

# Jemena Electricity Networks (Vic) Ltd

## 2016-20 Electricity Distribution Price Review Regulatory Proposal

### Revocation and substitution submission

#### Attachment 2-2 Price control mechanisms

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## ABBREVIATIONS

AER	Australian Energy Regulator
DMIS	Demand Management Incentive Scheme
DUoS	Distribution Use of System
JEN	Jemena Electricity Network
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
Optimal NEO Position	The position which contributes to the achievement of the NEO to the greatest degree and best promotes the long term interests of consumers of electricity.
PTRM	Post Tax Revenue Model
STPIS	Service target performance incentive scheme
TAR	Total Annual Revenue
TSS	Tariff Structure Statement
WACC	Weighted average cost of capital

## OVERVIEW

**Key messages**

- Jemena Electricity Networks (Vic) Ltd (**JEN**) agrees with the broad forms of control but considers corrections are required.
- We seek revisions to the standard control services control mechanism to support the **Optimal NEO Position**,<sup>1</sup> including:
  - Ensuring accurate adjustments for the service target performance incentive scheme (s-factor) and correct side-constraint application
  - The use of an unders and overs method that minimises the potential for revenue and price volatility—JEN proposes a different method with lower volatility
  - Two minor clarifications.
- The National Electricity Rules (**NER**) do not provide for a side constraint to be applied to metering services and JEN seeks that this is removed.
- JEN supports the price caps for each individual service for alternative control services.

1. The table below summarises our response to the preliminary decision.

**Table 1–1: Overview of our response to the preliminary decision on control mechanisms**

Component of form of regulation	Our response to the preliminary decision
Control mechanisms	

2. The April 2015 proposal (together with any supporting material contained or referred to in the April 2015 proposal) is incorporated into, and forms part of this submission.

<sup>1</sup> The position which contributes to the achievement of the National Electricity Objective (**NEO**) to the greatest degree and best promotes the long term interests of consumers of electricity.

## 1. CONTROL MECHANISMS TO APPLY TO DIRECT CONTROL SERVICES

3. The NER requires a form of price or revenue control (known as the control mechanism) for those services that are to be directly regulated,<sup>2</sup> and the formulae to give effect to the control mechanism. The control mechanism determines how prices or revenues are adjusted over time.
4. The NER also specifies that the Australian Energy Regulator (**AER**) may only approve proposed control mechanisms if they are consistent with the AER's final decision in its framework and approach paper.<sup>3</sup>
5. The preliminary decision confirms the AER's framework and approach that JEN applies to direct control service tariffs for each of its services offered in the 2016 regulatory period and adjusted annually via an annual pricing proposal.
6. The AER's price control mechanisms include:
  - A revenue cap for standard control services<sup>4</sup>
  - A revenue cap for type 5, type 6 and smart regulated metering for 'installation, operation, repair & maintenance, and replacement' and 'collection of meter data, processing and storage of meter data, and provision of access to meter data' services<sup>5</sup>
  - Price caps for each individual service for alternative control services.<sup>6</sup>
7. The preliminary decision also specifies the control mechanism formulas and their respective parameters. While JEN agrees to the broad forms of control, we consider that corrections to the formula are required.
8. JEN sets out the required formula adjustments and why this is appropriate (including how this better promotes the Optimal NEO Position), in sections 1.1 to 1.3. The NER specifies that the AER may amend the formulae that give effect to the control mechanisms if it considers unforeseen circumstances justify departing from them.<sup>7</sup> This provides the AER the ability to amend the formula in the preliminary decision to correct for errors.

### 1.1 REVENUE CAP FOR STANDARD CONTROL SERVICES

9. A revenue cap on standard control services means that we have no scope to recover more or less from our tariffs than the total revenue allowed by the AER. Where tariff levels and actual demand levels result in an under- or over-recovery of revenue in any one year (year t-2), we must adjust future (year t) tariffs to correct this.

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<sup>2</sup> NER cl 6.2.5(b).

<sup>3</sup> NER cl 6.12.3(c).

<sup>4</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 14 – Control Mechanism*, October 2015, p 14-6.

<sup>5</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 16 – Alternative Control Services*, October 2015, pp 16-30 to 16-32.

<sup>6</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 16 – Alternative Control Services*, October 2015, pp 16-7 to 16-9.

<sup>7</sup> NER cl 6.12.3(c1).

10. Box 1-1 sets out JEN's proposed control mechanism formulae for standard control services in this submission. The sections below detail where our submission differs to the preliminary decision.
11. JEN's submission seeks revisions to:
- S-factor adjustments (section 1.1.1)
  - The method for unders and overs (section 1.1.2)
  - The side-constraint application (section 1.1.3)
  - Clarify the appropriate adjustment for time value of money (section 1.1.4)
  - Clarify the appropriate nominal weighted average cost of capital (**WACC**) calculation (section 1.1.5)
12. In all respects other than discussed in sections 1.1.1 to 1.1.2, JEN accepts the price control mechanism for standard control services.

### 1.1.1 S-FACTOR ADJUSTMENTS

13. JEN's proposal for standard control services formulae in Box 1-1 varies from the preliminary decision by its expression of the s-factor parameter in formula (3).
14. For both the revenue cap formulae and the associated side constraint, the AER has used  $S_t$ , which is the s-factor determined in accordance with the service target performance incentive scheme (**STPIS**) for regulatory year  $t$ .<sup>8</sup> The AER considers that the s-factor in the first two years of the 2016 regulatory period will true-up the required adjustments across regulatory periods.<sup>9</sup>
15. JEN considers the correct term for both the revenue cap formulae and the associated side constraint in year one (2016) should have been  $S'''_t$ .<sup>10</sup> This correctly accounts for the transition of the previous STPIS scheme in the 201 regulatory period to the revised STPIS scheme for the 2016 regulatory period.
16. This is because the formulae in the preliminary decision would result in adjusting for the s-factor twice in the year  $t=1$ —once in JEN's post tax revenue model (**PTRM**), which adjusts revenues to remove the S-factor. And then a second time in the AER revenue cap formula.
17. In respect of the STPIS adjustment in the price control mechanism, the formulae in Box 1-1 is consistent with JEN's 2016 pricing proposal.<sup>11</sup> Without this mechanism properly implemented, the AER would not be giving effect to the incentive regulation as required in the National Electricity Law (**NEL**)<sup>12</sup> and complying with the transitional rules for reopening a distribution determination.<sup>13</sup> This change is, therefore, necessary to promote the Optimal NEO Position.

<sup>8</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 14 – Control Mechanism*, October 2015, p 14-14.

<sup>9</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 14 – Control Mechanism*, October 2015, p 14-12.

<sup>10</sup> The AER framework and approach paper defines  $S'''_t$  as is the sum of the s-factors for all parameters after application of the s-bank adjusted for the change in the annual revenue requirement between the last year of the 2011 regulatory period to 2016.

<sup>11</sup> JEN, *2016 JEN pricing proposal*, 19 November 2015.

<sup>12</sup> NEL cl. 7A(3).

<sup>13</sup> NER cl. 11.60.4(d)(1).

**Box 1-1. Control mechanism for standard control services**

$$(1) \text{ TAR}_t \geq \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij} \quad i=1,\dots,n \text{ and } j=1,\dots,m \text{ and } t=1,\dots,5$$

$$(2) \text{ TAR}_t = \text{AAR}_t + I_t + T_t + B_t \quad t = 1,2,\dots,5$$

Where:

$$(3) \text{ AAR}_t = \text{AR}_t (1 + S_t^m) \quad t = 1$$

$$(4) \text{ AAR}_t = \text{AAR}_{t-1} (1 + \Delta \text{CPI}_t) (1 - X_t) (1 + S_t) \quad t = 2,3,4,5$$

Where:

$\text{TAR}_t$  is the maximum allowable revenue in year t.

$p_t^{ij}$  is the price of component j of tariff i in year t.

$q_t^{ij}$  is the forecast quantity of component j of tariff i in year t.

$\text{AR}_t$  is the annual smoothed revenue requirement as stated in the Post Tax Revenue Model (PTRM) for year t (when year t is the first year of the 2016 regulatory period).<sup>14</sup> This value is set in the preliminary decision.

$\text{AAR}_t$  is the adjusted annual smoothed revenue requirement for year t.

$I_t$  is the annual adjustment f-factor scheme amount in year t. This amount will be calculated as per the method set out in the relevant f-factor scheme.

$T_t$  is the final carryover amount from the application of the Demand Management Incentive Scheme (DMIS) from the 2011 regulatory period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to allowed revenue in the 2017 pricing proposal.

$B_t$  is the sum of:

- The recovery of licence fee charges by the Victorian Essential Services Commission indexed by one and a half years of interest, calculated using the following method:

$$L_{t-1} (1 + \text{WACC}_{t-1}) (1 + \text{WACC}_{t-2})^{1/2}$$

Where:

$L_{t-1}$  are the licence fees paid by Jemena to the Victorian Essential Services Commission in the financial year ending in June of regulatory year t-1

WACC is the approved nominal weighted average cost of capital (WACC) for the relevant regulatory year

<sup>14</sup> The AER's final F&A stated that if necessary an adjustment for inflation may be required to the annual smoothed revenue requirement for year t. However, as the annual smoothed revenue requirement for year t as stated in our preliminary decision PTRM is in nominal dollars there is no need to adjust it for inflation. This approach is consistent with past regulatory practice.



- Any under or over recovery of actual revenue collected through Distribution Use of Service (**DUoS**) charges in regulatory year t-2 as calculated using the method in Appendix A.
- The AER approved pass through amounts (positive or negative) with respect to regulatory year t.

$\Delta CPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the June quarter in year t-2 to the June quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-2

minus one.<sup>15</sup>

$X_t$  is the X-factor for each year of the 2016 regulatory period as determined in the PTRM, and annually revised for the return on debt update in accordance with the formula specified in the final decision.

$S_t'''$  is the sum of the s-factors for all parameters after application of the s-bank adjusted for the change in the annual revenue requirement between the last year of the 2011 regulatory period to 2016.

$S_t$  is the s-factor determined in accordance with the service target performance incentive scheme for regulatory year t.

### 1.1.2 METHOD FOR UNDERS AND OVERS

18. The AER did not accept JEN's proposed method to calculate for annual adjustments (the 'B factor'). The AER considered the JEN method introduces additional administrative burden and forecasting error, and reduces transparency as compared to its preferred method.<sup>16</sup>
19. JEN proposes to maintain its method for unders and overs for distribution use of system, designated pricing proposal changes and jurisdictional schemes as set out in Appendix A. Section 1.4 sets out further evidence why JEN considers its method better promotes the Optimal NEO Position.

### 1.1.3 SIDE CONSTRAINT APPLICATION

20. JEN largely accepts the AER's side constraint formula for the standard control services side constraint. However, as the AER definitions of  $I'_t$ ,  $T'_t$  and  $B'_t$  in the side constraint formula are defined as percentages, we propose to clarify how these are described in the formula.
21. The side constraint formula in the preliminary decision currently adds  $I'_t$ ,  $T'_t$  and  $B'_t$  to the right hand side of the equation. The appropriate approach, consistent with the remainder of the formulae, should be to convert the percentages to indexes and for these indexes to be multiplicative rather than additive—that is, the right hand side should be multiplied by  $(1+I'_t) \times (1+T'_t) \times (1+B'_t)$  as shown in Box 1-2.

<sup>15</sup>  $\Delta CPI$  is an index number and should not be confused with any CPI percentage.

<sup>16</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 14 – Control Mechanism*, October 2015, p 14-10.

**Box 1-2 Side constraint formula for standard control services**

$$\frac{\left(\sum_{i=1}^n \sum_{j=1}^m d_t^{ij} q_t^{ij}\right)}{\left(\sum_{i=1}^n \sum_{j=1}^m d_{t-1}^{ij} q_t^{ij}\right)} \leq (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \times (1 + S_t) \times (1 + I_t') \times (1 + T_t') \times (1 + B_t')$$

where each tariff class has "n" tariffs, with each up to "m" components, and where:

$d_t^{ij}$  is the proposed price for component 'j' of tariff 'i' for year t.

$d_{t-1}^{ij}$  is the price charged for component 'j' of tariff 'i' in year t-1.

$q_t^{ij}$  is the forecast quantity of component 'j' of tariff 'i' in year t.

$\Delta CPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities<sup>17</sup> from the June quarter in year t-2 to the June quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-2

minus one.

For example, for the 2017 regulatory year, t-2 is June quarter 2015 and t-1 is June quarter 2016 and for the 2018 regulatory year, t-2 is June quarter 2016 and t-1 is June quarter 2017 and so on.

$X_t$  is the X factor for each year of the 2016 regulatory period as determined in the PTRM, and annually revised for the return on debt update in accordance with the formula specified in the final decision—calculated for the relevant year. If  $X > 0$ , then X will be set equal to zero for the purposes of the side constraint formula.

$S_t$  is the s-factor determined in accordance with the STPIS for regulatory year t.<sup>18</sup>

$I_t'$  is the annual percentage change from the f-factor scheme amount in year t. This amount will be calculated as per the method set out in the relevant f-factor scheme.

$T_t'$  is the annual percentage change from the final carryover amount from the application of the DMIS from the 2011 regulatory period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to allowed revenue in the 2017 pricing proposal.

$B_t'$  is annual percentage change from the sum of:

- the recovery of license fee charges by the Victorian Essential Services Commission indexed by one and a half years of interest, calculated using the following method:

<sup>17</sup> If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

<sup>18</sup> For the first two years of the 2016 regulatory period, the value of  $S_t$  is to be to account for the change in revenue requirements between the regulatory periods, as explained in attachment 11. In the formulas in the STPIS, the  $AR_{(t+1)}$  is equivalent to  $AR_t$  in this formula. Calculations of the S factor adjustment are to be made accordingly.

$$L_{t-1}(1+WACC_{t-1})(1+WACC_{t-2})^{1/2}$$

where:

$L_{t-1}$  are the licence fees paid by Jemena to the Victorian Essential Services Commission in the financial year ending in June of regulatory year  $t-1$ ,

$WACC$  is the approved nominal weighted average cost of capital (WACC) for the relevant regulatory year,

- any under or over recovery of actual revenue collected through DUoS charges in regulatory year  $t-2$  as calculated using the method in Appendix A,
- the AER approved pass through amounts (positive or negative) with respect to regulatory year  $t$ .

With the exception of the CPI, X factor and S factor, the percentage for each of the other factors above can be calculated by dividing the incremental revenues (as used in the total annual revenue formula) for each factor by the expected revenues for regulatory year  $t-1$  (based on the prices in year  $t-1$  multiplied by the forecast quantities for year  $t$ ).

#### 1.1.4 CLARIFICATION FOR APPROPRIATE ADJUSTMENT FOR TIME VALUE OF MONEY

22. To ensure the revenue cap works appropriately, it is important that the formulae definitions are clear whether JEN should use nominal or real dollars. In particular:
- $AAR_t$ ,  $I_t$ ,  $T_t$  and  $B_t$  definitions should be amended to note that the values are in nominal dollar amounts
  - $AR_t$  should have been defined as being in 2015 real terms, consistent with the PTRM—given this applies only to 2016 prices, JEN rectified this issue as part of the approved 2016 pricing proposal by adjusting this for the change in inflation.<sup>19</sup>

#### 1.1.5 ENSURING THE APPROPRIATE NOMINAL WACC CALCULATION

23. When the preliminary decision refers to nominal WACC in the control mechanisms it is not clear how that WACC should be calculated. For the purposes of accurately applying nominal WACC, it should be clear that JEN should use the following formula to ensure that actual CPI, and not forecast CPI, is used in the calculations. That is, JEN should use:

$$\text{Nominal vanilla } WACC_t = (1 + \text{real Vanilla } WACC_t)(1 + \Delta CPI_t) - 1$$

## 1.2 REVENUE CAP FOR METERING SERVICES

24. The preliminary decision sets out the revenue cap for metering services.<sup>20</sup> JEN accepts the annual metering charges revenue cap formula set out in Figure 16.3 of the preliminary decision.
25. However, the preliminary decision goes on to include a side constraint stating:<sup>21</sup>

<sup>19</sup> That is, multiplying  $AR_t(1+S_t)$  by  $(1+\Delta CPI)$ .

<sup>20</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 16 – Alternative control services*, October 2015, p 16-30.

For each year after the first year of a regulatory control period, side constraints will apply. Consistent with the application of side constraints for standard control services, the permissible percentage increase will be the greater of CPI-X plus 2 per cent or CPI plus 2 per cent.

26. The AER has erred in applying a side constraint to metering services as the NER only provides for side constraints on standard control services.<sup>22</sup> Metering services should not, therefore, have a side constraint applied.
27. For the avoidance of doubt JEN proposes the price control formula in Box 1-3, with no side constraint.

#### Box 1-3 Price control mechanism for metering services

$$TARM_t \geq \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij} \quad i=1,\dots,n \text{ and } j=1,\dots,m \text{ and } t=1,\dots,5$$

$$TARM_t = AR_t + T_t + B_t \quad t = 1,2,\dots,5$$

$$AR_t = AR_{t-1}(1 + \Delta CPI_t)(1 - X_t) \quad t = 1,2,\dots,5$$

where;

$TARM_t$  is the total annual revenue for annual metering charges in year t.

$p_t^{ij}$  is the price of component 'j' of metering service 'i' in year t.

$q_t^{ij}$  is the forecast quantity of component 'j' of metering service 'i' in year t.

$AR_t$  is the annual revenue requirement for year t. When year t is the first year of the 2016 regulatory period,  $AR_t$  is the annual revenue requirement in the annual metering charges Post Tax Revenue Model (PTRM) for year t.

$T_t$  is equal to zero for all years except 2017 and is a once off adjustment to 2017 charges for the unders and overs recoveries relating to Advanced Metering Infrastructure actual revenues and actual costs incurred in 2014 and 2015.

$B_t$  is the sum of annual adjustment factors in year t as calculated in the unders and overs account in appendix A.

$AR_{t-1}$  is the annual revenue requirement for year t-1.

$\Delta CPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities<sup>23</sup> from the June quarter in year t-2 to the June quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t-2

<sup>21</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 16 – Alternative control services*, October 2015, pp 16-30 to 16-32.

<sup>22</sup> NER, cl. 6.18.6.

<sup>23</sup> If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

minus one.

For example, for the 2017 regulatory year, t–2 is June quarter 2015 and t–1 is June quarter 2016 and for the 2018 regulatory year, t–2 is June quarter 2016 and t–1 is June quarter 2017 and so on.

$X_t$  is the X factor for each year of the 2016 regulatory period as determined in the annual metering charges PTRM.

### 1.3 PRICE CAPS FOR EACH INDIVIDUAL SERVICE FOR ALTERNATIVE CONTROL SERVICES

28. JEN supports the price caps for each individual service for alternative control services described in the preliminary decision.<sup>24</sup> This includes the use of the limited building block model for public lighting operation, maintenance and replacement services to derive annual price adjustments for each light type and the metering exit fee (to the extent the metering exit fee must be adjusted).
29. For the avoidance of doubt JEN proposes the price control formula in Box 1-4 for fee bases ancillary network services

#### Box 1-4 Price caps for alternative control services individual services

$$\bar{p}_t^i \geq p_t^i \quad i=1,\dots,n \text{ and } t=2,3,4,5$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i (1 + CPI_t) (1 - X_t^i)$$

Where:

$\bar{p}_t^i$  is the cap on the price of service i in year t

$p_t^i$  is the price of service i in year t.

$CPI_t$  is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities<sup>25</sup> from the June quarter in year t–2 to the June quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the June quarter in regulatory year t–2

<sup>24</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 16 – Alternative control services*, October 2015, pp 16-7 to 16-9.

<sup>25</sup> If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

minus one.

For example, for the 2017 year, t–2 is the June quarter 2015 and t–1 is the June quarter 2016 and in the 2018 year, t–2 is the June quarter 2016 and t–1 is the June quarter 2017 and so on.

$X_t^i$  is the X factor for service i in year t, as set out in the preliminary decision for the real price adjustment of ACS services.

## 1.4 MECHANISM FOR TRUEING UP UNDER AND OVER RECOVERIES

30. JEN proposes the mechanism to true up unders and overs as demonstrated in Appendix A applies to trueing up distribution use of system, designated pricing proposal changes, jurisdictional schemes and regulated metering.
31. The preliminary decision set out its reasons for replacing JEN's method with its own; identifying administrative burden, forecast error and transparency as reasons. We respond to each concern in sections 1.4.2 to 1.4.4 following consideration of the potential for price volatility under each method (section 1.4.1).

### 1.4.1 PRICE VOLATILITY LOWER UNDER JEN METHOD

32. The AER method trues up t-2 over- or under-recovery only in year t, without taking into account any available t-1 data. In contrast JEN's method to true up t-2 does take available t-1 data into account to estimate expected t-1 under- or over-recovery.
33. The primary benefit of JEN's method is to reduce revenue volatility from reduced interest carryovers in any year, which would translate into price volatility for customers. Appendix B demonstrates the potential volatility under the AER method compared to JEN's proposed method. This shows that the AER method results in higher interest adjustments and, therefore, greater year on year volatility.
34. JEN considers reducing the potential for revenue (and price) volatility is particularly important for this regulatory period when we are seeking to introduce new maximum demand tariffs for residential and small business customers. We are seeking to implement this tariff reform in a way that minimises customer impacts as required by the NER.<sup>26</sup> The risk of large single year under-recovery in 2016 combined with the introduction of maximum demand tariffs in 2018 is that the AER method would accentuate the price impact on those customers who are currently receiving cross subsidies (which maximum demand tariffs are seeking to unwind). Consideration of customer impacts is a key consideration in meeting the network pricing objective and the pricing principles developed to promote the Optimal NEO Position.<sup>27</sup>

### 1.4.2 ADMINISTRATIVE BURDEN IS MINIMAL

35. Any additional burden on JEN and the AER from adopting JEN's method over that in the preliminary decision would be minimal given this approach will be used in NSW. Therefore, the AER will have developed processes and models to assess overs and unders calculations under this method. JEN does not consider its method provides any additional administrative burden for us to develop annual prices.

<sup>26</sup> NER, cl 6.18.5.

<sup>27</sup> NER, cl. 6.18.5.

### 1.4.3 FORECAST ERROR IS WHAT OUR METHOD ATTEMPTS TO REDUCE

36. Demand forecast inaccuracies in year t are the reason why an under and overs method is required. By estimating t-1 consumption volumes three months before the end of the year, this forecast inaccuracy would be reduced.
37. The method used should then be the one that seeks to manage this true-up in a way that minimises volatility for retailers and, ultimately, customers. The key benefit of JEN's method over the AER's is that it smoothes the year on year volatility as shown in Appendix B.

### 1.4.4 OUR PRICES ARE COST REFLECTIVE AND TRANSPARENT

38. The AER states that JEN's method would reduce transparency by distorting the cost-reflectivity of the charging parameters.<sup>28</sup>
39. However, the new Tariff Structure Statement (**TSS**) process,<sup>29</sup> our proposed introduction of maximum demand charges<sup>30</sup> and the requirement to explain differences between indicative prices and proposed prices in annual pricing proposals,<sup>31</sup> will ensure prices are transparent and demonstrated to be cost-reflective.
40. Further, the unders and overs process will not impact the approach outlined in our TSS for our tariffs to be cost reflective.<sup>32</sup> Our proposal is for our demand charges (to be introduced to tariffs that don't currently have a demand charge) to be set at the cost reflective level.<sup>33</sup> We then source our residual revenue from our usage and fixed charges, meaning that the cost-reflective levels of the demand charge would not be subject to change from annual unders and overs.
41. By contrast, the AER's method would negatively impact cost reflectivity as it would result in excessive interest adjustments as shown in Appendix B.

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<sup>28</sup> AER, *Preliminary Decision, Jemena distribution determination 2016 to 2020, Attachment 14 – Control Mechanism*, October 2015, p 14-11.

<sup>29</sup> NER, cl. 6.18.1A.

<sup>30</sup> JEN, *Tariff Structure Statement*, 25 September 2015.

<sup>31</sup> NER, cl. 6.18.2(b)(7A) & 6.18.8(a)(2).

<sup>32</sup> JEN, *Tariff Structure Statement*, 25 September 2015.

<sup>33</sup> This would be after a period of transition for residential and small business customers not currently on a demand tariff.

# Appendix A

## Method for unders and overs



## A1. REVENUE TRUE UPS

42. For the following services, the form of price control requires a true-up of the actual revenue as it varies to allowance:
- Standard control services
  - Type 5 and 6 regulated metering services
  - Designated pricing proposal charges
  - Jurisdictional scheme amounts.
43. To undertake these adjustments, we will follow the process outlined in Table A1-1. It should be noted that for standard control services, provision is made within the methodology to account for 'pass through amounts'.
44. In all calculations, the balance amounts must be adjusted for the time value of money using the WACC consistent with the rate the AER approved for the final determination in the year in which the determination is applicable, i.e. the WACC in previous regulatory periods will be used where the formula crosses multiple regulatory periods.

**Table A1–1: Example proposed calculation of DUOS unders and overs account (\$'000, nominal)**

	t-2 (actual)	t-1 (estimate)	t (forecast)
Revenue from tariffs	95,000	107,000	113,672
<i>less</i> TAR for the relevant year	100,000	105,000	110,000
<i>less</i> Allowed pass through	0	0	0
<i>equals</i> Under/(over) recovery for regulatory year	-5,000	2,000	3,672
<b>DUOS unders and overs account</b>			
Nominal WACC	8.0%	8.0%	8.0%
Opening balance	0	-5,196	-3,534
Interest on opening balance	0	-416	139
Under/(over) recovery for regulatory year	-5,000	2,000	n.a.
Interest on under/(over) recovery for regulatory year	-196	78	n.a.
<b>Closing balance</b>	<b>-5,196</b>	<b>-3,534</b>	<b>0</b>

(1) In year t we are trueing up revenue under and over recoveries for t-2, the over or under recovery in year t itself won't be trueed up until t+2.

(2) Interest on under/over recovery calculated using a half year effect on the WACC, ie,  $(1+WACC)^{0.5} - 1$ .

(3) Must set tariffs at rates that cause the closing balance in year t to be close to zero.

# Appendix B

## Comparison of AER and JEN over and under method

## B1. COMPARISON OF AER AND JEN OVER AND UNDER METHOD

45. JEN has set out the difference between the AER and JEN over and under method via the interest accumulated under four different scenarios. The interest is added to the revenue required in each year (to give the Total Annual Revenue (**TAR**)) meaning that it directly impacts the volatility of revenue to be recovered and therefore adding to the potential year on year volatility in prices. Reducing the volatility is in customers' interests and supports the Optimal NEO Position.
46. Each scenario demonstrates that the total interest adjustment, and therefore the potential for volatility, is lower under JEN's method.
47. The four scenarios are:
- Scenario 1—under recovery in year t-2 and over recovery in year t-1 (Figure 1–1)
  - Scenario 2—over recovery in year t-2 and under recovery in year t-1 (Figure 1–2)
  - Scenario 3—under recovery in year t-2 and under recovery in year t-1 (Figure 1–3)
  - Scenario 4—over recovery in year t-2 and over recovery in year t-1 (Figure 1–4).

### B1.1 AER METHOD RESULTS IN HIGHER TOTAL INTEREST

48. We have summarised a comparison of the interest in Table B1-1. This demonstrates the AER method results in higher interest adjustments and therefore greater year on year revenue volatility, which would most likely result in higher price volatility.

**Table B1–1: Interest paid under JEN and AER methods under four potential scenarios**

Potential recovery scenarios	Total interest \$,000 (nominal)	
	JEN method	AER Method
Under recovery in year t-2 and over recovery in year t-1	-395	-832
Over recovery in year t-2 and under recovery in year t-1	238	499
Under recovery in year t-2 and under recovery in year t-1	-389	-832
Over recovery in year t-2 and over recovery in year t-1	230	499

The individual comparison tables are included below.







