ANALYSIS SUPPORTING APPROVAL OF REFERENCE TARIFFS AND CHARGES FOR STANDARD NETWORK ACCESS SERVICES
1 JULY 2013 – 30 JUNE 2014

Background

1. As set out in the 2009 Reset Final Determination (published in March 2009), the Power and Water Corporation (PWC) is required to submit a schedule of individual network access tariffs each year within the third regulatory period.

2. The 2009 Reset Final Determination 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:

   $$P_t \leq [\, (P_{t-1} * (1 + Po)) * (CPI_{t-1}/CPI_{t-2}) * (1 - (X_1 + X_2 + X_3))\,]$$

   - the weighted average tariff for each individual end-use customer complies with the CPI – X + Y side constraint applying in 2013-14;

3. 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 PWC expects network prices to change over the regulatory period and the reasons for the expected changes.

4. In May 2013, in response to an application by PWC for a cost pass through of expenditure related to the implementation of the recommendations from the Davies Review, the Commission released a further Determination that reset the price cap with respect to the 2013-14 regulatory year.

5. For the 2013-14 regulatory year, PWC must develop network tariff schedules for standard control services that conform with the following constraint on weighted average tariffs:

   $$P_{2013\text{-}14} \leq [\, P_{2012\text{-}13} * (CPI_{2012}/CPI_{2011}) * (1 - X) * (1 + C)\,]$$

   where:

   > CPI = a 100 based index, being the all capital cities headline CPI index published by the Australian Bureau of Statistics ("ABS") measured in accordance with the Commission's 2009 Network Price Determination;

   > X = -0.85 per cent, in accordance with the Commission's 2009 Network Price Determination; and

   > C = 20.6 per cent, being the factor determined by the Commission to recover the approved cost pass through amount.

Price constraint for 2013-14

6.   The price constraint calculations for 2013-14 are set out below:

Table 1: Parameters

	Value
CPI_{2010} (average of 4 quarters Mar 2011 to Dec 2011)	99.275
CPI_{2011} (average of 4 quarters Mar 2012 to Dec 2012)	101.025
$P_{2012\text{-}13}$	121.732
X_1	0.00%
X_2	0.25%
X_3	1.10%
C	20.60%

7.   The constraint equation for 2013-14 is calculated as follows:

$$P_t \leq [P_{t-1} * (CPI_{t-1}/CPI_{t-2}) * (1 - (X_1 + X_2 - X_3) * (1 + C))]$$

$$P_{2013\text{-}14} \leq [P_{2012\text{-}13} * (CPI_{2012}/CPI_{2011}) * (1 - (X_1 + X_2 - X_3) * (1 + C))]$$

$$\leq [121.732 * (101.025/99.275) * (1 - (\text{-}0.85\%) * (1 + 20.6\%))]$$

$$\leq 150.667$$

Weighted average tariff index

8.   The weighted average tariff index for 2013-14 tariff schedule proposed by Power and Water was calculated as follows:

Table 2: Summations of price and quantity data

	Value
$\Sigma_{i=1...n}[p^i_{2013\text{-}14} * q^i_{2011\text{-}12}]$	130,034,975
$\Sigma_{i=1...n}[p^i_{2012\text{-}13} * q^i_{2011\text{-}12}]$	106,123,904

$$P_t = P_{t-1} * [\Sigma_{i=1...n}(p^i_t * q^i_{t-2}) / \Sigma_{i=1...n}(p^i_{t-1} * q^i_{t-2})]$$

$$P_{2013\text{-}14} = P_{2012\text{-}13} * [\Sigma_{i=1...n}(p^i_{2013\text{-}14} * q^i_{2011\text{-}12}) / \Sigma_{i=1...n}(pi_{2012\text{-}13} * qi_{2011\text{-}12})]$$

$$= 121.732 * (130,034,975 / 106,123,904)$$

$$= 149.160$$

9.   Since 149.160 ≤ 150.667, Power and Water's proposed tariff schedules for 2013-14 comply with the price constraint equation.

Side constraint for individual customers

10. 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: Po+2 per cent; and

   - in relation to each of the four years after 2009-10: 2 per cent.

11. The side constraint requires that the change in tariff confronting each individual end-user complies with the following constraint:

   $$P^j_t \leq [\ P^j_{t-1} * (CPI_{t-1}/CPI_{t-2}) * (1 - X + Y)]$$

   where the "j" superscript denotes an individual customer.

12. In line with the Commission's May 2013 Final Determination on PWC's Cost Pass Through Application, in relation to 2013-14 Y is C+2 per cent.

13. For 2013-14, the side constraint is calculate as follows:

   $$P^j_{2013\text{-}14} \leq [\ P^j_{2012\text{-}13} * (CPI_{2012}/CPI_{2011}) * (1 - X + C + 2 \text{ per cent}\%)]$$

   $$\leq [\ P^j_{2012\text{-}13} * (101.025/99.275) * (1 - (-0.85\%) + 20.6\% + 2\%)]$$

   $$\leq [\ P^j_{2012\text{-}13} * 1.2563\ ]$$

14. This can be re-expressed as:

   $$P^j_{2013\text{-}14} / P^j_{2012\text{-}13} \leq 1.2563$$

15. The increase in the weighted average tariff for each individual end-use customer ranges from 25.62 to 24.50 per cent, which is within the side constraint of 25.63 per cent. The average increase is 24.82 per cent.

16. PWC's proposed tariff schedules for 2013-14 complied with the side constraint for individual customers.

Consistency with the approved Pricing Principles and Methods Statement

17. 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 PWC.

18. 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.

19. The 2013-14 tariff schedules incorporate some rebalancing across tariff categories to:

   - complete the alignment of network tariffs across the three regulated regions; and

   - improve cost reflectivity across customer groups.

20. PWC provided modelling to the Commission showing the allocation of costs across various customer groups and the revenue currently being recouped from the respective customer groups.

21. The Commission has considered the modelling provided and considers that, while high level, the outcomes appear valid. The modelling will be refined and updated and submitted to the Commission as part of PWC's Pricing Proposal for the 2014 Network Price Determination.

22. PWC has advised that it intends to propose a number of structural changes to network tariffs from 2014 and that some of the changes will be significant.

23. The Commission has therefore allowed some rebalancing of tariffs in 2013-14, within the limits provided by the individual customer side constraint, to better align cost recovery with the appropriate customer classes.

24. The Commission considers that the proposed change in the structure of network tariffs is consistent with the approved Pricing Principle and Methods Statement.

Inquiries

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