets (dispatch able *real time* system management of consumer level generation or thermal storage etc.)
- Increased generator efficiency and decreased line loss through system management of dispatch able (up and down) consumer load.

<sup>&</sup>lt;sup>13</sup> Cost Benefit Analysis of Smart Metering and Direct Load Control, CRA International Sept 2007 pp 13. Smart Meter Function 14, Case C appears to provide an enhancement to core functionality 8 in being able to remotely "Turn on" or "turn off" controlled load at 99% of meters within 1 minute.

<sup>&</sup>lt;sup>14</sup> ERM Power Submission to ERA, AA3, 2012

- Availability of intermittent renewable power and power from under loaded thermal generators for consumer level energy service supply at or near marginal costs<sup>15</sup> (*i.e. on similar terms as available to other market participants*).
- Harvest of the benefits of low cost overnight use of legacy Verve thermal power units directly by consumers.
- Reduce the competitive position of gas and liquid fuel generation in overnight LFAS market to promote energy security and conservation of relatively more scarce hydrocarbons.

The potential future cost savings to consumers from participation in provision of LFAS and Spinning Reserve are not insubstantial<sup>16</sup>. It is reasonable that Western Power share in a financial incentive over and above the AWCC for investment that allows the consumer to directly capture (or at least to compete with other market participants) in improvements to system wide technical performance.

Consumers (through cost reflectivity movement in the A1 tariff) will bear financial risk of both increased volume of projected load balancing and LFAS (estimated to increase to +/- 90MW in 2011/12)<sup>17</sup> as well potentially increased unit prices for these services in the imminent ancillary service market. The consumer also bears the risk of a potentially deteriorating financial position of Verve resulting from the introduction of the ancillary market.

Recommendation 4:That the ERA model options for Western Power to share in financial incentives for investment promoting technical efficiency improvement in consumer electrical services delivery.

Recommendation 5:That Western Power is provided financial incentives to implement 'upgradable' smart meters and other technical services to facilitate future consumer participation in the wholesale and ancillary services market including direct System Management control of some loads.

<sup>&</sup>lt;sup>15</sup>On Behalf of System Managment, Roam Consulting modelled up to 61.5% curtailment of annual total production of the estimated 1391 MW of Wind capacity to be installed in the SWIS by 2019-20. At 35% availability and 10% distribution losses this represents \$1,276,520,700 worth of electricity if delivered at the A1 tariff. ROAM 2011

<sup>&</sup>lt;sup>16</sup> Roam Consulting estimates the 2015-16 LFAS requirement to be 125.3 MW. For the purpose of illustration, if consumers where to consume say 30% of this via controlled loads at low charge (say 8c kW) and this displaced 80% of this consumption at the A1 tariff (say 26c kW) this would represent nominal saving of \$42,052, 648 pa to SWIS Customers. ((125.3 x 0.3 x 0.8 x 260) - (125.3 x 0.3 x 80)) x 8760 (hours per year). WACOSS understands that this illustration is a theoretical possibility with a range of system security, regulatory and consumer behaviour barriers to overcome.

<sup>&</sup>lt;sup>17</sup> Roam Consulting estimate Load Following Ancillary Service requirement of 89MW in 2012 rising to 125.3MW by 2015-16.

# **Deferred revenue**

The Draft Decision proposes to permit Western Power to recover the revenue deferred in connection with capital contributions at the start of the AA2 period over a ten year period starting with the AA3 period.<sup>18</sup> The deferral in revenue arose out of a change in the treatment of contributed assets from the end of AA1 to the start of AA2.

The Draft Decision notes that clause 6.4(c) of the ENAC provides that pricing arrangements should seek to avoid imposing price shocks.

The Council considers that this deferred revenue should be recouped over the life of the underlying assets. Ordinarily, returns on capital occur over the useful life of that capital asset<sup>19</sup>. The Authority takes this approach in relation to the network assets constructed by Western Power. The Authority's approach makes sense for Western Power's assets as these assets provide services continuously over their useful life, and collecting the capital return in the year of construction would not be feasible. The approach, in other words, is to match the period for repayment of capital to the useful life of the asset.

The Council considers that there is no good reason to depart from the ordinary practice of recovering the return on the assets over their useful life (understood to be around 40 years). The fact these are contributed assets should not change the approach.

The submission from the Office of Energy argued for a short recovery period on the basis that a longer period might impose possible cash flow problems on Western Power. However, Western Power has not provided any evidence to demonstrate it expects to suffer a cash flow problem in practice that would justify a shorter recovery period than the usual period for recovery of capital. In this regard, the Council agrees with the Draft Decision's overall observation that the "price control provides adequate revenue to meet the forward-looking and efficient costs of providing covered services".<sup>20</sup>

The Council also considers that:

- Despite the arguments by Western Power to the contrary, an early repayment period of 10 years imposes a potential intergenerational debt *on current users* given the assets being repaid in the 10 year period will continue to provide services well past 10 years.
- There is no strong basis for selecting a 10 year recovery period rather than the useful life of the relevant assets.

<sup>&</sup>lt;sup>18</sup> The Draft Decision proposes to re-examine the length of the period at the start of AA4 period.

<sup>&</sup>lt;sup>19</sup> The Australian Accounting Standards Board Accounting Standard AASB 116, Property, Plant and Equipment states that "The depreciable amount of an asset shall be allocated on a systematic basis over its useful life" p 23, http://www.aasb.gov.au/admin/file/content105/c9/AASB116\_07-04\_COMPjun09\_07-09.pdf

<sup>&</sup>lt;sup>20</sup> ERA Draft Decision, p. 241, paragraph 1018.

- There is no certainty the shorter recovery period will not impose price shocks on particular customer classes given the Draft Decision sets side constraints at 2 per cent and thus tariffs for particular customer classes may escalate well above the average. Further, the Draft Decision provides for increased spending on wood poles over and above the capex allowed in the Draft Decision. EnergySafety expects Western Power will have to accelerate its spending compared to the AA3 proposal.<sup>21</sup> This may lead to increases in tariffs during AA3 and price shocks arising out of the impact of the shortened recovery period.
- Moreover, selecting a 10 year recovery period may in practice impose price shocks contrary to the provisions of the ENAC. Even if transmission and distribution tariffs stay flat applying a 10 year recovery period, final tariffs for customers are escalating sharply at present. The Authority should take the rate of increase in final tariffs into consideration when setting the recovery period. A longer recovery period will ameliorate the current price shocks in final tariffs for users.

Recommendation 6: Recover the deferred revenue associated with the change in the treatment of capital contributions over the useful life of these assets

<sup>&</sup>lt;sup>21</sup> ERA Draft Decision, p. 135, paragraph 560.

## Service standards

The Council considers that, given the current service performance being achieved by Western Power, the primary focus should be on cost containment and maintaining service performance at current levels rather than on improving service performance.

The Council accepts Western Power's proposal to move to a combination of minimum standards and performance targets to enable it to earn rewards on a target-by-target basis. It is reasonable for Western Power to earn some part of the service standard bonus where it meets some, but not all of the performance targets.

The Council also support Western Power's proposal (as modified by the Authority) to establish a call centre service standard.

The Council supports the Authority's draft position, given the trend to improving performance in SAIDI and SAIFI,<sup>22</sup> to set the performance targets for the service standard benchmarks to the average of the last three years of performance.<sup>23</sup>

The Council considers that Western Power should report the performance of the worst ten or fifteen per cent of feeders. Such reporting would provide greater transparency around Western Power's progress in addressing the performance of poorly performing parts of the network and provide a level of encouragement to improve performance of such parts of the network towards median levels. The Council notes that Western Power argued against such reporting on the basis that the reporting would inevitably focus on rural long feeders, which form the full set of such poorly performing feeders.<sup>24</sup>

However, this problem can be addressed by reporting performance of the worst ten or fifteen per cent of feeders within each of the categories of CBD, urban, rural short, and rural long feeders.<sup>25</sup> A number of east coast jurisdictions take this approach to enable transparent tracking of poorer sections of the network over time. It would not be onerous for Western Power to provide this data.

Support Western Power's proposal to move to a combination of minimum standards and performance targets, with the opportunity to earn a portion of the total rewards on offer for meeting some of the performance targets.

<sup>&</sup>lt;sup>22</sup> SAIDI and SAIFI stand respectively for system average interruption duration index and system average interruption frequency index. They measure the average length of interruptions per year and the average number of interruptions per year.

<sup>&</sup>lt;sup>23</sup> ERA Draft Decision, p. 270.

<sup>&</sup>lt;sup>24</sup> ERA Draft Decision, pp. 278 – 279.

<sup>&</sup>lt;sup>25</sup> If the worst performing 10 or 15 per cent of CBD feeders are found to be close to the average level of performance it may not be necessary to report the performance of the worst performing feeders in the CBD feeder group. It is unlikely that the performance of the worst 10 or 15 per cent of feeders in the urban, rural short, or rural long categories will be close to the average.

Support Western Power's proposal to move to a combination of minimum standards and performance targets to enable it to earn rewards on a target-by-target basis.

Recommendation 7: Require Western Power to report publicly the performance of the worst ten or fifteen per cent of feeders in CBD, urban, rural short, and rural long areas.

# Tariff equalisation contribution

The Draft Decision provides for collection of a tariff equalisation contribution (TEC) to cross-subsidise the cost of offering electricity outside the South West Interconnected System (SWIS).

The Draft Decision notes that it is obliged under the ENAC to recover this amount.

The Council notes that Western Power has estimated the amount of the TEC as the State Government has not yet gazetted the relevant amount.<sup>26</sup> This amount has been built into the revenue cap.

The Council considers the Authority's final decision should contain a mechanism to match the estimated tariff equalisation contribution with the actual tariff equalisation contribution when the actual tariff equalisation contribution is gazetted by the Government.

The Council also notes the ENAC will shortly be the subject of a government review by the Public Utilities Office, with a public consultation process expected to start in mid-2012.<sup>27</sup> The Public Utilities Office is likely to have regard to the experience flowing from the Authority's determinations during the AA3 and in particular the size of the tariff equalisation contribution compared with Western Power's overall revenue cap.

The Council considers that the subsidy should be removed from users within the SWIS as it artificially inflates electricity prices within the SWIS. The impost under the TEC also impacts disproportionately on low income households because these households spend a higher percentage of their income on electricity. The distortion posed by the TEC is very considerable given that the subsidy is estimated to be \$906.9million out of the proposed revenue cap of \$6.8billion, representing over 13 per cent of the cap. The Authority recently estimated that in 2012-13 the TEC would contribute 1.64 cents per kWh to projected 2012-13 average tariffs across all regulated customer classes, or 7.1 per cent of average final tariffs.<sup>28</sup>

The Council notes that as the cross-subsidy funded by the TEC is provided on a volumetric (i.e. per kilowatt-hour) basis, the benefit of the cross-subsidy flows disproportionately to major energy users in the cross-subsidized area. These users may not be the most deserving recipients of the cross-subsidy. Moreover, the cross-subsidy does not provide incentives to conserve use in the cross-subsidized area.

<sup>&</sup>lt;sup>26</sup> ERA Draft Decision, p. 244, paragraph 1035.

<sup>&</sup>lt;sup>27</sup> See http://www.finance.wa.gov.au/cms/content.aspx?id=14552&terms=electricity+networks+access+code

<sup>&</sup>lt;sup>28</sup> ERA, Inquiry into the Efficiency of Synergy's Costs and Electricity Tariffs: Draft Report, 4 April 2012.

The Council considers that the subsidy should be removed from electricity transmission and distribution tariffs within the SWIS and funded from consolidated revenue. Moreover, to improve targeting of the subsidy in the cross-subsidized area, the Council considers that the subsidy arrangements should be reviewed with a view to at least partly reducing the amount of the subsidy linked to consumption and redirecting it to those users in most need through an expansion of the current concession arrangements. This would have the benefit of encouraging more efficient use of electricity in the cross-subsidized area.

Recommendation 8: Ensure the AA3 Arrangement contains provisions to adjust for any difference between the estimate of the TEC and the actual value of the TEC gazetted by the Government.

Recommendation 9: As a matter of policy, remove the TEC from users in the SWIS and fund subsidies to users outside the SWIS from consolidated revenue.

Recommendation 10: Review the provision of subsidies outside the SWIS and consider replacing them with arrangements that cap subsidies and/or target additional concessions to those most in need.

# Tariff design

The Draft Decision provides for tariffs for particular customer classes to be adjusted by 2 per cent in real terms per year beyond any changes in average tariffs.<sup>29</sup> Constraints on rebalancing different tariff classes within the same revenue cap are known as side-constraints. Rebalancing is considered to promote more efficient outcomes where it enables tariffs to remove internal cross-subsidies and move towards more cost-reflective levels

The Council considers that as a general point, there needs to be close scrutiny by the Authority of movements in tariffs within tariff classes. This is consistent with the requirement in the ENAC for the Authority to consider and seek to avoid price shocks.

The Council considers that the proposed real annual 2 per cent side-constraint adjustment is too large. A two per cent annual real adjustment could increase tariffs within a customer class by 10.4 per cent in real terms over the five years of AA3 (independent of any other changes arise from the general direction of tariffs). This is a substantial rise in real terms and could be considered to impose a price shock.

The Council disagrees with the argument that side-constraints of 2 per cent are necessary to provide Western Power with the opportunity to develop efficient price levels and structures.<sup>30</sup> Western Power has not presented any specific evidence to support a significant reweighting of different tariff classes to more cost-reflective prices. The fact that costs are relatively stable across customer classes suggests it is not necessary to provide scope for a cumulative internal reweighting of tariffs in real terms of up to 10.4 per cent. Moreover, Western Power might use a side-constraint of 2 per cent to reweight tariffs not towards more cost-reflective tariff structures, but to shift costs to those customer classes where users are less able to avoid tariff increases in the short term. This would result in a less efficient tariff structure.

The Council considers a 1 per cent side-constraint is more appropriate. Alternatively, the Authority may wish to provide Western Power with the ability to seek a side constraint change greater than 1 per cent in a given year subject to close scrutiny by the Authority.

In the absence of consumer ability to participate more fully in the wholesale market (see above), the Council encourages the Authority to require Western Power to develop off-peak tariff arrangements. At present, such tariffs are not available to residential customers, unlike most other jurisdictions within Australia. The Council considers that off-peak tariffs could and should be introduced within the AA3 period to encourage demand to shift from peak to off-peak times, enabling significant savings in capex. The Council notes that Western Power's load duration curve shows that the use of the network is quite peaky.<sup>31</sup>

The Council does not support the compulsory imposition of time-of-use metering on consumers.

<sup>&</sup>lt;sup>29</sup> ERA Draft Decision, p. 289, paragraph 1204.

<sup>&</sup>lt;sup>30</sup> ERA Draft Decision, p. 290, paragraph 1210.

<sup>&</sup>lt;sup>31</sup> GBA, p. 83, figure 7.3.

Prior to the opportunity for consumers to participate more fully in the wholesale market, introduction of off-peak tariffs could be achieved by Western Power offering off-peak tariffs by either using a ripple signal to turn off power at peak times to appliances connected to off-peak circuits as occurs in some jurisdictions within Australia or by installing smart meters. Offer incentives via reduced off-peak tariffs may encourage significant numbers of consumers to shift their usage, reducing the high costs imposed by current peak capacity and spinning reserve and allowing some capex programs to be deferred.

More sophisticated real time demand management services may be achieved for domestic customers with upgradable/adaptable functionality of smart meters in conjunction with discrete switching and sensor control in the premises and ripple control, rf control, telecoms control or any combination of available communications that receive instruction from system management. The Council notes that smart present a range of other benefits<sup>32</sup> but that past procurements of smart meter technology has not always provided cost effective functional upgradability.

The Council considers that any approach to the introduction of smart meters should be a progressive one, and allow cost effective upgradability for near real time communications, switching and data transfer functionality. As a principal rollout should be based on the natural replacement of old accumulation meters and as new sites get connected to the grid. This will allow for the cheapest roll out of smart meters within the SWIS and therefore will have a lesser impact on electricity prices.

While the Council is concerned that compulsory TOU tariffs can disproportionately impact on certain segments of the community<sup>33</sup>, if the right tariff or market structures are in place and concession holders are given a 'no loss' choice to opt into off-peak arrangements, then the potential negative impact on these households may be avoided.

Recommendation 11: Provide for a 1 per cent side constraint. Alternatively consider permitting a greater than 1 per cent side constraint change in a given year subject to close scrutiny by the Authority.

Recommendation 12: Provide for the introduction of off-peak tariffs during or at end of the AA3 period.

<sup>&</sup>lt;sup>32</sup> CRA International See Cost Benefit Analasys of Smart Metering and Load Control, CRA International for Department of Inductry Tourism and Resources September 2007

<sup>&</sup>lt;sup>33</sup> See Customer Protections and Smart Meters, May Mauseth Johnston St Vincent De Paul, 2009