



FINAL DECISION
Powercor distribution
determination
2016 to 2020

Attachment 14 – Control
mechanisms

May 2016

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Note

This attachment forms part of the AER's final decision on Powercor's distribution determination for 2016–20. It should be read with all other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 7 – Operating expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment 11 – Service target performance incentive scheme

Attachment 12 – Demand management incentive scheme

Attachment 13 – Classification of services

Attachment 14 – Control mechanisms

Attachment 15 – Pass through events

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 18 – f-factor scheme

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Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced metering infrastructure
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DPPC	designated pricing proposal charges
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
Expenditure Assessment Guideline	Expenditure Forecast Assessment Guideline for Electricity Distribution
F&A	framework and approach
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base

Shortened form	Extended form
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

14 Control mechanisms

A control mechanism imposes limits over the prices of direct control services and/or the revenues that a distribution network service provider can recover from customers. For standard control services, the National Electricity Rules (NER) require the control mechanism to be of the prospective CPI–X form (or some incentive-based variant).¹

This attachment sets out the revenue cap as the control mechanism for Powercor's standard control services for the 2016–20 regulatory control period. It discusses:

- the application of the revenue cap
- compliance with the price controls²
- the mechanism through which Powercor will recover the distribution use of system (DUoS) charges—including adjustments for revenue under or over recovery—in the 2016–20 regulatory control period³
- how Powercor must report on its recovery of designated pricing proposal charges and jurisdictional scheme amounts⁴
- the procedures Powercor must apply for assigning or reassigning retail customers to tariff classes.⁵

The control mechanisms applying to Powercor's alternative control services are set out separately in attachment 16.

14.1 Final decision

Our final decision for Powercor is as follows:

- The control mechanism for standard control services is a revenue cap.⁶
- Section 14.4.4 contains the revenue cap formulae:⁷
 - The revenue cap for any given regulatory year is the total annual revenue, or TAR, calculated using the formula in Figure 14.1.
 - The side constraints applying to the annual price movements of each Powercor tariff class must be consistent with the formula in Figure 14.2.

¹ NER, cl. 6.2.6(a).

² NER, cl. 6.12.1(13).

³ NER, cl. 6.12.1(11).

⁴ NER, cll. 6.12.1(19) and 6.12.1(20).

⁵ NER, cl. 6.12.1(17).

⁶ AER, *Final framework and approach for the Victorian Electricity Distributors: Regulatory control period commencing 1 January 2016*, October 2014, p. 73; Powercor, *Revised regulatory proposal 2016–2020*, January 2016, p. 387. (Powercor, *Revised regulatory proposal*, January 2016).

⁷ NER, cl. 6.12.1(11).

- Powercor must demonstrate compliance with the revenue cap—in accordance with Figure 14.1—by including adjustments for DUoS revenue under or over recovery in accordance with appendix A of this attachment.
- Powercor must submit as part of its annual pricing proposal, a record of the amount of revenue recovered from designated pricing proposal charges and associated payments in accordance with appendix B of this attachment.⁸
- Powercor must submit as part of its annual pricing proposal, a record of its jurisdictional scheme amounts recovery and associated payments in accordance with appendix C of this attachment.
- Appendix D of this attachment specifies the procedures Powercor must apply in assigning retail customers to tariff classes or reassigning retail customers from one tariff class to another.

14.2 Powercor's revised proposal

Powercor accepted our preliminary decision on the control mechanism for standard control services.⁹

14.3 Assessment approach

Our final framework and approach (final F&A) set the control mechanism for standard control services as a revenue cap.¹⁰ The basis of the revenue cap must be of the prospective CPI-X form (or some incentive based variant).¹¹

In determining the control mechanism for standard control services, we considered the factors in clause 6.2.5(c) of the NER for each revenue adjustment parameter and its application.

Our final F&A set out a generic formula to give effect to the control mechanism for standard control services.¹² The generic formula requires parameters that need to be specified with more precision in order to be implemented. This final decision clarifies our position regarding the control mechanism formula and its respective parameters.

14.4 Reasons for final decision

While Powercor accepted our preliminary decision, we have amended the control mechanism since our preliminary decision to account for issues raised in the other

⁸ We referred to this as the 'TUoS unders and overs account' in previous distribution determinations. In this final decision, we use the term 'designated pricing proposal charges' to reflect the wording of the NER (cl. 6.12.1(19)).

⁹ Powercor, *Revised regulatory proposal*, January 2016, p. 387.

¹⁰ AER, *Final framework and approach for the Victorian Electricity Distributors: Regulatory control period commencing 1 January 2016*, October 2014, p. 73.

¹¹ NER, cl. 6.2.6(a).

¹² AER, *Final framework and approach for the Victorian Electricity Distributors: Regulatory control period commencing 1 January 2016*, October 2014, pp. 87–88; NER, cl. 6.8.1(b)(2)(ii).

Victorian distributors' revised proposals.¹³ These amendments ensure a consistent approach to the control mechanism for standard control services across the Victorian distributors. Prior to the publication of our final decision, we raised these amendments with Powercor.¹⁴

The following discusses the reasons for our final decision for each component of the revenue cap control mechanism, including the reporting on designated pricing proposal charges and jurisdictional scheme amounts.

14.4.1 Application of the revenue cap

Total annual revenue

The revenue cap for any given regulatory year is the total annual revenue (TAR) for standard control services. Figure 14.1 contains the revenue cap formula.

Intra-period adjustment to the weighted average cost of capital

As per our preliminary decision, changes to the TAR resulting from the trailing average cost of debt update will be implemented through annual revisions to the X factors. Further discussion on this adjustment can be found in attachment 3—rate of return—which discusses the WACC annual adjustment and attachment 1—annual revenue requirement—which details issues relating to X factors.

Incentive scheme adjustments (I factor)

The I factor parameter is for annual TAR adjustments relating to a distributor's performance against incentive schemes.¹⁵ The I factor for the 2016–20 regulatory control period will include the Victorian Government's f-factor scheme.¹⁶

The f-factor scheme provides financial incentives for the Victorian distributors to reduce the incidence of fire starts that can be attributable to electricity infrastructure, and to reduce the risk of loss or damage caused by fire starts.¹⁷ Including the f-factor scheme in the I factor gives effect to the rewards and penalties related to this incentive scheme in a distributor's TAR. The annual adjustment amounts will be calculated as

¹³ See: Jemena Electricity Networks (Vic) Ltd, *2016-20 Electricity Distribution Price Review Regulatory Proposal: Revocation and substitution submission 1 January 2016 - 31 December 2020: Attachment 2–2 Price control mechanisms*, 6 January 2016; AusNet Electricity Services Pty Ltd, *Electricity distribution price review 2016–20 revised regulatory proposal – Chapter 13: Control mechanism*, 6 January 2016.

¹⁴ AER information request –Powercor - #053 – Pre- final decision Copy of Powercor SCS revenue controls for Feedback, 29 March 2014.

¹⁵ The I factor excludes adjustments relating to performance against the service target performance incentive scheme which is applied under a specified S factor. The S factor is discussed below.

¹⁶ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism*, October 2015, pp. 8–9.

¹⁷ *Energy and Resources Legislation Amendment Bill 2010*, Explanatory Memorandum, p. 10.

per the method in the relevant f-factor scheme. Our final decision for the f-factor scheme to apply in the 2016–20 regulatory control period is set out in attachment 18.

Transitional adjustments (T factor)

The T factor parameter is for annual TAR adjustments relating to carryover adjustments or transitional adjustments arising from the 2011–15 regulatory control period. The T factor for the 2016–20 regulatory control period will include the final carryover amount from the conclusion of the demand management incentive scheme (DMIS) applied to Powercor in the 2011–15 regulatory control period.¹⁸

The final DMIS carryover adjustment amount includes:

- any amount of the DMIS allowance which was unspent or not approved by the AER over the 2011–15 regulatory control period
- the time value of money accrued or lost as a result of the expenditure profile selected by the distributor
- any approved foregone revenue adjustment.¹⁹

The T factor adjustment will be added or deducted from Powercor's TAR in its 2017 pricing proposal.

Annual adjustments (B factor)

The B factor parameter is for annual TAR adjustments required within the 2016–20 regulatory control period. As per our preliminary decision, the B factor will include:

- the recovery of licence fee charges by the Victorian Essential Services Commission
- a true-up for the net present value of under or over recovered revenue
- AER approved cost pass through amounts in respect of direct control services during the 2016–20 regulatory control period.²⁰

Licence fees

The Victorian distributors are required to pay the Victorian Essential Services Commission annual licence fees. These licence fees will be treated as a pass through and recovered through the B factor in the 2016–20 regulatory control period.

¹⁸ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism*, October 2015, p. 9.

¹⁹ AER, *Demand Management Incentive Scheme: Jemena, CitiPower, Powercor, SP AusNet and United Energy 2011–15*, April 2009, p. 17.

²⁰ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism*, October 2015, pp. 9–10.

True-up of under or over recovered revenue

The B factor will also include a true-up for the net present value of under or over recovered revenue. These true-ups will be calculated through the DUoS unders and overs account in accordance with appendix A.

Our final decision has changed the approach to true-up under and over recovered revenues from our preliminary decision. Our final decision includes an additional true-up for estimated under and over recovery of revenues for regulatory year t-1.²¹ We have made this change to be consistent with the approach applied in most other jurisdictions.²² Our final decision approach is consistent with that currently applied to the distributors in New South Wales, South Australia and Tasmania.²³

Prior to the publication of our final decision, we raised this change with Powercor.²⁴

Preliminary decision errors in the true-up calculations

Our final decision has corrected for errors in the true-up calculations in our preliminary decision for the DUoS, designated pricing proposal charges and jurisdictional scheme amounts unders and overs accounts as well as the recovery of licence fees. Our preliminary decision net present value calculations for these true-ups incorrectly applied the weighted average cost of capital for regulatory years t-2 and t-1.²⁵ The correct application should be the weighted average cost of capital for regulatory years t-1 and t. This correction has been applied in Figure 14.1 and Figure 14.2 below as well as appendices A, B and C of this attachment.

Due to the error in our preliminary decision, Powercor's TAR for 2017 will be adjusted to account for the difference in the recovery of licence fee charges in Powercor's 2016 pricing proposal. However, these errors had no impact on the unders and overs accounts in Powercor's 2016 pricing proposal as these true-ups do not begin until 2017.

S factor adjustments

The S factor parameter is for annual TAR adjustments relating to a distributor's performance against the service target performance incentive scheme. The S factor

²¹ Year t represents the forthcoming regulatory year. Therefore, year t-2 and year t-1 are the two regulatory years prior to year t. By way of example, if year t is the year 2018 then year t-2 is 2016 and year t-1 is 2017.

²² NER, cl. 6.2.5(c)(4). Queensland is the only jurisdiction that applies a different approach. The approach in Queensland is consistent with that set out in our Victorian 2016-20 preliminary decision.

²³ For example, see: AER, *Final decision: Ausgrid distribution determination 2015-16 to 2018-19: Attachment 14-Control mechanisms*, April 2015, Appendix A; AER, *Final decision, SA Power Networks determination 2015-16 to 2019-20: Attachment 14-Control mechanisms*, October 2015, Appendix A; AER, *Final distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17- Attachments*, April 2012, pp. 31-34.

²⁴ AER information request – Powercor - #053 – Pre- final decision Copy of Powercor SCS revenue controls for Feedback, 29 March 2014.

²⁵ AER, *Preliminary decision: Powercor distribution determination 2016-20: Attachment 14-Control mechanism, Figure 14.1 and figure 14.2*, October 2015, pp. 12-16.

gives effect to any rewards or penalties related to this scheme. The scheme requires the S factor to be applied as a percentage adjustment to annual revenue.²⁶ The service target performance incentive scheme applying to Powercor in the 2016–20 regulatory control period is discussed in attachment 11.

As per our preliminary decision, the S factor in 2016 and 2017 will also true-up service target performance incentive scheme revenue adjustments related to the scheme applied in the 2011–15 regulatory control period.²⁷

Calculation of the consumer price index escalation

The method for calculating the consumer price index (CPI) escalation is based on the annual movement between the Australian Bureau of Statistics' (ABS) published June quarter data. The application of this calculation is set out in Figure 14.1.

Calculation of nominal weighted average cost of capital

Our final decision clarifies that the calculation of the nominal WACC should apply the actual change in CPI, and not forecast CPI. We have updated the definition of the nominal WACC calculation in Figure 14.1 and Figure 14.2 below to use the actual CPI. This definition of the nominal WACC calculation will also apply in the unders and overs accounts set out in the appendices to this attachment.

Timing of revenue cap parameter adjustments

Our final decision clarifies that the revenue cap parameters are all in nominal terms. While our preliminary decision did not explicitly state that the revenue cap parameters were in nominal terms, it was implicit through the mechanics of calculating each parameter. However, to avoid any ambiguity, our final decision revenue cap formulas clarify that the parameters are in nominal terms.

14.4.2 Reporting on designated pricing proposal charges

We must decide how Powercor will report on the recovery of designated pricing proposal charges for each year of the 2016–20 regulatory control period, and how to account for any under or over recovery of revenue associated with those charges.²⁸ As per the preliminary decision, an under and over recovery mechanism will apply to facilitate this reporting and permits the true-up of under and over recovery of revenue.

However, we have changed the approach to how we true-up designated pricing proposal charges under and over recovered revenues from our preliminary decision.

²⁶ AER, *Electricity distribution network service providers: Service target performance incentive scheme: Appendix C*, November 2009, p. 32.

²⁷ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism*, October 2015, pp. 10–11.

²⁸ NER, cl. 6.12.1(19).

Consistent with the DUoS unders and overs account, our final decision includes an additional true-up for estimated under and over recovery of revenues for regulatory year $t-1$. This approach is also consistent with that applied to the distributors in New South Wales, South Australia and Tasmania and the requirements of the NER.²⁹ Our final decision method is set out in appendix B.

As discussed above, the preliminary decision applied incorrect weighted average cost of capital adjustments in calculating the net present value of under or over recovered designated pricing proposal charges revenue.³⁰ The final decision has applied the correct weighted average cost of capital adjustments.

14.4.3 Reporting on jurisdictional scheme amounts

We must decide how Powercor will report on the recovery of jurisdictional scheme amounts for each year of the 2016–20 regulatory control period and how to account for any under or over recovery of revenue associated with those charges.³¹ As per the preliminary decision, an under and over recovery mechanism will apply to facilitate this reporting and to account for the true-up of under and over recovery of revenue.

Consistent with the DUoS and designated pricing proposal charges unders and overs accounts, our final decision approach to true-up jurisdictional scheme amounts under and over recovered revenues includes a true-up for regulatory year $t-1$. As discussed, this approach is consistent with that applied in other jurisdictions and the requirements of the NER.³² The operation of this method is detailed in appendix C.

As discussed above, the preliminary decision applied incorrect weighted average cost of capital adjustments in calculating the net present value of under or over recovered jurisdictional scheme amounts revenue.³³ The final decision has applied the correct weighted average cost of capital adjustments.

14.4.4 Control mechanism formulas

Powercor's revenues must be consistent with the total annual revenue formula and side constraint formula set out in Figure 14.1 and Figure 14.2 below.

²⁹ For example, see: AER, *Final decision: Ausgrid distribution determination 2015–16 to 2018–19: Attachment 14–Control mechanisms*, April 2015, Appendix B; AER, *Final decision, SA Power Networks determination 2015–16 to 2019–20: Attachment 14–Control mechanisms*, October 2015, Appendix B; AER, *Final distribution determination: Aurora Energy Pty Ltd 2012–13 to 2016–17– Attachments*, April 2012, pp. 34–36; NER, cl. 6.12.1(19), 6.18.7.

³⁰ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism, Table 14.2*, October 2015, p. 20.

³¹ NER, cl. 6.12.1(20).

³² For example, see: AER, *Final decision: Ausgrid distribution determination 2015–16 to 2018–19: Attachment 14–Control mechanisms*, April 2015, Appendix C; AER, *Final decision, SA Power Networks determination 2015–16 to 2019–20: Attachment 14–Control mechanisms*, October 2015, Appendix C; NER, cl. 6.12.1(20), 6.18.7A.

³³ AER, *Preliminary decision: Powercor distribution determination 2016–20: Attachment 14–Control mechanism, Table 14.3*, October 2015, p. 22.

Side constraints

Figure 14.2 sets out the side constraints formula. For each regulatory year after the first year of a regulatory control period, side constraints apply to the weighted average revenue raised from each tariff class. In accordance with the NER, the permissible percentage increase is the greater of CPI–X plus 2 per cent or CPI plus 2 per cent.³⁴ Recovery of certain revenues, such as those to accommodate pass throughs, is disregarded in deciding whether the permissible percentage has been exceeded.³⁵

Figure 14.1 Revenue cap formula³⁶

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

$$(2) \quad TAR_t = AAR_t + I_t + T_t + B_t \quad t = 1, 2, \dots, 5$$

$$(3) \quad AAR_t = AR_t(1 + S_t) \quad t = 1$$

$$(4) \quad AAR_t = AAR_{t-1}(1 + \Delta CPI_t)(1 - X_t)(1 + S_t) \quad t = 2, \dots, 5$$

where;

TAR_t is the total annual revenue for regulatory year t.

p_t^{ij} is the price of component 'j' of tariff 'i' in regulatory year t.

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

AAR_t is the adjusted annual smoothed revenue requirement for regulatory 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 DMIS from the 2011–15 regulatory control period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to the adjusted annual smoothed revenue requirement in the 2017 pricing proposal. It will cease to apply after the 2017 regulatory year.

B_t is the sum of:

³⁴ NER, cl. 6.18.6(c).

³⁵ NER, cl. 6.18.6(d).

³⁶ All parameters are in nominal terms unless otherwise specified.

- 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:

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

where:

L_{t-1} are the licence fees paid by Powercor 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 using the following method:

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

where the *real Vanilla WACC_t* is as set out in our final decision PTRM and updated annually

- 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
- AER approved pass through amounts in respect of direct control services (positive or negative) with respect to regulatory year t.

AR_t is the annual smoothed revenue requirement as stated in the Post Tax Revenue Model (PTRM) for regulatory year t (when year t is the first year of the 2016–20 regulatory control period).³⁷

S_t is the S factor determined in accordance with the service target performance incentive scheme (STPIS) for regulatory year t.³⁸

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities³⁹ from the June quarter in regulatory year t-2 to the June quarter in regulatory 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

³⁷ Our 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.

³⁸ For the first two regulatory years of the 2016–20 regulatory control period, the value of S_t is to be adjusted to account for the change in revenue requirements between the regulatory control 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.

³⁹ 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.

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 2016–20 regulatory control period as determined in the PTRM, and annually revised for the return on debt update in accordance with the formula specified in attachment 3—rate of return—calculated for the relevant regulatory year.

Figure 14.2 Side constraints

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

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 regulatory year t.

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

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

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities⁴⁰ from the June quarter in regulatory year t–2 to the June quarter in regulatory 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.

⁴⁰ 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.

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 regulatory year of the 2016–20 regulatory control period as determined in the PTRM, and annually revised for the return on debt update in accordance with the formula specified in attachment 3—rate of return—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.⁴¹

I_t' is the annual percentage change from the f–factor scheme amount for regulatory 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 2011–15 regulatory control period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to the adjusted annual smoothed revenue requirement in the 2017 pricing proposal.

B_t' is the 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:

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

where:

L_{t-1} are the licence fees paid by Powercor 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 using the following method:

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

where the *real Vanilla WACC_t* is as set out in our final decision PTRM and updated annually

⁴¹ For the first two regulatory years of the 2016–20 regulatory control period, the value of S_t is to be adjusted to account for the change in revenue requirements between the regulatory control 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.

- 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
- AER approved pass through amounts in respect of direct control services (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).

14.4.5 Annual pricing proposals

Powercor must submit annual pricing proposals to the AER with proposed tariffs and charging parameters.⁴² The annual pricing proposals must be compliant with our final decision.⁴³

Powercor's pricing proposals must set out, for each tariff, charging parameters (the constituent elements of a tariff⁴⁴) and the elements of service to which each charging parameter relates.⁴⁵ Pricing proposals must also demonstrate compliance with any applicable distribution determination and set how Powercor will pass on designated pricing proposal charges and jurisdictional scheme amounts to customers, and any adjustments to tariffs resulting from over or under recovery of those amounts.⁴⁶

Unless confidential, each tariff charging parameter and element of service relating to DUoS, designated pricing proposal charges and jurisdictional scheme amounts should be publicly disclosed separately. This presentation style enables regulators, retailers, policy makers and end users to see the varied pricing impacts and effects of the different pricing proposal elements.

Powercor's pricing proposals should also publicly disclose these charging parameters as an aggregate, to ensure interested parties can also see the total pricing impacts of the network charges.

⁴² NER, cl. 6.18.2.

⁴³ NER, cl. 6.18.2(b)(7).

⁴⁴ NER, chapter 10.

⁴⁵ NER, cl. 6.18.2(b)(3).

⁴⁶ NER, cl. 6.18.2(b)(6), (6A) and (7).

A DUoS unders and overs account

To demonstrate compliance with the distribution determination applicable to it during the 2016–20 regulatory control period, Powercor must maintain a DUoS unders and overs account in its annual pricing proposal.⁴⁷

Powercor must provide the amounts for the following entries in its DUoS unders and overs account for the most recently completed regulatory year (t–2), the current regulatory year (t–1) and the next regulatory year (t):

1. An opening balance for year t–2, year t–1 and year t;
2. An interest charge for one year on the opening balance for each regulatory year (t–2, t–1 and t). These adjustments are to be calculated using the respective nominal weighted average cost of capital (WACC) for each intervening year between regulatory year t–2 and year t.⁴⁸ The WACC applied for each year will be that approved by the AER for the relevant year;
3. The amount of revenue recovered from DUoS charges in respect of that year, less the total annual revenue for the year in question;
4. An adjustment to the net amount in item 3 by six months of interest. These adjustments are to be calculated using the approved nominal WACC;
5. The total sum of items 1–4 to derive the closing balance for each year.

Powercor must provide details of calculations in the format set out in Table 14.1. Amounts provided for the most recently completed regulatory year (t–2) must be audited. Amounts provided for the current regulatory year (t–1) will be regarded as an estimate. Amounts for the next regulatory year (t) will be regarded as a forecast.

In proposing variations to the amount and structure of DUoS charges, Powercor is expected to achieve a closing balance as close to zero as practicable in its DUoS unders and overs account in each forecast year in its annual pricing proposals during the 2016–20 regulatory control period.

⁴⁷ NER, cl. 6.18.2(b)(7).

⁴⁸ The WACC for each year will be that approved by the AER for the respective year and as calculated as set out in Figure 14.1.

**Table 14.1 Example calculation of DUoS unders and overs account
(\$'000, nominal)**

	Year t-2 (actual)	Year t-1 (estimate)	Year t (forecast)
(A) Revenue from DUoS charges	46 779	40 269	39 510
(B) Less TAR for regulatory year =	43 039	41 427	44 429
+ Adjusted annual smoothed revenues (AAR _t)	40 189	41 393	44 393
+ f-factor scheme amount (I _t)	-12	10	14
+ DMIS carryover amount (T _t)	1013	0	0
+ Annual adjustments (B _t) ^a =	1849	24	22
+ License fee recovery	25	24	22
+ Approved pass through amounts	1824	0	0
(A minus B) Under/over recovery of revenue for regulatory year	3740	-1158	-4919^b
DUoS unders and overs account			
Nominal WACC (per cent)	5.00%	5.50%	6.00%
Opening balance	1737	5656 ^c	4778
Interest on opening balance	87	311	287
Under/over recovery of revenue for regulatory year	3740	-1158	-4919 ^b
Interest on under/over recovery for regulatory year	92	-31	-145
Closing balance	5656	4778	0^d

Notes: (a) B_t parameter calculations in the DUoS unders and overs account exclude approved DUoS revenue under/over recovery for regulatory year.
(b) Approved DUoS revenue under/over recovery for regulatory year t.
(c) Opening balance is the previous year's closing balance.
(d) Powercor is expected to achieve a closing balance as close to zero as practicable in its DUoS unders and overs account in each forecast year in its annual pricing proposals in the 2016–20 regulatory control period.

B Designated pricing proposal charges⁴⁹ unders and overs account

To demonstrate compliance with the distribution determination applicable to it during the 2016–20 regulatory control period, Powercor must maintain a designated pricing proposal charges unders and overs account in its annual pricing proposal.⁵⁰

Powercor must provide the amounts for the following entries in its designated pricing proposal charges under and overs account for the most recently completed regulatory year (t–2), the current regulatory year (t–1) and the next regulatory year (t):

1. An opening balance for year t–2, year t–1 and year t;
2. An interest charge for one year on the opening balance for each regulatory year (t–2, t–1 and t). These adjustments are to be calculated using the respective nominal weighted average cost of capital (WACC) for each intervening year between regulatory year t–2 and year t.⁵¹ The WACC applied for each year will be that approved by the AER for the relevant year;
3. The amount of revenue recovered from designated pricing proposal charges in respect of that year, less the total annual revenue for the year in question;
4. An adjustment to the net amount in item 3 by six months of interest. These adjustments are to be calculated using the approved nominal WACC;
5. The total sum of items 1–4 to derive the closing balance for each year.

Powercor must provide details of calculations in the format set out in Table 14.2. Amounts provided for the most recently completed regulatory year (t–2) must be audited. Amounts provided for the current regulatory year (t–1) will be regarded as an estimate. Amounts for the next regulatory year (t) will be regarded as a forecast.

In proposing variations to the amount and structure of designated pricing proposal charges, Powercor is expected to achieve a closing balance as close to zero as practicable in its designated pricing proposal charges unders and overs account in each forecast year in its annual pricing proposals during the 2016–20 regulatory control period.

⁴⁹ Designated pricing proposal charges, are charges related to: designated pricing proposal services (prescribed exit fees, prescribed common transmission services and prescribed transmission use of system services); avoided customer transmission use of system charges; charges provided by another distributor (but only to the extent they comprise of designated pricing proposal services or standard control services); and charges or payments related specified in NER clause 11.39.

⁵⁰ NER, cll. 6.18.2(b)(6), 6.12.1(19).

⁵¹ The WACC for each year will be that approved by the AER for the respective year and as calculated as set out in Figure 14.1.

Table 14.2 Example calculation of designated pricing proposal charges unders and overs account (\$'000, nominal)

	Year t-2 (actual)	Year t-1 (estimate)	Year t (forecast)
(A) Revenue from designated pricing proposal charges (DPPC)	40 077	34 944	36 609
(B) Less DPPC related payments for regulatory year =	34 365	38 734	39 200
+ DPPC charges to be paid to TNSP	33 672	37 933	38 000
+ Avoided TUoS/DPPC payments	572	734	800
+ Inter-distributor payments	121	67	400
(A minus B) Under/over recovery of revenue for regulatory year	5712	-3790	-2540^a
<i>DPPC unders and overs account</i>			
Nominal WACC (per cent)	5.00%	5.50%	6.00%
Opening balance	167	6028 ^b	2467
Interest on opening balance	8	332	148
Under/over recovery of revenue for regulatory year	5712	-3790	-2540 ^a
Interest on under/over recovery for regulatory year	141	-103	-75
Closing balance	6028	2467	0^c

Notes: (a) Approved DPPC revenue under/over recovery for regulatory year t.
(b) Opening balance is the previous year's closing balance.
(c) Powercor is expected to achieve a closing balance as close to zero as practicable in its DPPC unders and overs account in each forecast year in its annual pricing proposals in the 2016–20 regulatory control period.

C Jurisdictional scheme amounts unders⁵² and overs account

To demonstrate compliance with the distribution determination applicable to it during the 2016–20 regulatory control period, Powercor must maintain a jurisdictional scheme amounts unders and overs account in its annual pricing proposal.⁵³

Powercor must provide the amounts for the following entries in its jurisdictional scheme amounts unders and overs account for the most recently completed regulatory year (t–2), the current regulatory year (t–1) and the next regulatory year (t):

1. An opening balance for year t–2, year t–1 and year t;
2. An interest charge for one year on the opening balance for each regulatory year (t–2, t–1 and t). These adjustments are to be calculated using the respective nominal weighted average cost of capital (WACC) for each intervening year between regulatory year t–2 and year t.⁵⁴ The WACC applied for each year will be that approved by the AER for the relevant year;
3. The amount of revenue recovered from jurisdictional scheme amounts charges in respect of that year, less the total annual revenue for the year in question;
4. An adjustment to the net amount in item 3 by six months of interest. These adjustments are to be calculated using the approved nominal WACC;
5. The total sum of items 1–4 to derive the closing balance for each year.

Powercor must provide details of calculations in the format set out in Table 14.3. Amounts provided for the most recently completed regulatory year (t–2) must be audited. Amounts provided for the current regulatory year (t–1) will be regarded as an estimate. Amounts for the next regulatory year (t) will be regarded as a forecast.

In proposing variations to the amount and structure of jurisdictional scheme charges, Powercor is expected to achieve a closing balance as close to zero as practicable in its jurisdictional scheme amounts unders and overs account in each forecast year in its annual pricing proposal during the 2016–20 regulatory control period.

⁵² Jurisdictional scheme amounts, are amounts a distributor is required under a jurisdictional scheme obligation as defined by the NER to: pay a person; pay into a fund established under an Act of a participating jurisdiction; credit against charges payable by a person; or reimburse a person, less any amounts recovered by the distributor from any person in respect of those amounts other than under the NER.

⁵³ NER, cll. 6.12.1(20), 6.18.2(b)(6A), 6.18.7(A)(b) and (c).

⁵⁴ The WACC for each year will be that approved by the AER for the respective year and as calculated as set out in Figure 14.1.

Table 14.3 Example calculation of jurisdictional scheme amounts unders and overs account (\$'000, nominal)

	Year t-2 (actual)	Year t-1 (estimate)	Year t (forecast)
(A) Revenue from jurisdictional schemes	19 777	23 121	26 965
(B) Less jurisdictional scheme payments for regulatory year =	20 272	20 959	28 641
+ Jurisdictional scheme 1 payments	14 159	13 954	13 961
+ Jurisdictional scheme 2 payments	6113	7005	14 680
(A minus B) Under/over recovery of revenue for regulatory year	-495	2162	-1676^a
<i>Jurisdictional scheme amount unders and overs account</i>			
Nominal WACC (per cent)	5.00%	5.50%	6.00%
Opening balance	-52	-562 ^b	1628
Interest on opening balance	-3	-31	98
Under/over recovery of revenue for regulatory year	-495	2162	-1676 ^a
Interest on under/over recovery for regulatory year	-12	59	-50
Closing balance	-562	1628	0^c

Notes: (a) Approved jurisdictional scheme amounts revenue under/over recovery for regulatory year t.
(b) Opening balance is the previous year's closing balance.
(c) Powercor is expected to achieve a closing balance as close to zero as practicable in its jurisdictional scheme amount unders and overs account in each forecast year in its annual pricing proposals in the 2016–20 regulatory control period.

D Assigning retail customers to tariff classes

We are required to decide on the procedures governing assignment or reassignment of retail customers (customers) to or between tariff classes.⁵⁵ Our decision on the procedures that Powercor is to adhere to in assigning and reassigning customers to tariff classes is outlined below.

D.1 AER's assessment approach

We must have regard to the principles set out in the NER when formulating provisions which Powercor must apply with assignment or reassignment of customers to tariff classes.⁵⁶ A distributor's decision to assign a customer to a particular tariff class or to reassign a customer from one tariff class to another should be subject to an effective system of assessment and review.⁵⁷

D.2 Reasons for the final decision

Powercor's revised proposal did not comment on the preliminary decision procedures governing assignment or reassignment of customers to or between tariff classes. Therefore, in this final decision we maintain our preliminary decision.

D.3 Procedures for assigning and reassigning retail customers to tariff classes

The procedure outlined in this section applies to direct control services.

Assignment of existing retail customers to tariff classes at the commencement of the 2016–20 regulatory control period

1. Powercor's customers will be taken to be "assigned" to the tariff class which Powercor was charging that customer immediately prior to 1 January 2016 if:
 - (a) they were a Powercor customer prior to 1 January 2016, and
 - (b) they continue to be a customer of Powercor as at 1 January 2016.

Assignment of new retail customers to a tariff class during the 2016–20 regulatory control period

2. If, after 1 January 2016, Powercor becomes aware that a person will become a customer of Powercor, then Powercor will determine the tariff class to which the new customer will be assigned.

⁵⁵ NER, cl. 6.12.1(17).

⁵⁶ NER, cl. 6.18.4.

⁵⁷ NER, cl. 6.18.4(4).

3. In determining the tariff class to which a customer or potential customer will be assigned, or reassigned, in accordance with paragraphs 2 or 5, Powercor will take into account one or more of the following factors:
 - (a) the nature and extent of the customer's usage
 - (b) the nature of the customer's connection to the network
 - (c) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.
4. In addition to the requirements under paragraph 3, Powercor, when assigning or reassigning a customer to a tariff class, will ensure the following:
 - (a) that customers with similar connection and usage profiles are treated on an equal basis
 - (b) those customers who have micro-generation facilities are treated no less favourably than customers with similar load profiles but without such facilities.

Reassignment of existing retail customers to another existing or a new tariff class during the 2016–20 regulatory control period

5. Powercor may reassign an existing customer to another tariff class in the following situations:
 - (a) Powercor receives a request from the customer or customer's retailer to review the tariff to which the existing retail customer is assigned; or
 - (b) Powercor believes that:
 - i. an existing customer's load characteristics or connection characteristics (or both) have changed such that it is no longer appropriate for that customer to be assigned to the tariff class to which the customer is currently assigned, or
 - ii. a customer no longer has the same or materially similar load or connection characteristics as other customers on the customer's existing tariff, then Powercor may reassign that customer to another tariff class.

Notification of proposed assignments and reassignments and rights of objection for standard control services

6. Powercor must notify the customer's retailer in writing of the tariff class to which the customer has been assigned or reassigned, prior to the assignment or reassignment occurring.
7. A notice under paragraph 6 above must include advice informing the customer's retailer that they may request further information from Powercor and that the customer or customer's retailer may object to the proposed reassignment. This notice must specifically include:

- (a) a written document describing Powercor's internal procedures for reviewing objections, if the customer's retailer provides express consent, a soft copy of such information may be provided via email
 - (b) that if the objection is not resolved to the satisfaction of the customer or customer's retailer under Powercor's internal review system within a reasonable timeframe, then, to the extent resolution of such disputes are with the jurisdiction of the Energy and Water Ombudsman Victoria or like officer, the customer or customer's retailer is entitled to escalate the matter to such a body
 - (c) that if the objection is not resolved to the satisfaction of the customer or customer's retailer under Powercor's internal review system and the body noted in paragraph 7(b) above, then the customer or customer's retailer is entitled to seek a decision of the AER via the dispute resolution process available under Part 10 of the NEL.
8. If, in response to a notice issued in accordance with paragraph 6 above, Powercor receives a request for further information from a customer or customer's retailer, then it must provide such information within a reasonable timeframe. If Powercor reasonably claims confidentiality over any of the information requested by the customer or customer's retailer, then it is not required to provide that information to the customer or customer's retailer. If the customer or customer's retailer disagrees with such confidentiality claims, he or she may have resort to the complaints and dispute resolution procedure, referred to in paragraph 7 above (as modified for a confidentiality dispute).
9. If, in response to a notice issued in accordance with paragraph 6 above, a customer or customer's retailer makes an objection to Powercor about the proposed assignment or reassignment, Powercor must reconsider the proposed assignment or reassignment. In doing so Powercor must take into consideration the factors in paragraphs 3 and 4 above, and notify the customer or customer's retailer in writing of its decision and the reasons for that decision.
10. If an objection to a tariff class assignment or reassignment is upheld by the relevant body noted in paragraph 7 above, then any adjustment which needs to be made to tariffs will be done by Powercor as part of the next network bill.
11. If a customer or customer's retailer objects to Powercor's tariff class assignment Powercor must provide the information set out in paragraph 7 above and adopt and comply with the arrangements set out in paragraphs 8, 9 and 10 above in respect of requests for further information by the customer or customer's retailer and resolution of the objection.

Notification of proposed assignments and reassignments and rights of objection for alternative control services

12. Powercor must make available information on tariff classes and dispute resolution procedures referred to in paragraph 7 above to retailers operating in Powercor's distribution area.

13. If Powercor receives a request for further information from a customer or customer's retailer in relation to a tariff class assignment or reassignment, then it must provide such information within a reasonable timeframe. If Powercor reasonably claims confidentiality over any of the information requested, then it is not required to provide that information. If the customer or customer's retailer disagrees with such confidentiality claims, he or she may have resort to the dispute resolution procedures referred to in paragraph 7 above, (as modified for a confidentiality dispute).
14. If a customer or customer's retailer makes an objection to Powercor about the proposed assignment or reassignment, Powercor must reconsider the proposed assignment or reassignment. In doing so Powercor must take into consideration the factors in paragraphs 3 and 4 above, and notify the customer or customer's retailer in writing of its decision and the reasons for that decision.
15. If an objection to a tariff class assignment or reassignment is upheld by the relevant body noted in paragraph 7 above, then any adjustment which needs to be made to tariffs will be done by Powercor as part of the next network bill.

System of assessment and review of the basis on which a retail customer is charged

16. Where the charging parameters for a particular tariff result in a basis charge that varies according to the customer's usage or load profile, Powercor will set out in its pricing proposal a method of how it will review and assess the basis on which a customer is charged.