

ANALYSIS SUPPORTING APPROVAL OF REFERENCE TARIFFS AND CHARGES FOR STANDARD NETWORK ACCESS SERVICES 1 JULY 2011 – 30 JUNE 2012

Background

1. For the purposes of the 2009 Reset, the Commission decided that, to the maximum extent possible under the NT Code, it would follow the procedures set out in the National Electricity Rules for arriving at a Final Determination, in order to achieve consistency with procedural practice now evident elsewhere in Australia in the regulation of electricity distribution networks.
2. In line with this, standard network access services are classified as follows:
 - direct control services – services that are subject to a direct form of price control. Direct control services are further divided into the following subclasses:
 - standard control services – services that are subject to the weighted average price cap form of price control; and
 - alternative control services – services that do not lend themselves to being regulated by a weighted average price cap form of price control; or
 - negotiated network services – services that are not subject to effective competition but do not lend themselves to being regulated by a direct form of price control.
3. The network service provider, the Power and Water Corporation (PWC), did not propose any negotiated network services.
4. The 2009 Reset Final Determination (published in March 2009) required that for standard control services:
 - the weighted average of the tariffs included in the schedule, expressed in index number form, complies with the constraint:
$$P_t \leq [(P_{t-1} * (1 + P_0)) * (CPI_{t-1}/CPI_{t-2}) * (1 - (X_1 + X_2 + X_3))]$$
 - the weighted average tariff for each individual end-use customer complies with the CPI – X + Y side constraint applying in 2010-11;
5. For alternative control services:
 - for fee-based services, those services included in the schedule prices are allowed to be escalated from the levels of the previous year by CPI – X; and
 - for quoted services, prices for those services are determined on the basis of the approved methodology.
6. Further, the proposed structure of network access tariffs must be consistent with the approved Pricing Principles and Methods Statement and PWC is required to publish a statement of expected network price trends (to be updated for each year) giving an

indication of how Power and Water expects network prices to change over the regulatory period and the reasons for the expected changes.

Standard Control Services

Price constraint for 2011-12

7. The price constraint calculations for 2011-12 are set out below:

Table 1: Parameters

	Value
CPI ₂₀₀₉ (average of 4 quarters Mar 2009 to Dec 2009)	167.825
CPI ₂₀₁₀ (average of 4 quarters Mar 2010 to Dec 2010)	172.600
P ₂₀₁₀₋₁₁	112.625
X ₁	0.00%
X ₂	0.25%
X ₃	1.10%

8. The constraint equation for 2011-12 is calculated as follows:

$$\begin{aligned}
 P_t &\leq [P_{t-1} * (CPI_{t-1}/CPI_{t-2}) * (1 - (X_1 + X_2 - X_3))] \\
 P_{2011-12} &\leq [P_{2010-11} * (CPI_{2010}/CPI_{2009}) * (1 - (X_1 + X_2 - X_3))] \\
 &\leq [112.625 * (172.600/167.825) * (1 - (-0.85%))] \\
 &\leq 116.814
 \end{aligned}$$

Weighted average tariff index

9. The weighted average tariff index for 2011-12 tariff schedule proposed by Power and Water was calculated as follows:

Table 2: Summations of price and quantity data

	Value
$\sum_{i=1...n}[p_{2011-12}^i * q_{2009-10}^i]$	101,785,000
$\sum_{i=1...n}[p_{2010-11}^i * q_{2009-10}^i]$	98,186,904

$$\begin{aligned}
 P_t &= P_{t-1} * [\sum_{i=1...n}(p_t^i * q_{t-2}^i) / \sum_{i=1...n}(p_{t-1}^i * q_{t-2}^i)] \\
 P_{2011-12} &= P_{2010-11} * [\sum_{i=1...n}(p_{2011-12}^i * q_{2009-10}^i) / \sum_{i=1...n}(p_{2010-11}^i * q_{2009-10}^i)] \\
 &= 112.625 * (101,785,000 / 98,186,904) \\
 &= 116.752
 \end{aligned}$$

10. Since $116.752 \leq 116.814$, Power and Water's proposed tariff schedules for 2011-12 comply with the price constraint equation.

Side constraint for individual customers

11. The 2009 Reset Final Determination provided that the resultant impact on the weighted average tariff for each individual end-use customer must comply with a CPI-X+Y side constraint, where Y is:
- in relation to 2009/10: $P_{0+2\%}$; and
 - in relation to each of the four years after 2009/10: 2%.
12. The side constraint requires that the change in tariff confronting each individual end-user complies with the following constraint:

$$P_t^j \leq [P_{t-1}^j * (CPI_{t-1}/CPI_{t-2}) * (1 - X + Y)]$$

where the "j" superscript denotes an individual customer.

13. For 2011-12, the side constraint is calculate as follows:

$$\begin{aligned} P_{2011-12}^j &\leq [P_{2010-11}^j * (CPI_{2010}/CPI_{2009}) * (1 -X +2\%)] \\ &\leq [P_{2010-11}^j * (172.600/167.825) * (1 - (-0.85\%) + 2\%)] \\ &\leq [P_{2009-10}^j * 1.0578] \end{aligned}$$

14. This can be re-expressed as:

$$P_{2011-12}^j / P_{2010-11}^j \leq 1.0578$$

15. The increase in the weighted average tariff for each individual end-use customer ranges from 0.43% to 4.20%, which is within the side constraint of 5.78%. The average increase is 3.52%.
16. PWC's proposed tariff schedules for 2011-12 complied with the side constraint for individual customers.

Alternative Control Services

17. Alternative control services are divided into two categories:
- 'fee based services' – itemised services set out in a schedule of charges; and
 - 'quoted services' – services for which the nature and scope cannot be known in advance irrespective of whether it is customer requested or an external event triggers the need (for example, price on application).
18. For Fee-based services, charges have been escalated 3.72% (ie. CPI-X) in line with the requirements of the 2009 Reset Final Determination.
19. For Quoted services, PWC submitted a methodology as part of its Regulatory Proposal. This was approved as part of the 2009 Reset Final Determination and the approval remains current to the end of the regulatory control period on 30 June 2014.

Consistency with the approved Pricing Principles and Methods Statement

20. The Pricing Principle and Methods Statement approved by the Commission on 31 March 2009 forms the basis upon which the Commission will assess proposed network tariffs and charges submitted for approval annually by Power and Water.
21. The Commission will approve the proposed tariffs and charges unless those tariffs and charges – either in whole or in part – do not comply with the approved Statement.
22. No changes have been made to the number or structure of standard network access tariffs other than the convergence of tariffs approved as part of PWC's Pricing Principles and Methods Statement.
23. PWC has introduced some new alternative control services as part of a staged approach towards a complete list of services. These relate to:
 - Streetlights – annual repairs and maintenance and annual capital charges;
 - Photovoltaic (PV) solar system installation charges; and
 - Temporary building supply services.
24. While there will be a phased introduction of alternative control services during the current regulatory control period, alternative control services – both what services are included and the price levels – will be rigorously scrutinised as part of the next regulatory reset process.

Inquiries

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