

ANALYSIS SUPPORTING APPROVAL OF REFERENCE TARIFFS AND CHARGES FOR STANDARD NETWORK ACCESS SERVICES 1 JULY 2010 – 30 JUNE 2011

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. Power and Water 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 2010-11

7. The price constraint calculations for 2010-11 are set out below:

Table 1: Parameters

	Value
CPI ₂₀₀₈ (average of 4 quarters Mar 08 to Dec 08)	164.825
CPI ₂₀₀₉ (average of 4 quarters Mar 09 to Dec 09)	167.825
P ₂₀₀₉₋₁₀	109.680
X ₁	0.00%
X ₂	0.25%
X ₃	1.10%

8. The constraint equation for 2010-11 is calculated as follows:

$$\begin{aligned}
 P_t &\leq [P_{t-1} * (CPI_{t-1}/CPI_{t-2}) * (1 - (X_1 + X_2 - X_3))] \\
 P_{2010-11} &\leq [P_{2009-10} * (CPI_{2009}/CPI_{2008}) * (1 - (X_1 + X_2 - X_3))] \\
 &\leq [109.680 * (167.825/164.825) * (1 - (-0.85%))] \\
 &\leq 112.626
 \end{aligned}$$

Weighted average tariff index

9. The weighted average tariff index for 2010-11 tariff schedule proposed by Power and Water was calculated as follows:

Table 2: Summations of price and quantity data

	Value
$\sum_{i=1...n}[p_{2010-11}^i * q_{2008-09}^i]$	95,769,210
$\sum_{i=1...n}[p_{2009-10}^i * q_{2008-09}^i]$	93,264,565

$$\begin{aligned}
 P_t &= P_{t-1} * [\sum_{i=1...n}(p_t^i * q_{t-2}^i) / \sum_{i=1...n}(p_{t-1}^i * q_{t-2}^i)] \\
 P_{2010-11} &= P_{2009-10} * [\sum_{i=1...n}(p_{2010-11}^i * q_{2008-09}^i) / \sum_{i=1...n}(p_{2009-10}^i * q_{2008-09}^i)] \\
 &= 109.680 * (95,769,210 / 93,264,565) \\
 &= 112.625
 \end{aligned}$$

10. Since $112.625 \leq 112.626$, Power and Water's proposed tariff schedules for 2010-11 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 2010-11, the side constraint is calculate as follows:

$$\begin{aligned} P_{2010-11}^j &\leq [P_{2009-10}^j * (CPI_{2009}/CPI_{2008}) * (1 -X +2\%)] \\ &\leq [P_{2009-10}^j * (167.825/164.825) * (1 + 0.85\% + 2\%)] \\ &\leq [P_{2009-10}^j * 1.0472] \end{aligned}$$

14. This can be re-expressed as:

$$P_{2010-11}^j / P_{2009-10}^j \leq 1.0472$$

15. The impact on the weighted average tariff for each individual end-use customer ranges from a fall of 6.03% to an increase of 4.68%, which is within the side constraint of 4.72%.
16. Power and Water's proposed tariff schedules for 2010-11 complied with the side constraint for individual customers.

Alternative Control Services

17. In its Regulatory Proposal, Power and Water proposed that alternative control services be further divided into two categories:
- existing excluded services – also termed "miscellaneous services" – including the maintenance of streetlights (ie "Fee-based Services"); and
 - above-standard connection services and other quoted services (ie "Quoted Services").
18. For Fee-based services, Power and Water has submitted a schedule of charges for a number of itemised services. In addition to those charges listed for 2009-10, some additional charges have been identified and added to the schedule. Charges have been escalated 2.69% (ie. CPI-X) in line with standard control services.
19. For Quoted services, Power and Water submitted a methodology as part of its Regulatory Proposal.
20. The Price Schedule for Fee-based Services for 2010-11 is consistent with the requirements of the 2009 Reset Final Determination.

21. The Methodology for Quoted Services for 2010-11 is consistent with the requirements of the 2009 Reset Final Determination.

Consistency with the approved Pricing Principles and Methods Statement

22. 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.
23. 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.
24. As set out in the Pricing Principles and Methods Statement, Power and Water has continued to work towards converging the three regional tariff schedules into a single NT-wide tariff schedule.
25. Demand and energy charges for customers using more than 750MWh per annum and energy charges for domestic customers using less than 750MWh per annum have now been converged.
26. Energy charges for commercial customers using less than 750MWh per annum and system availability charges for all customers continue to differ by region.
27. PWC has also converged some of the steps within the demand and energy tariffs.
28. These changes are consistent with the approved Pricing Principles and Methods Statement.

Inquiries

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