

# Coliban Water Determination

1 July 2018 – 30 June 2023

19 June 2018



**An appropriate citation for this paper is:**

Essential Services Commission 2018, Coliban Water Determination: 1 July 2018 – 30 June 2023, 19 June

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# 1. General

## 1.1. Introduction

- (a) Clause 14 of the **WIRO** requires the commission to either:
- (i) approve the maximum prices the **regulated entity** may charge for **prescribed services** or the manner in which the **regulated entity's** prices are to be calculated, determined or otherwise regulated, as proposed by the **regulated entity** in its **price submission**; or
  - (ii) specify the maximum prices the **regulated entity** may charge for **prescribed services** or the manner in which the **regulated entity's** prices are to be calculated, determined or otherwise regulated.
- (b) On 13 June 2018, the commission made its decision under the **WIRO** in respect of:
- (i) the prices which Coliban Region Water Corporation (trading as Coliban Water) (ABN 96 549 082 360) (**Coliban Water**) may charge for **prescribed services** during the **regulatory period**; and
  - (ii) the standards and conditions of service and supply which **Coliban Water** has included in its **price submission**.
- (c) This Determination is made by the commission under section 33 of the **ESC Act**, pursuant to clauses 10 and 14 of the **WIRO**.
- (d) The purpose and reasons for the making of this Determination are to:
- (i) give effect to the decision of the commission referred to in clause 1.1(b)(i);
  - (ii) specify the maximum prices which **Coliban Water** may charge for **prescribed services** during the **regulatory period** or the manner in which such prices are to be calculated, determined or otherwise regulated;
  - (iii) facilitate the achievement of the commission's objectives in the **ESC Act** and the **WI Act**; and
  - (iv) reflect the requirements in the **WIRO**.
- (e) The reasons for the making of this Determination are as set out in the decision published by the commission on 19 June 2018.

## 1.2. Application

This Determination applies to **Coliban Water** and its successors and assigns in respect of the business carried on by **Coliban Water** at the date of this Determination.

### 1.3. Effective period

(a) **Term**

This Determination takes effect on the later of the date on which notice of its making is published in the Government Gazette or 1 July 2018, subject to clause 1.3(b), has effect until the earlier of the date on which it is amended or revoked by a later determination or 30 June 2023.

(b) **Next regulatory period**

Subject to clause 2.3(b)(ii), if the commission has not made a determination in respect of the prices to apply in the **next regulatory period** on or before 30 June 2023, the prices or the manner in which such prices are to be calculated or otherwise determined as set out in this Determination will continue to apply in respect of **prescribed services** provided by **Coliban Water** between 1 July 2023 and the date on which the determination for the **next regulatory period** comes into effect.

### 1.4. Modification of time periods

The commission may, by notice to **Coliban Water**, extend or reduce the time by which, or the period within which, **Coliban Water** or the commission must comply with an obligation under this Determination.

### 1.5. Summary and structure

Clause 2 of this Determination specifies the prices which will apply to **prescribed services** during the **regulatory period** and sets out the procedure and formula according to which prices may be adjusted during the **regulatory period** on an annual basis. Clauses 3, 4 and 5 provide for the circumstances in which prices may be adjusted during the **regulatory period** otherwise than in accordance with clause 2.

### 1.6. Definitions and interpretation

In this Determination, unless the contrary intention appears:

- (a) words and phrases in bold italics have the meanings given to them in part A of Schedule 1; and
- (b) the rules of interpretation in part B of Schedule 1 will apply.

## 1.7. Annexure

- (a) For convenience, Annexure A to this Determination summarises:
  - (i) the assumptions underpinning the prices to apply to **Coliban Water** during the **regulatory period** or the manner in which such prices are to be calculated, determined or otherwise regulated; and
  - (ii) the standards and conditions of services and supply additional to those specified in the **Code** which will be provided by **Coliban Water** pursuant to the decision referred to in clause 1.1(b)(ii).
- (b) For the avoidance of doubt, Annexure A does not form part of this Determination.

## 2. Price control

### 2.1. General principles

Subject to this Determination:

#### (a) Scheduled prices

**Coliban Water** must not charge more than:

- (i) the scheduled prices in Schedule 2, during the first **regulatory year**, and
- (ii) the amounts determined in accordance with clause 2.3, during each subsequent **regulatory year**,

in respect of those prescribed services to which the scheduled prices in Schedule 2 relate.

#### (b) Application principles

The application principles in Schedule 3 will apply to the prices charged by **Coliban Water** in respect of **prescribed services** during the **regulatory period**.

#### (c) Pricing principles

During the **regulatory period**, **Coliban Water** must apply the pricing principles in Schedule 4 when determining the prices to apply to the **prescribed services** to which the pricing principles in Schedule 4 relate.

### 2.2. Ancillary matters

#### (a) Contracts

Where **Coliban Water** has entered into a contract (a **relevant contract**) which relates to the provision of **prescribed services** prior to 1 July 2018, **Coliban Water** may charge the prices for **prescribed services** which are set out in that **relevant contract** until its expiration, termination or a periodic review of the prices set out in the contract. Once a **relevant contract** has expired or been terminated or the prices in a **relevant contract** have been subject to a periodic review, the scheduled prices in Schedule 2 (as adjusted in accordance with this Determination) or the prices determined in accordance with the pricing principles in Schedule 4 will apply for the remainder of the **regulatory period**.

#### (b) Dispute Resolution

Any question as to whether a price has been set in accordance with this Determination will be determined by the commission on the basis of the commission's interpretation of this Determination.

(c) **Publication**

**Coliban Water** must publish a list of its current prices and pricing principles for **prescribed services**, and all relevant supporting information that is relied upon to apply the prices or pricing principles, on its website at all times during the **regulatory period** and must provide a written copy of the list to its customers on request. The list must clearly indicate in respect of each price, the amount determined in accordance with this Determination, the amount of GST payable and the total price (in a manner consistent with the requirements of the *Competition and Consumer Act 2010* (Cth)).

(d) **GST**

**Coliban Water** will not be considered to be in contravention of this Determination if a price charged by it for a **prescribed service** exceeds the amount determined in accordance with clause 2 only by reason of the levying of a charge on account of **GST**.

## 2.3. Annual adjustment of prices

(a) **Adjustment**

(i) Subject to Schedule 2 and Schedule 5, the scheduled prices in Schedule 2 will be adjusted in each subsequent **regulatory year** in the **regulatory period** in accordance with the formula in clause 2.3(b)(i) and the procedure in clause 2.3(c), and will apply to the **prescribed services** to which the scheduled prices in Schedule 2 relate in that **regulatory year**.

(b) **Formula**

(i) Subject to Schedule 2 and Schedule 5, each price for the **prescribed services** referred to in clause 2.3(a) will be adjusted in accordance with the following formula with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**:

$$p_t = p_{t-1} \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t)$$

where:

$p_t$  is the price component for **regulatory year** 't'

$p_{t-1}$  is the price component for **regulatory year** 't-1'

$\frac{CPI_t}{CPI_{t-1}}$  for the particular **regulatory year** is:  
the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the start of the relevant **regulatory year**

divided by

the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the March quarter referred to above

$PPM_t$  is the prescribed price movement for the price component for **regulatory year** t determined in accordance with Schedule 2.

- (ii) If the commission has not made a determination in respect of the prices to apply in the **next regulatory period** on or before 30 June 2023,  $PPM_t$  will be set equal to zero for the purpose of adjusting prices in accordance with the formula in clause 2.3(b)(i) for **regulatory years** commencing on or after 1 July 2023 until the date on which this determination is amended or revoked by a later determination.

**(c) Adjustment procedure**

- (i) At least 30 **business days** prior to the commencement of each subsequent **regulatory year** in the **regulatory period**, **Coliban Water** must submit its proposed prices for the **prescribed services** referred to in clause 2.3(a) to apply in that subsequent **regulatory year** (the **revised scheduled prices**) to the commission for approval, together with sufficient information to enable the commission to assess whether the proposed prices comply with this Determination.
- (ii) The commission will approve the **revised scheduled prices** if it considers that they have been calculated in accordance with the formula set out in clause 2.3(b)(i).
- (iii) The commission will be deemed to have approved the **revised scheduled prices** if it has not provided notice under clause 2.3(c)(iv) to **Coliban Water** within 20 **business days** from the date of its receipt of the **revised scheduled prices**.
- (iv) If the commission does not approve the **revised scheduled prices**, the commission:

- (A) will provide notice to **Coliban Water** (including a statement of its reasons);
- (B) may request **Coliban Water** to provide any additional information specified by the commission;
- (C) will take any additional information provided by **Coliban Water** into account; and
- (D) will determine the **revised scheduled prices**.

## 2.4. Price changes during a billing period

### (a) Application of this clause

This clause 2.4 applies where **Coliban Water** issues an invoice in respect of a billing period during which a change to any price for a **prescribed service** comes into effect in accordance with this Determination.

### (b) Method of charging

**Coliban Water** must not charge the prices determined in accordance with this Determination in respect of any part of a billing period prior to the effective date of the change, but may charge for **prescribed services** in respect of the periods before and after the effective date of the change at the prices applicable for each of those periods on a pro-rata basis.

## 2.5. Reporting requirements

- (a) **Coliban Water** must make available to the commission all information reasonably requested by the commission from time to time for the purpose of enabling it to confirm that **Coliban Water** is complying with this Determination.
- (b) Without limiting clause 2.5(a), if, during the **regulatory period**, **Coliban Water** enters into a **new contract** which relates to the provision of a **prescribed service** to which the pricing principles in Schedule 4 relate, **Coliban Water** must, within 30 **business days** of the date of the **new contract**, on request provide the commission with a notice specifying:
  - (i) details of the **new contract**; and
  - (ii) information which demonstrates the way in which the prices in the **new contract** reflect the relevant pricing principles.

- (c) Without limiting clause 2.5(a), if **Coliban Water** proposes to stop providing a **prescribed service** or refuses to provide a **prescribed service** to a customer, or potential customer, during the **regulatory period**, it must:
- (i) in the case of a proposal to stop providing a **prescribed service**, provide a notice to the commission stating the nature of the **prescribed service** which it proposes to stop providing and the reason why it proposes to stop providing the **prescribed service**. This notice must be provided at least 30 **business days** prior to the date upon which **Coliban Water** proposes to stop providing the **prescribed service**; and
  - (ii) in the case of a refusal to provide a **prescribed service** to a customer, or potential customer, **Coliban Water** must provide a notice to the commission within 5 **business days** of the refusal, stating the nature of the **prescribed service** and the reason for the refusal.

### 3. Amendment of Schedule 2

(a) **Amendment**

- (i) **Coliban Water** may apply to the commission in accordance with this clause 3 and Schedule 5 for the amendment of the prescribed price movements and/or price components included in Schedule 2 for the following **regulatory year** (the **relevant regulatory year**) and all subsequent **regulatory years** remaining in the **regulatory period** (the **revised tariff schedule**).
- (ii) The average price movement for the **relevant regulatory year** and for each subsequent **regulatory year** in the **regulatory period** determined in accordance with the **revised tariff schedule** must not exceed the weighted average price movement that would otherwise have applied under this Determination as calculated in accordance with the following formula.

$$\frac{\sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}} \geq \frac{\sum_{i=1}^n \sum_{j=1}^m ap_t^{ij} q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}}, i = 1, \dots, n; j = 1 \dots m$$

where **Coliban Water** has  $n$  tariff categories, which each have up to  $m$  tariff components, and where, for each **regulatory year**  $t$  for which the calculation is undertaken:

$p_{t-1}^{ij}$  is the tariff charged in **regulatory year**  $t-1$  for component  $j$  of tariff  $i$

$p_t^{ij}$  is the proposed tariff for component  $j$  of tariff  $i$  determined in accordance with Schedule 2 where the **revised tariff schedule** is not applied

$ap_t^{ij}$  is the proposed tariff for component  $j$  of tariff  $i$  determined in accordance with Schedule 2 where the **revised tariff schedule** is applied

$q_{t-2}^{ij}$  is the quantity of component  $j$  of tariff  $i$  that was sold in **regulatory year**  $t-2$ , or, if an actual quantity is not available, either an estimate of the quantity of component  $j$  of tariff  $i$  that would have been sold in **regulatory year**  $t-2$  or a forecast of the quantity of component  $j$  of tariff  $i$  that is expected to be sold in **regulatory year**  $t-2$

**(b) Amendment procedure**

- (i) An application by **Coliban Water** under this clause 3 must be received by the commission at least 80 **business days** prior to the commencement of the **relevant regulatory year** and must be accompanied by the following information:
- (A) (1) a clearly articulated new tariff strategy that is consistent with clause 11 of the **WIRO** (the **revised tariff strategy**); or
  - (2) an explanation of how the **revised tariff schedule** is consistent with the tariff strategy for **Coliban Water** approved by the commission in connection with this Determination, (**the relevant tariff strategy**);
  - (B) a **revised tariff schedule** that specifies proposed prices for the **relevant regulatory year** and prescribed price movements for each subsequent **regulatory year** in the **regulatory period** that is consistent with the **relevant tariff strategy**;
  - (C) a statement setting out evidence demonstrating that **Coliban Water** has provided information to its customers explaining the **revised tariff schedule** and how it relates to the **relevant tariff strategy** and has consulted effectively with its customers on the **revised tariff strategy** (if clause 3(b)(i)(A)(1) applies) and the **revised tariff schedule**;
  - (D) a statement setting out the customer impacts resulting from the **revised tariff schedule** and actions proposed by **Coliban Water** to address these customer impacts; and
  - (E) an explanation of the calculation of the relevant quantities " $q_{t-2}^{ij}$ ".
- (ii) The commission may approve the **revised tariff schedule** submitted by **Coliban Water** under this clause 3 if it is satisfied that:
- (A) **Coliban Water** has complied with clause 3(b)(i)(A);
  - (B) the price movements calculated in accordance with the **revised tariff schedule** comply with clause 3(a)(ii);
  - (C) the **revised tariff schedule** is consistent with the **relevant tariff strategy**;
  - (D) **Coliban Water** has consulted effectively with its customers on the **revised tariff strategy** (if clause 3(b)(i)(A)(1) applies) and the **revised tariff schedule**;
  - (E) **Coliban Water** has effectively addressed customer impacts resulting from the **revised tariff schedule**; and
  - (F) the basis for calculating the relevant quantities " $q_{t-2}^{ij}$ " is reasonable.

- (iii) In determining whether it will approve the **revised tariff schedule**, the commission may request **Coliban Water** to provide any additional information specified by the commission and/or to resubmit any of the matters in clause 3(b)(i)(A)-(E).
- (iv) The commission will be deemed to have not approved a **revised tariff schedule** if it has not provided notice to **Coliban Water** within 40 **business days** from the date of its receipt of **Coliban Water's** application under this clause 3.
- (v) An approved **revised tariff schedule** will be taken to amend Schedule 2 to the extent of any inconsistency.

## 4. Uncertain or unforeseen events

### 4.1. General principle

- (a) **Coliban Water** may apply to the commission for the amendment of this Determination and/or the adjustment of the scheduled prices in Schedule 2 to reflect increased or decreased costs incurred by **Coliban Water** and/or increased or decreased revenue received by **Coliban Water** as a result of events which were uncertain or unforeseen at the time this Determination was made (an **uncertain events application**).
- (b) Whether or not **Coliban Water** makes an application under clause 4.1(a), **Coliban Water** must promptly notify the commission upon becoming aware of an event which could form part or all of the basis of an application.
- (c) The commission may take action under clause 4.3(b) in respect of an **uncertain events application** where the commission is satisfied that such action is necessary or desirable to take account of events that were uncertain or unforeseen at the time of making this Determination provided that the commission is satisfied that such action takes into account the interests of customers. Generally the matters taken into account will include positive and negative influences on revenue and expenditure. The Commission may limit an adjustment to only some events or a single event.

### 4.2. Consideration by the commission

#### (a) Examples of uncertain and unforeseen events

The matters that may, at the discretion of the commission, be taken into account by the commission under this clause 4 include:

- (i) actual licence fees or contributions payable by **Coliban Water** during a particular **regulatory year** during the **regulatory period** under section 51 of the *Safe Drinking Water Act 2003* (Vic), section 24 of the *Environment Protection Act 1970* (Vic) and section 4H(2) of the **WI Act** which differ from the forecast licence fees or contributions set out in Annexure A for that **regulatory year**;
- (ii) changes in the timing or scope of expenditure by **Coliban Water** on major capital projects including the Castlemaine Link Interconnector Pipeline and the Goldfield Superpipe projects;
- (iii) instances where the commission is satisfied that there is a material difference between the forecast demand levels set out in Annexure A and

actual demand levels for **Coliban Water** in one or more **regulatory years** during the **regulatory period**; and

- (iv) a change in or to any of the following:
  - (A) the **WI Act**, the *Water Act 1989* (Vic), the *Safe Drinking Water Act 2003* (Vic), the *State Owned Enterprises Act 1992* (Vic) and the *Environment Protection Act 1970* (Vic);
  - (B) any licence issued pursuant to any of the Acts referred to in clause 4.2(a)(iv)(A);
  - (C) a **relevant tax**; or
  - (D) the Statement of Obligations; or
  - (E) the introduction or cessation of a statutory carbon price or tax or a national emissions trading scheme or other scheme relating to the reduction of greenhouse gas emissions.

**(b) Exclusions**

In considering an **uncertain events application**, the commission will not take into account matters that:

- (i) are or should be within **Coliban Water's** control;
- (ii) were or should have been known by **Coliban Water** at the time the Determination was made;
- (iii) could reasonably have been foreseen by **Coliban Water**;
- (iv) should be or should have been planned for or managed by **Coliban Water**; and/or
- (v) reflect inefficient expenditure by **Coliban Water**.

**(c) Dispute resolution**

Any question as to whether a matter should be taken into account by the commission under this clause 4 will be determined by the commission in its absolute discretion.

### **4.3. Procedure**

**(a) Application process**

- (i) An **uncertain events application** must be accompanied by a statement setting out:
  - (A) the details of each relevant uncertain or unforeseen event;
  - (B) the amount and timing of any increase or decrease in operating and/or capital expenditure associated with the relevant event during

the **regulatory period** and/or the amount and timing of any increase or decrease in revenue associated with the relevant event during the **regulatory period**;

- (C) the basis for calculating the increase or decrease in operating and/or capital expenditure and/or revenue referred to in clause 4.3(a)(i)(B); and
  - (D) details of the proposed action to be taken by the commission under clause 4.3(b).
- (ii) The commission may identify an event or events which it considers has had or may have a material impact on **Coliban Water's** operating and/or capital expenditure and/or revenue and may decide to take action under clause 4.3(b) in the absence of an **uncertain events application** by **Coliban Water**.
  - (iii) The commission may request **Coliban Water** to provide any additional information specified by the commission in connection with an **uncertain events application**.

**(b) Action by the commission**

If the commission is satisfied of the matters set out in clause 4.1(c) in respect of an **uncertain events application** or an event identified by the commission under clause 4.3(a)(ii), the commission may, in its absolute discretion:

- (i) amend this Determination or adjust the scheduled prices in Schedule 2 and/or the revenue requirements in Annexure A with effect from a date and in a manner decided by the commission (in respect of one or more events) at a time decided by the commission; or
- (ii) take the **uncertain events application** into account in making its determination in respect of the prices which **Coliban Water** may charge for **prescribed services** in the **next regulatory period**.

## 5. Material error and unintended consequences

Where the commission is satisfied that in any material respect:

- (a) this Determination or any information relied upon in the making of this Determination contains an error, deficiency or miscalculation;
- (b) any information on which this Determination was based was false or misleading in a material respect; or
- (c) such amendment or adjustment is necessary or desirable to avoid an unintended consequence of this Determination,

the commission may decide to amend this Determination and/or specify a price adjustment, provided that it is satisfied that such amendment and/or price adjustment takes into account the interests of customers.

In most cases, an amendment will be undertaken in accordance with the commission's standard consultation process for price determinations, including the issue of a draft decision and an invitation for interested parties to make submissions to the commission in relation to the draft decision, as set out in clause 16(a) and (b) of the WIRO.

In some limited circumstances, the commission may amend this Determination without further consultation, or with only limited consultation. This will be the case where an amendment is not sufficiently material to warrant a full consultation process, or where there is urgency that justifies the commission moving quickly, as set out in clause 16(c) of the WIRO. In these circumstances, the commission will provide its reasons for proceeding with the amendment without consultation (or with a modified consultation process).

# Schedule 1 – Definitions and interpretation

## A Definitions

**business day** means a day on which banks are open for general banking business in Melbourne, not being a Saturday or a Sunday.

**Code** means the applicable *Customer Service Code* made under the **WI Act**.

**ESC Act** means the *Essential Services Commission Act 2001* (Vic).

**GST** has the meaning given in section 195-1 of the *A New Tax System (Goods and Services) Tax Act 1999* (Cth).

**miscellaneous services** means services that are provided in direct connection with **prescribed services**, prices in respect of which are either included in Schedule 2 or determined in accordance with the relevant pricing principles in Schedule 4.

**new contract** means any contract for **prescribed services** which is renewed, renegotiated or entered into during the **regulatory period**.

**next regulatory period** means the period commencing on 1 July 2023 and ending on a date specified by the commission.

**prescribed services** has the meaning given in the **WIRO** and includes **miscellaneous services**.

**price submission** has the meaning given in the **WIRO**.

**regulated entity** has the meaning given in the **WIRO**.

**regulatory period** means the period commencing on 1 July 2018 and ending on 30 June 2023.

**regulatory year** means each period of twelve months commencing on 1 July and ending on 30 June.

**relevant contract** means a contract which relates to the provision of **prescribed services**.

**relevant tax** means any tax imposed by or payable directly or indirectly to any government or public authority in the Commonwealth of Australia (including **GST**) but excluding:

- (a) the licence fees referred to in clause 4.2 of this Determination;
- (b) penalties and interest for late payment of any tax; or
- (c) any tax that replaces any of the taxes referred to in (a) and (b), where tax includes any rate, duty, charge or other like or analogous impost.

**WI Act** means the *Water Industry Act 1994* (Vic).

**WIRO** means the Water Industry Regulatory Order 2014 as at the date of this Determination.

## B Interpretation

Headings are for convenience only and do not affect interpretation. The following rules apply unless the context requires otherwise.

- (a) The singular includes the plural, and the converse also applies.
- (b) If a word or phrase is defined, its other grammatical forms have a corresponding meaning.
- (c) A reference to a person includes a corporation, trust, partnership, unincorporated body or other entity, whether or not it comprises a separate legal entity.
- (d) A reference to a clause or schedule is a reference to a clause of or schedule to this document.
- (e) A reference to a determination, agreement or document (including a reference to this document) is to the agreement or document as amended, supplemented, novated or replaced, except to the extent prohibited by this document or that other agreement or document.
- (f) A reference to an Act, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them.
- (g) If a period of time is specified and commences on a given day or on a day of an act or event, the period of time is to be calculated inclusive of that day.
- (h) Any “notice” to be given or matter to be “notified” must be in writing.
- (i) The symbol ‘ $\Sigma$ ’ requires a summation to be performed over the range of variables specified in respect of the algebraic terms specified.
- (j) All data which is utilised in calculations made under this Determination will be utilised to the accuracy, in terms of the number of decimal places, to which it is given.
- (k) A fixed price, charge or fee determined in accordance with this Determination is to be rounded down and specified to two decimal places.
- (l) A volumetric price, charge or fee determined in accordance with this Determination is to be rounded down and specified to four decimal places.
- (m) When a calculation is required under this document:
  - (i) **regulatory year** ‘t’ is the **regulatory year** in respect of which the calculation is being made;
  - (ii) **regulatory year** ‘t-1’ is the **regulatory year** immediately preceding **regulatory year** ‘t’;
  - (iii) **regulatory year** ‘t-2’ is the **regulatory year** immediately preceding **regulatory year** ‘t-1’.

## Schedule 2 – Prices

This schedule should be read in conjunction with Schedule 3, Schedule 4 and Schedule 5. Variable water, sewerage, recycled water and trade waste charges are rounded down to 4 decimal places. All other charges are rounded down to 2 decimal places.

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
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### 1.1 Water Volume Charges (per kL)

All Districts*	2.2554	-1.2%	-1.2%	-1.2%	-1.2%
Central District*	2.2554	-1.2%	-1.2%	-1.2%	-1.2%
Northern District*	2.0325	-100%	-	-	-
Standpipe (Treated)	2.2554	-1.2%	-1.2%	-1.2%	-1.2%
Untreated	1.1277	-1.2%	-1.2%	-1.2%	-1.2%
Recycled	1.6915	-1.2%	-1.2%	-1.2%	-1.2%
Standpipe (Recycled)	1.6915	-1.2%	-1.2%	-1.2%	-1.2%

\*Northern District and Central District water volume charges will be the same from 2019-20 onward (All Districts tariff will then apply).

### 1.2 Urban Water Access Fees\* (per annum)

20mm Meter or Less	228.50	-1.2%	-1.2%	-1.2%	-1.2%
25mm Meter	357.03	-1.2%	-1.2%	-1.2%	-1.2%
32mm Meter	584.96	-1.2%	-1.2%	-1.2%	-1.2%
40mm Meter	914.00	-1.2%	-1.2%	-1.2%	-1.2%
50mm Meter	1428.13	-1.2%	-1.2%	-1.2%	-1.2%
80mm Meter	3656.00	-1.2%	-1.2%	-1.2%	-1.2%
100mm Meter	5712.50	-1.2%	-1.2%	-1.2%	-1.2%
150mm Meter	12853.13	-1.2%	-1.2%	-1.2%	-1.2%

\*Non-residential recycled Water Access Fee is based on 50% of the Urban Water Access Fee.

\*Urban Untreated Water Access Fee is based on 50% of the Urban Water Access Fee.

\*Residential Recycled 20 mm Meter or less Access Fee is \$0.00 from 2018-19.

### 1.3 Fire Services Access Fees (per annum)

32mm Meter	54.40	-1.2%	-1.2%	-1.2%	-1.2%
40mm Meter	81.62	-1.2%	-1.2%	-1.2%	-1.2%
50mm Meter	117.28	-1.2%	-1.2%	-1.2%	-1.2%
80mm Meter	280.36	-1.2%	-1.2%	-1.2%	-1.2%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
100mm Meter	438.09	-1.2%	-1.2%	-1.2%	-1.2%
150mm Meter	920.63	-1.2%	-1.2%	-1.2%	-1.2%
<b>1.4 Sewer Fees</b>					
Sewer Access Fee (per annum)	686.64	-1.2%	-1.2%	-1.2%	-1.2%
STED Sewer Rebate (Elmore only)	564.35	-1.5%	-1.5%	-1.5%	-1.5%
Sewer Volume Charge (per kL) (non-residential only)*	0.9787	-1.2%	-1.2%	-1.2%	-1.2%
<i>*Applies to discharges in excess of 0.63 kL per day (equivalent to 230kL per year) in any given billing period.</i>					
<b>2.1 Rural Charges – Unmodernised</b>					
Volume Charge (per ML)	261.5052	-1.2%	-1.2%	-1.2%	-1.2%
Excess Usage (per ML)	3237.2900	-1.2%	-1.2%	-1.2%	-1.2%
Infrastructure Charge (per ML entitlement)	165.67	-1.2%	-1.2%	-1.2%	-1.2%
Access Charges (per annum)					
Unmodernised Pipeline	856.09	-1.2%	-1.2%	-1.2%	-1.2%
Channel	481.13	-1.2%	-1.2%	-1.2%	-1.2%
Channel – Single Shared Outlet	384.90	-1.2%	-1.2%	-1.2%	-1.2%
Storage Access	106.67	-1.2%	-1.2%	-1.2%	-1.2%
Outlet Fees (per additional outlet)	27.51	-1.2%	-1.2%	-1.2%	-1.2%
<b>2.2 Rural Charges – Modernised Pipeline</b>					
Volume Charge (per ML)	261.5052	-1.2%	-1.2%	-1.2%	-1.2%
Excess Usage (per ML)	3237.2900	-1.2%	-1.2%	-1.2%	-1.2%
Infrastructure Charge – modernised (per ML entitlement) :	248.86	-1.2%	-1.2%	-1.2%	-1.2%
Modernised Network Component	223.97	-1.2%	-1.2%	-1.2%	-1.2%
Modernised Headworks Component	24.89	-1.2%	-1.2%	-1.2%	-1.2%
Termination Fee (per ML entitlement)	2239.70	-1.2%	-1.2%	-1.2%	-1.2%
<b>Modernised Rural Access Charges (per annum)</b>					
20mm Meter or less	228.50	-1.2%	-1.2%	-1.2%	-1.2%
25mm Meter	357.03	-1.2%	-1.2%	-1.2%	-1.2%
32mm Meter	584.96	-1.2%	-1.2%	-1.2%	-1.2%
40mm Meter	914.00	-1.2%	-1.2%	-1.2%	-1.2%
50mm Meter	1428.13	-1.2%	-1.2%	-1.2%	-1.2%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
80mm Meter or greater	3656.00	-1.2%	-1.2%	-1.2%	-1.2%
<b>3.1 Major Trade Waste Charges</b>					
Access Fee (per annum)	In accordance with pricing principles				
Volume Charge (per kL)	0.9787	-1.2%	-1.2%	-1.2%	-1.2%
Quality Parameters (per kg)					
COD	0.3857	-1.2%	-1.2%	-1.2%	-1.2%
SS	0.8238	-1.2%	-1.2%	-1.2%	-1.2%
TKN	1.6350	-1.2%	-1.2%	-1.2%	-1.2%
P	3.1607	-1.2%	-1.2%	-1.2%	-1.2%
TDS	0.0247	-1.2%	-1.2%	-1.2%	-1.2%
Sampling	Actual Cost				
<b>3.2 Minor Trade Waste Charges</b>					
Minor Trade Waste (per annum)	155.60	-1.2%	-1.2%	-1.2%	-1.2%
<b>4.1 New Customer Contributions (per lot)</b>					
Water – growth	1626.43	0.0%	0.0%	0.0%	0.0%
Water – non-growth	1301.14	0.0%	0.0%	0.0%	0.0%
Sewer – growth	1626.43	0.0%	0.0%	0.0%	0.0%
Sewer – non-growth	1301.14	0.0%	0.0%	0.0%	0.0%
Recycled Water	813.21	0.0%	0.0%	0.0%	0.0%
<b>5.1 Core Miscellaneous Services</b>					
Project Management Fee (per project)	620.12	10.0%	-1.2%	-1.2%	-1.2%
Fast Track Project Management Fee (per project)	930.17	10.0%	-1.2%	-1.2%	-1.2%
Project Management Fee (per lot)	82.91	10.0%	-1.2%	-1.2%	-1.2%
Fast Track Project Management Fee (per lot)	124.36	10.0%	-1.2%	-1.2%	-1.2%
Water & Sewer Plan Amendment Fee	74.26	-1.2%	-1.2%	-1.2%	-1.2%
Mains Extension Plan Resubmission Fee	199.22	-1.2%	-1.2%	-1.2%	-1.2%
Property Connection Application	74.26	-0.1%	-1.0%	-1.0%	-1.0%
Repeat Site Inspection Fee	199.22	-1.2%	-1.2%	-1.2%	-1.2%
Fast Track Practical Completion	249.01	-1.2%	-1.2%	-1.2%	-1.2%
Recycled Connection Inspection Fee	275.39	-1.2%	-1.2%	-1.2%	-1.2%
Special Meter Reading Fee	19.25	-1.2%	-1.2%	-1.2%	-1.2%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
Information Statement	28.92	-1.2%	-1.2%	-1.2%	-1.2%
Consent to Erect a Structure (Build Over)	310.27	-1.2%	-1.2%	-1.2%	-1.2%
Hydrant Flow and Pressure Test Field Information	246.10	-1.2%	-1.2%	-1.2%	-1.2%
Standard Pressure Information	106.41	-1.2%	-1.2%	-1.2%	-1.2%
Restrictor Action Fee	105.47	-1.2%	-1.2%	-1.2%	-1.2%

## 5.2 Non-Core Miscellaneous Services

Various Non-Core Miscellaneous

In accordance with pricing principles

As set out in clause 1.1(d) of this Determination, the role of the Commission in making this Determination is limited to specifying the maximum prices that **Coliban Water** may charge for **prescribed services** during the **regulatory period**, or the manner in which such prices are to be calculated, determined or otherwise regulated.

It is the role of **Coliban Water** to apply a tariff in accordance with the **Water Act 1989 (Vic)**. The Commission does not have a role in hearing disputes about individual billing issues that users may have.

## Schedule 3 – Application of prices

### 3.1 Urban water volume charge

The table below indicates the allocation of towns to districts for the purposes of applying the water volume charge. Note that urban water volume charges in Central Districts and Northern Districts will be the same from 2019-20.

District	Towns
<b>Central Districts</b>	The towns within the <b>Coliban Water</b> supply region except those mentioned in the Northern District are subject to Central District pricing
<b>Northern Districts</b>	The towns of Echuca, Cohuna, Gannawarra, Gunbower, Leitchville, Mead and Rochester.
<b>Untreated supply</b>	All urban water that is supplied untreated. Towns include Borung, Dingee, Elmore (untreated), Goornong (untreated), Jarklin, Kyneton (untreated), Macorna, Mitiamo, Mysia and Wychitella.

### 3.2 Sewer volume charge

Only non-residential customers are subject to the sewer volume charge on discharges in excess of 0.63kL per day in any given billing period (230kL per annum). The volume charge calculation is as follows:

$$\frac{((\text{Water Consumption} \times \text{Industry Discharge Factor}) - ((230/\text{Days in year}) \times \text{Days in period})) \times \text{Price}}{(\text{KL per billing period})} \quad (\text{refer to table 3.3}) \quad (\text{allowable discharge in the period kL}) \quad (\$/\text{kL})$$

Where this calculation results in a negative (occurring when a customer's sewer volume is less than the allowable volume in a period) the applicable charge becomes \$0.00.

### 3.3 Industry discharge factors

Description	%	Definition	%
Airfield	50	Office	95
Bakery	25	Panel Beating	95
Bank/Financial Institution	95	Plant Nursery	25
Bowling Club	25	Police station and dwelling	75
Building	95	Post Office	95

Description	%	Definition	%
Café/Restaurant	95	Pottery	25
Caravan Park	50	Poultry Shed	50
Car Park	95	Pre School	50
Car Yard	75	Private Hospital	75
Cemetery	25	Office	95
Church	75	Quarry	25
Court House	95	Racecourse/Stables	50
Dairy	95	Railway Station	75
Dental Clinic	95	Recreational Club	95
Depot	95	Recreation Centre	95
Factory	95	Recreation Reserve – Facilities	25
Farm including house	65	Recreation Reserve – No Facilities	0
Fire Station	75	Restaurant	95
Funeral Director	95	Retail Store	95
Golf Course	25	School – Large Non Discharge Usage	15
Guest House	75	School – Normal Discharge Usage	50
Hall	95	School – Zero Non Discharge Usage	75
Health Centre	95	Service Station	95
Hospital	75	Shed	95
Hotel – Large Non Discharge Usage	35	Shop	95
Hotel – Normal Discharge Usage	95	Shop and Dwelling	75
Ice Skating Rink	75	Shop and Factory	95
Industrial Land	0	Special Accommodation	75
Infant Welfare	50	Squash Courts	95
Information Centre – Tourist	95	Standpipe	0
Jail	75	Swimming Pool	50
Kennels	75	Telephone Exchange	95
Laboratory	95	Tennis Courts	95

Description	%	Definition	%
Laundry/Dry Cleaner	95	Theatre	95
Lawn Tennis Courts	25	Timber Yard	95
Library	95	Tip	95
Median Strip	0	Toilet	95
Medical Rooms	95	Trade Waste	(by agreement)
Mining Lease	0	Unspecified	95
Mining Treatment	25	Veterinary Clinic	75
Motel – Normal Discharge Usage	75	Warehouse	95
Motel – Large Non Discharge Usage	40	Winery	25
Municipal Office	95	Workshop	95
Nursing Home	75	Youth Club	95

### 3.4 Miscellaneous fees and charges

The following table sets out the definitions of the miscellaneous charges contained in Schedule 2.

Miscellaneous service	Definition
<b>Project management fee (per project)</b>	Fee for the management of developer works. Applied on a per project basis.
<b>Fast track project management fee (per project)</b>	Fee for the management of developer works completed within priority period. Applied on a per project basis.
<b>Project management fee (per lot)</b>	Fee for the management of developer works. Applied on a per lot basis.
<b>Fast track project management fee (per lot)</b>	Fee for the management of developer works completed within priority period. Applied on a per lot basis.
<b>Water &amp; sewer plan amendment fee</b>	Fee for the management of adjustments to on site water and sewer assets.
<b>Mains extension plan resubmission fee</b>	Fee for resubmission of an amended mains extension plan for approval.

Miscellaneous service	Definition
<b>Property connection application</b>	Fee for administering the lodgement and management of land development applications and associated works.
<b>Repeat site inspection fee</b>	Fee for additional site inspections to ensure compliance (per inspection).
<b>Fast track practical completion</b>	Fee for site inspection at practical completion to ensure completion within 2 business days.
<b>Recycled connection inspection fee</b>	Fee for assessing compliance to ensure that cross connection does not occur.
<b>Special meter reading fee</b>	Fee to conduct a meter read at a customer's request.
<b>Information statements</b>	Provision of information statements on the transfer of properties.
<b>Consent to erect a structure (build over)</b>	Fee for assessing an application and issuing consent for any structure to be constructed on an easement or within 1 metre of Coliban Water assets.
<b>Hydrant flow and pressure test field information</b>	Fee for undertaking in-field testing of hydrant flow or pressure and providing test results information.
<b>Standard pressure information</b>	Fee for providing information on pressure from system data.
<b>Restrictor action fee</b>	Fee for installation of restrictor device due to non-payment of debt.

## Schedule 4 – Pricing principles

### 4.1 Recycled water pricing principles

Recycled water prices should be set so as to:

- have regard to the price of any substitutes and customers' willingness to pay;
- cover the full cost of providing the service (with the exception of services related to specified obligations or maintaining balance of supply and demand); and
- include a variable component.

Where **Coliban Water** does not propose to fully recover the costs associated with recycled water, it must demonstrate to the commission that:

- it has assessed the costs and benefits of pursuing the recycled water project;
- it has clearly identified the basis on which any revenue shortfall is to be recovered; and
- if the revenue shortfall is to be recovered from non-recycled water customers, either the project is required under the Statement of Obligations which applies to **Coliban Water** or pursuant to other government policies that apply to **Coliban Water** or there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.

### 4.2 Pricing principles where scheduled prices do not apply

Where the prices set out in Schedule 2 do not apply because the nature of the service provided to a particular customer (including, in the case of trade waste customers, the volume or load of waste treated) is unique, prices must be set as follows:

- variable prices (including, in the case of trade waste customers, load-based charges) should reflect the long run marginal cost of providing services (including, in the case of trade waste customers, trade waste transfer, treatment and disposal);
- the total revenue received from each customer should be greater than the cost that would be avoided from ceasing to serve that customer, and (subject to meeting avoidable cost) less than the stand alone cost of providing the service to the customer in the most efficient manner;
- the methodology used to allocate common and fixed costs to that customer should be clearly articulated and be consistent with any guidance provided by the commission;
- prices should reflect reasonable assumptions regarding the customer's demand for services (including, in the case of trade waste customers, the volume and strength of trade waste anticipated to be produced by that customer);
- depreciation rates and rates of return used to determine prices should be consistent with those adopted by the commission for the purposes of making this Determination;

- customers should be provided with full details of the manner in which prices have been calculated and any new, renewed or renegotiated contractual agreements with customers should indicate that the prices to apply are subject to any Determination made by the commission;
- where applying these principles results in significant changes to prices or tariff structures, arrangements for phasing in the changes may be considered and any transitional arrangements should be clearly articulated.

### 4.3 Pricing principles for New Customer Contributions (NCC)

#### Core pricing principles

NCC, including standard or negotiated NCC, will be calculated by applying the following core NCC pricing principles.

Standard and negotiated NCC will:

- have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- have regard to the incremental future revenues that will be earned from customers at that connection;
- be greater than the avoidable cost of that connection and less than the standalone cost of that connection.

Notes:

1. Given that NCC are to be based on the net incremental cost of connection (ie incremental costs net of incremental benefits), in this context, the costs referred to in the efficient pricing bound are the net costs, specifically the avoidable net cost of connection and standalone net cost of connection.
2. Where the connection arrangement requires assets to be gifted, the value of gifted assets will be excluded for the purpose of calculating net costs.
3. Incremental costs may include financing costs associated with constructing an asset sooner than planned.

#### Incremental financing costs

Incremental financing costs (IFC) should be calculated using this formula:

$$IFC = \left(1 - \left[\frac{1}{(1+r)^n}\right]\right) \times \text{cost of capital being provided sooner than planned}$$

where:

- r estimated pre-tax regulatory rate of return
- n the number of years the asset is required sooner than planned.

## Gifted Assets

**Coliban Water** can require developers to provide and gift to **Coliban Water** specified assets as a condition of connection, provided that **Coliban Water**:

- makes clear to potential developers which assets a developer will be responsible for providing and gifting, and which will be provided by **Coliban Water**;
- confirms that negotiation of any non-standard connection and associated charges will be undertaken in accordance with **Coliban Water's** published negotiating framework; and
- the value of gifted assets will be excluded for the purposes of calculating net costs.

## 4.4 Pricing principles for miscellaneous services not included in Schedule 2

Prices for miscellaneous services must be set according to actual cost calculated on the basis of the aggregate of:

- direct third party or contractor invoice cost;
- direct marginal internal costs, including labour, materials and transport costs; and
- a fair contribution to overheads.

For bank dishonour, debt collection and legal fees, the third party costs must be charged directly to the customer with no contribution for internal costs or a contribution to overheads.

## 4.5 Guidelines

**Coliban Water** must comply with any guidelines issued by the commission from time to time which relate to the setting of prices for **prescribed services** to which Schedule 4 relates.

## Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt and cost savings from the rollout of digital metering

If in any **regulatory year** Condition A applies, the formula set out in clause 2.3(b) is not applicable to the extent it relates to the prices outlined in Schedule 5A. These prices are set out in items 1.1, 1.2, 1.4, 2.1 and 2.2 of Schedule 2.

If in any **regulatory year** Condition B applies, the formula set out in clause 2.3(b) is not applicable to the extent it relates to the prices as determined by **Coliban Water**. These prices are set out in Schedule 2.

Instead the prices above will be adjusted in accordance with the formulas (as applicable) provided below, with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**.

**Coliban Water** must comply with any guidance issued by the commission from time to time which relate to the setting of prices for **prescribed services** to which Schedule 2 and 4 relates.

### Schedule 5A – Adjustments to prices

	Condition A (Annual cost of debt update)	Condition B (Cost savings from roll-out of digital metering)
1.1 Water Volume Charges	X	
1.2 Urban Water Access Fees	X	
1.4 Sewer Access Fee and Volume Charge	X	
2.1 Rural Charges (Unmodernised)	X	
2.2 Rural Charges (Modernised) – Volume Charge, Excess Usage Charge, Access Charges (all), Infrastructure Charge	X	
The cost savings will be apportioned across the tariffs listed in Schedule 2 as determined by Coliban Water.		X

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

## Schedule 5B – Prices

### Condition A – Annual cost of debt update

Condition A will apply when the trailing average cost of debt in any **regulatory year** 't' changes in that year. The adjustment is calculated as per formula 4.

The difference in the forecast and actual regulatory rate of return in any **regulatory year** 't' is multiplied by the average of the regulatory asset base (RAB) to determine the change in **Coliban Water's** total expected return. The RAB is set out in Table 5 of Annexure A.

The trailing average cost of debt adjustment will be apportioned across the tariffs listed in Schedule 5A.

### Formula 1: Determining the nominal cost of debt

$$CoD_t^{nominal} = \sum_{i=t-10}^{t-1} \frac{CoD_i^{nominal}}{10}$$

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$CoD_t^{nominal}$	Is equal to the simple average of the 10 years up to (but not inclusive of) <b>regulatory year</b> 't' of: <ul style="list-style-type: none"><li>- The data series outlined in Table 1 of Annexure A</li></ul> and <ul style="list-style-type: none"><li>- RBA Table F3 – Non-financial corporate BBB-rated bonds – Yield – 10 year target tenor [Series ID FNFYBBB10M]</li></ul> from 1 April to 31 March before the start of <b>regulatory year</b> 't' (e.g. 1 April 2017 to 31 March 2018 in relation to 2018-19)
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### Formula 2: Determining the real cost of debt

$$CoD_t^{real} = \frac{(1 + CoD_t^{nominal})}{(1 + \pi^{det})} - 1$$

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$\pi^{det}$	Is the inflation factor which is equal to 2.3% for all regulatory years
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Formula 2 outlines the process for converting the trailing average cost of debt from nominal to real using the Fisher equation.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

### Formula 3: Determining the real regulatory rate of return

$$RRR_t^{real} = 0.4 \times CoE_t^{real} + 0.6 \times CoD_t^{real}$$

$RRR_t^{real}$	Is the post-tax ‘vanilla’ regulatory rate of return in real terms for <b>regulatory year ‘t’</b> rounded to two decimal places, i.e. 4.347% is rounded to 4.35%
$CoE_t^{real}$	Is the real cost of equity determined through <b>Coliban Water’s</b> PREMO rating, which is equal to 4.9% for 2018-19 to 2022-23

### Formula 4: Trailing average cost of debt adjustment

$$CDA_t^j = (RRR_t^{act} - RRR_t^{det}) \times \left( \frac{RAB_{opening,t}^{det} + RAB_{closing,t}^{det}}{2} \right) \times \frac{CPI_t}{CPI_{base}} \times \frac{\alpha_t^j \times q_{j,t}^{det}}{\sum_{j=1,n}^{t=t} (\alpha_t^j \times q_{j,t}^{det})} \times \frac{1}{q_{j,t}^{det}}$$

$CDA_t^j$	Is the trailing average cost of debt adjustment applied proportionally to tariff j, based on tariff j’s relative share of total revenues. Total revenues refer to the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply
$RRR_t^{act}$	Is the actual calculated real post tax ‘vanilla’ regulatory rate of return in <b>regulatory year ‘t’</b>
$RRR_t^{det}$	Is the determination real post tax ‘vanilla’ regulatory rate of return in <b>regulatory year ‘t’</b>
$RAB_{opening,t}^{det}$	Is the determination opening regulatory asset base in <b>regulatory year ‘t’</b>
$RAB_{closing,t}^{det}$	Is the determination closing regulatory asset base in <b>regulatory year ‘t’</b>
$CPI_t$	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter immediately preceding the start of the relevant <b>regulatory year</b>
$CPI_{base}$	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter in year 2017 equal to 110.5
$\alpha_t^j$	Is the price for tariff j at <b>regulatory year ‘t’</b> before the cost of debt adjustment where: $\alpha_t^j = p_{t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j)$

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

$p_{t-1}^j$	Is the price for tariff j in <b>regulatory year</b> 't-1'
$q_{j,t}^{det}$	Is the determination quantity for tariff j in <b>regulatory year</b> 't'
$\sum_{j=1,n}^{t=t} (\alpha_t^j \times q_{j,t}^{det})$	Is the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply

Formula 4 outlines the process for calculating the adjustment to prices outlined in Schedule 5A to reflect the new cost of debt. This is done in two steps. The first step is to calculate the change in the revenue requirement by multiplying the adjustment to the rate of return, to reflect the updated cost of debt, by the average regulatory asset base.

The second step is to apply the change in the revenue requirement proportionally to tariff j, based on tariff j's relative share of total revenues. Total revenues are defined as the sum of all revenues received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply.

#### Formula 5: Schedule 5A tariffs

$$p_t^{j,COD} = p_{t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j) + CDA_t^j$$

$p_t^{j,COD}$	Is the price for tariff j at <b>regulatory year</b> 't' that accounts for the cost of debt adjustment. The cost of debt adjustment will apply to the tariffs listed in Schedule 5A
$p_{t-1}^j$	Is the price for tariff j in <b>regulatory year</b> 't-1'
$CPI_t$	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter immediately preceding the start of the relevant <b>regulatory year</b>
$PPM_t^j$	The prescribed price movement for the price component for tariff j in <b>regulatory year</b> 't' as per the determination
$CDA_t^j$	Is the trailing average cost of debt adjustment applied proportionally to tariff j, based on tariff j's relative share of total revenues as outlined in formula 4. Total revenues refer to the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

## **Condition B – Price adjustment to account for cost savings from the rollout of digital metering**

**Condition B** will apply to account for any cost savings from the rollout of digital metering in any *regulatory year* 't'.

The cost savings will be apportioned across any or all of the tariffs listed in Schedule 2.

**Condition A** will continue to apply when **Condition B** applies.

When **Condition B** applies:

- 1. Formula 5** will continue apply and will include the cost savings from the digital rollout apportioned to tariffs in Schedule 5A.
- 2.** The formula set out in **clause 2.3(b)** will continue to apply and will include the cost savings from the digital rollout apportioned to the remaining tariffs in Schedule 2 (that are not in Schedule 5A).

**The Common Seal of the  
Essential Services  
Commission** was affixed to  
this Determination with the  
authority of the commission.



Date: 19 June, 2018

A handwritten signature in black ink, appearing to read "Ron Ben-David", written over a horizontal line.

**Dr Ron Ben-David**

**Chairperson**

## Annexure A

**Table 1** Historical cost of debt (nominal)

Per cent

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Cost of debt	6.92%	7.36%	7.05%	6.31%	5.27%	7.05%	5.36%	5.27%	4.91%	4.53%

**Table 2** Forecast real regulatory rate of return

Per cent

	2018-19	2019-20	2020-21	2021-22	2022-23
Regulatory rate of return	4.13%	4.13%	4.13%	4.13%	4.13%

**Table 3** Benchmark revenue requirement

\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Operating expenditure	67.3	67.0	67.2	66.7	66.8
Return on assets	20.5	20.5	20.4	20.5	20.5
Regulatory depreciation	31.5	32.6	33.6	34.7	36.0
Adjustments from last period	0.0	0.0	0.0	0.0	0.0
Non-prescribed revenue offset of revenue requirement	0.0	0.0	0.0	0.0	0.0
Tax allowance	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>119.3</b>	<b>120.1</b>	<b>121.2</b>	<b>121.9</b>	<b>123.2</b>

**Table 4 Updated regulatory asset base**  
\$m 2017-18

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB at 1 July	329.0	358.6	396.2	419.9	466.6
<i>Plus</i> Gross capital expenditure	45.9	57.7	47.3	65.4	36.7
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	4.0	3.0	4.1	3.5	3.8
<i>Less</i> Proceeds from disposals	1.2	4.7	5.8	0.1	1.8
<i>Less</i> Regulatory depreciation	11.2	12.4	13.7	15.1	16.2
<b>Closing RAB at 30 June</b>	<b>358.6</b>	<b>396.2</b>	<b>419.9</b>	<b>466.6</b>	<b>481.4</b>

**Table 5 Rolled forward regulatory asset base**  
\$m 2017-18

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB at 1 July	481.4	496.3	496.1	495.0	494.4	496.6
<i>Plus</i> Gross capital expenditure	38.0	36.8	37.2	38.5	42.5	42.1
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	4.4	3.9	4.2	4.0	4.1	4.2
<i>Less</i> Proceeds from disposals	1.5	1.5	1.5	1.5	1.5	1.5
<i>Less</i> Regulatory depreciation	17.2	31.5	32.6	33.6	34.7	36.0
<b>Closing RAB at 30 June</b>	<b>496.3</b>	<b>496.1</b>	<b>495.0</b>	<b>494.4</b>	<b>496.6</b>	<b>497.1</b>

**Table 6**      **Approved licence fee and environmental contribution assumptions**  
\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Essential Services Commission licence fee	0.07	0.07	0.07	0.07	0.10
Department of Health and Human Services licence fee	0.04	0.04	0.04	0.04	0.04
Environment Protection Authority licence fee	0.19	0.19	0.19	0.19	0.19
Environmental contribution	5.02	4.91	4.80	4.69	4.58

**Table 7**      **Bulk water purchases**  
\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Bulk water purchases	2.33	2.33	2.33	2.33	2.33

**Table 8**      **Demand forecast**

	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Water assessments (no.)</b>					
Residential	69,221	70,472	71,745	73,042	74,362
Non-residential	6,922	6,973	7,024	7,076	7,128
Total	76,143	77,445	78,769	80,118	81,490
<b>Sewerage assessments (no.)</b>					
Residential	62,903	64,189	65,349	66,530	67,732
Non-residential	5,851	5,894	5,938	5,981	6,026
Total	68,754	70,083	71,287	72,511	73,757
<b>Billable water consumption (ML)</b>					
Residential	12,997	13,232	13,471	13,715	13,962
Non-residential	6,502	6,550	6,598	6,646	6,695
Total	19,499	19,782	20,069	20,361	20,658

**Table 9 Major capital projects**

Projects	Expected start date	Expected completion date
Digital customer metering	2018-19	2019-20
Western Bendigo water network growth and pressure	2018-19	2021-22
Strathfieldsaye water network augmentation	2018-19	2021-22
Kyneton water reclamation plant lagoon compliance works	2018-19	2021-22
Echuca West tank	2019-20	2021-22
Heathcote water reclamation plant compliance	2018-19	2021-22
Castlemaine water reclamation plant sludge handling upgrades	2020-21	2022-23
Echuca water treatment plant security of supply	2018-19	2022-23
Epsom Huntly water main augmentation	2020-21	2022-23
Bendigo water reclamation plant sludge processing upgrades	2020-21	2023-24