

Lower Murray Water Determination

1 July 2018 – 30 June 2023

19 June 2018



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Contents

1. General	1
1.1. Introduction	1
1.2. Application	2
1.3. Effective period	2
1.4. Modification of time periods	2
1.5. Summary and structure	2
1.6. Definitions and interpretation	3
1.7. Annexure	3
2. Price control	4
2.1. General principles	4
2.2. Ancillary matters	4
2.3. Annual adjustment of prices	5
2.4. Price changes during a billing period	13
2.5. Reporting requirements	13
3. Uncertain or unforeseen events	15
3.1. General principle	15
3.2. Consideration by the commission	15
3.3. Procedure	17
4. Material error and unintended consequences	18
Schedule 1 – Definitions and interpretation	19
A Definitions	19
B Interpretation	20
Schedule 2 – Prices (prescribed services to urban water users)	22
Schedule 3 – Prices (services to users other than urban water users)	25
Schedule 4 – Calculation of revenue cap revenue requirements for each regulatory year	30
Schedule 5 – Application of prices	31
5.1 Urban water usage – domestic customers	31
5.2 Urban sewerage and minor trade waste – domestic and non-domestic customers	31
5.3 Urban day labour construction – security amount	32
5.4 Rural irrigation and diversions – delivery share	32
5.6 Rural drainage services – divisions	33
5.7 Inclining block tariffs	33
5.8 Miscellaneous fees and charges	33

Schedule 6 – Pricing principles	35
6.1 Recycled water pricing principles	35
6.2 Pricing principles where scheduled prices do not apply	35
6.3 Pricing principles for New Customer Contributions (NCC)	36
Core pricing principles	36
Incremental financing costs	36
Gifted Assets	37
6.4 Pricing principles for miscellaneous services not included in Schedule 2 or Schedule 3	37
6.5 Guidelines	37
6.6 Pricing principles for termination fees	37
Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through	38
Schedule 7A – Adjustments to prices	38
Schedule 7B – Prices	39
Formula 1: Determining the nominal cost of debt	39
Formula 2: Determining the real cost of debt	39
Formula 3: Determining the real regulatory rate of return	40
Formula 4: Trailing average cost of debt adjustment	40
Formula 6: Schedule 7A tariffs	43
Annexure A	46

1. General

1.1. Introduction

- (a) Rule 29 of the **WCIR** requires the commission to approve or determine the regulated charges which the **Part 6 operator** may charge as set out in the **Part 6 operator's** application under rule 25 of the **WCIR**.
- (b) 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.
- (c) On 13 June 2018, the commission made its decision under the **WCIR** and the **WIRO** in respect of:
 - (i) The regulated charges and prices which Lower Murray Urban and Rural Water Corporation (trading as Lower Murray Water) (ABN 18 475 808 826) (**Lower Murray Water**) may charge during the **regulatory period**; and
 - (ii) the standards and conditions of service and supply which **Lower Murray Water** has included in its **price submission**.
- (d) This Determination is made by the commission under section 33 of the **ESC Act**, pursuant to rule 29 of the **WCIR** and clauses 10 and 14 of the **WIRO**.
- (e) 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) determine the regulated charges and specify the maximum prices which **Lower Murray Water** may levy or charge for 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 or applying under the **ESC Act**, the **WCIR**, the accreditation arrangements determined by the ACCC pursuant to rule 59 of the **WCIR** and the **WI Act**, and
 - (iv) reflect the requirements in the **WCIR**, the **ACCC pricing principles** and the **WIRO**.

- (f) 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 **Lower Murray Water** and its successors and assigns in respect of the business carried on by **Lower Murray 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(c)(ii) and clause 2.3(d)(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 **Lower Murray 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 **Lower Murray Water**, extend or reduce the time by which, or the period within which, **Lower Murray 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 and 4 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 ***Lower Murray 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 ***Lower Murray Water*** pursuant to the decision referred to in clause 1.1(c)(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

Lower Murray Water must not charge more than:

- (i) the scheduled prices in Schedule 2 and Schedule 3, 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 and Schedule 3 relate.

(b) Application principles

The application principles in Schedule 5 will apply to the prices charged by **Lower Murray Water** in respect of **prescribed services** during the **regulatory period**.

(c) Pricing principles

During the **regulatory period**, **Lower Murray Water** must apply the pricing principles in Schedule 6 when determining the prices to apply to the **prescribed services** to which the pricing principles in Schedule 6 relate.

2.2. Ancillary matters

(a) New prices

If a **new price** is introduced under clause 2.3:

- (i) that **new price** is deemed to be included in Schedule 2 or Schedule 3 (as appropriate) with effect from the start of the subsequent **regulatory year**; and
- (ii) any new application principle specified in respect of that **new price** is deemed to be included in Schedule 5 with effect from the start of the subsequent **regulatory year**

(b) Contracts

Where **Lower Murray Water** has entered into a contract (a **relevant contract**) which relates to the provision of **prescribed services** prior to 1 July 2018, **Lower Murray 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 and Schedule 3 (as adjusted in accordance with this Determination) or the prices determined in accordance with the pricing principles in Schedule 6 will apply for the remainder of the **regulatory period**.

(c) 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.

(d) Publication

Lower Murray 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)).

(e) GST

Lower Murray 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) Schedule 2: Adjustment

Subject to Schedule 2, clause 2.3(c)(iii) and Schedule 7, 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(c)(i) and the procedure in clause 2.3(e), and will apply to the **prescribed services** to which the scheduled prices in Schedule 2 relate in that **regulatory year**.

(b) Schedule 3: Adjustment

Subject to Schedule 3 and clause 2.3(d)(iii) the scheduled prices in Schedule 3 will be adjusted in each subsequent **regulatory year** in the **regulatory period** in

accordance with the formula in clause 2.3(d)(i) and the procedure in clause 2.3(e), and will apply to the **prescribed services** to which the scheduled prices in Schedule 3 relate in that **regulatory year**.

(c) Schedule 2: Formula

- (i) Subject to Schedule 2 and Schedule 7, 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**. 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:

Lower Murray 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** $t-2$

- (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 following formula 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:

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

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.

- (iii) An increase in tariffs in Schedule 2 in a **regulatory year** must not exceed the weighted average of all Schedule 2 price increases in that **regulatory year** by more than 10% in real terms.

(d) Schedule 3: Formulae

- (i) Subject to Schedule 3 and clause 2.3(d)(iii) each price for the **prescribed services** referred to in clause 2.3(b) will be adjusted in accordance with the following formulae with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**:

$$\sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij} \leq cap_t$$

$$cap_t = rev_t \times \frac{CPI_t}{CPI_{base}} + \left(cap_{t-1} - \sum_{i=j}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-1}^{ij} \right) \times \frac{CPI_t}{CPI_{t-1}} \times (1 + wacc) + PEC_{t-1}$$

where **Lower Murray Water** has n tariff categories, which have up to m tariff components, and where:

- p_t^{ij} is the proposed tariff component j of tariff i for **regulatory year** t
- q_t^{ij} is the forecast quantity of tariff component j of tariff i for **regulatory year** t
- cap_t is the revenue cap for **regulatory year** t calculated in accordance with the formula set out above
- cap_{t-1} is the revenue cap for **regulatory year** $t-1$: for the second year of the **regulatory period**, cap_{t-1} is equal to rev_t for the first **regulatory year** as set out in Schedule 4. For subsequent **regulatory years**, cap_{t-1} is the amount calculated for **regulatory year** $t-1$ in accordance with the formula set out above
- rev_t is the total revenue requirement for **regulatory year** t as set out in Schedule 4
- p_{t-1}^{ij} is the actual tariff component j of tariff i for **regulatory year** $t-1$
- q_{t-1}^{ij} is the estimate of the actual quantities of tariff component j of tariff i 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

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 2018 equal to 112.6

$wacc$ is 4.0 per cent, being the weighted average cost of capital

PEC_t is the incremental electricity cost calculated on forecast megawatt hours to be passed through in prices

When,

$$\frac{IEC_{t-1}}{FMWH_{t-1}} > 10\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}}$$

&

$$TAEC_{t-1} > 10\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

Then,

$$PEC_t = EC_t - FEC_t \times 110\% \times \frac{CPI_t}{CPI_{base}} + FEC_t \times \frac{10\%}{2} \times \frac{CPI_t}{CPI_{base}}$$

or,

When,

$$\frac{IEC_{t-1}}{FMWH_{t-1}} < -10\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}}$$

&

$$TAEC_{t-1} < -10\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

Then,

$$PEC_t = EC_t - FEC_t \times 90\% \times \frac{CPI_t}{CPI_{base}} - FEC_t \times \frac{10\%}{2} \times \frac{CPI_t}{CPI_{base}}$$

IEC_{t-1} is the incremental electricity cost calculated on forecast megawatt hours

$$IEC_{t-1} = EC_{t-1} - FEC_{t-1} \times \frac{CPI_t}{CPI_{base}}$$

$TAEC_t$ is outturn February to January electricity prices in **regulatory year** 't'

(in year \$t) x actual February to January megawatt hours

EC_t is outturn February to January electricity prices in **regulatory year** 't' (in year \$t) x forecast February to January megawatt hours as per the Table 15 in Annexure A

FEC_t is total forecast February to January electricity costs for **regulatory year** 't' as per the Table 15 in Annexure A

$FMWH_t$ is February to January forecast megawatt hours in **regulatory year** 't' as per Table 15 in the Annexure A

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 regulatory year

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 2018 equal to 112.6

- (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 regulatory requirement for **regulatory year** t " rev_t " will be set equal to " $(rev_{t-1} \times \frac{CPI_t}{CPI_{t-1}})$ " for the purpose of adjusting prices in accordance with the formulae in clause 2.3(d)(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.
- (iii) An increase in any scheduled price in Schedule 3 in any **regulatory year** must not exceed the weighted average of all scheduled price increases in that **regulatory year** by more than 10% in real terms.

(e) Adjustment procedure

- (i) At least 40 business days prior to the commencement of each subsequent **regulatory year** in the **regulatory period**, **Lower Murray Water** must submit its proposed prices for the **prescribed services** referred to in clauses 2.3(a) and 2.3(b) to apply in the 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 including in relation to the proposed prices for the **prescribed services** referred to in clause 2.3(b):

- (A) the forecast quantities for **regulatory year t** “ q_t^{ij} ” (referred to in the relevant formula in clause 2.3(d)(i));
 - (B) the estimate of actual quantities for **regulatory year t-1** “ q_{t-1}^{ij} ” (referred to in the relevant formula in clause 2.3(d)(i));
 - (C) information which explains the calculation of the items referred to in subparagraphs (A) and (B) above;
 - (D) information relating to any **new price** which **Lower Murray Water** proposes to introduce in **regulatory year t**;
 - (E) a statement setting out evidence demonstrating the extent to which **Lower Murray Water** has provided, in respect of material price increases, information to its customers and any relevant consultative committee established under the *Water Act 1989* (Vic) (the **Water Act**) explaining the calculation of the revised prices and has consulted effectively with its customers and any relevant consultative committee on the revised prices;
 - (F) a statement setting out the anticipated customer impacts resulting from the revised prices and actions, if any, proposed by **Lower Murray Water** to address these customer impacts;
 - (G) a statement setting out evidence demonstrating the extent to which **Lower Murray Water** has, over the course of the past **regulatory year**, provided information to its customers explaining its long-term pricing strategy for **prescribed services** and consulted effectively with its customers on developing that pricing strategy to provide reasonable price stability (that is, minimising price shocks) to its customers; and
 - (H) any other information required by the commission.
- (ii) The commission will approve the **revised scheduled prices** if it considers that:

- (A) the **revised scheduled prices** in respect of clause 2.3(a) have been calculated in accordance with the formula set out in clause 2.3(c)(i) with any necessary adjustments to comply with clause 2.3(c)(iii);
 - (B) the **revised scheduled prices** in respect of clause 2.3(b) have been calculated in accordance with the formulae set out in clause 2.3(d)(i) with any necessary adjustments to comply with clause 2.3(d)(iii); and
 - (C) the items referred to in clause 2.3(e)(i)(A) and (B) are reasonable;
 - (D) **Lower Murray Water** has adequately consulted (in the circumstances) with its customers and any relevant consultative committee established under the **Water Act** on the revised prices;
 - (E) **Lower Murray Water** has adequately addressed (in the circumstances) customer impacts resulting from the revised prices; and
 - (F) **Lower Murray Water** has adequately consulted (in the circumstances) with its customers on its long-term pricing strategy and that strategy provides reasonable price stability (that is, minimising price shocks) to its customers.
- (iii) The commission will be deemed to have approved the **revised scheduled prices** if it has not provided notice under clause 2.3(e)(iv) to **Lower Murray Water** within 30 **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 **Lower Murray Water** (including a statement of its reasons);
 - (B) may request **Lower Murray Water** to provide any additional information specified by the commission;
 - (C) will take any additional information provided by **Lower Murray Water** into account; and
 - (D) will determine the **revised scheduled prices**.
- (v) For the avoidance of doubt, any **new price** approved by the commission under clause 2.3(e)(ii) or deemed to have been approved by the commission under clause 2.3(e)(iii) will be a **revised scheduled price** for the purpose of clause 2.3(e).

2.4. Price changes during a billing period

(a) Application of this clause

This clause 2.4 applies where **Lower Murray 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

Lower Murray 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) **Lower Murray 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 **Lower Murray Water** is complying with this Determination.

(b) Without limiting clause 2.5(a), if, during the **regulatory period**, **Lower Murray Water** enters into a **new contract** which relates to the provision of a **prescribed service** to which the pricing principles in Schedule 6 relate, **Lower Murray 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 **Lower Murray 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 **Lower Murray 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, **Lower Murray 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. Uncertain or unforeseen events

3.1. General principle

- (a) Subject to the *WCIR*, **Lower Murray Water** may apply to the commission for the amendment of this Determination and/or the adjustment of the scheduled prices in Schedule 2 and/or the adjustment of the **revenue requirements** in Schedule 4 to reflect increased or decreased costs incurred by **Lower Murray Water** and/or increased (or, in the case of **prescribed services**, decreased) revenue received by **Lower Murray Water** as a result of an event which could not reasonably have been foreseen (or, in the case of **prescribed services**, was uncertain) at the time this Determination was made (an **uncertain events application**).
- (b) Whether or not **Lower Murray Water** makes an application under clause 3.1(a), **Lower Murray 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 3.3(b) in respect of an **unforeseen 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.

3.2. 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 3 in respect include:

- (i) actual licence fees or contributions payable by **Lower Murray 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 **Lower Murray Water** on major capital 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 **Lower Murray Water** in one or more **regulatory years** during the **regulatory period**; and
- (iv) amounts payable by **Lower Murray Water** for purchases of bulk water during a particular **regulatory year** during the **regulatory period** which differ from the forecast bulk water payments set out in Annexure A for that **regulatory year**; and
- (v) 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 3.2(a)(v)(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 **unforeseen events application**, the commission will not take into account matters that:

- (i) are or should be within **Lower Murray Water's** control;
- (ii) were or should have been known by **Lower Murray Water** at the time the Determination was made;
- (iii) could reasonably have been foreseen by **Lower Murray Water**;
- (iv) should be or should have been planned for or managed by **Lower Murray Water**;
- (v) reflect inefficient expenditure by **Lower Murray Water** and/or
- (vi) in the case of an application made under the **WCIR**, have a rectification cost on excess of the amount referred to in rule 43(5)(b) of the **WCIR**.

(c) Dispute resolution

Any question as to whether a matter should be taken into account by the commission under this clause 3 will be determined by the commission in its absolute discretion.

3.3. Procedure

(a) Application process

- (i) An **unforeseen events application** made under the **WCIR** must satisfy the requirements of rule 40 of the **WCIR**.
- (ii) An **unforeseen events application** made in respect of **prescribed services** 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 3.3(a)(ii)(B); and
 - (D) details of the proposed action to be taken by the commission under clause 3.3(b).
- (iii) The commission may identify an event or events which it considers has had or may have a material impact on **Lower Murray Water's** operating and/or capital expenditure and/or revenue and may decide to take action under clause 3.3(b) in the absence of an **unforeseen events application** by **Lower Murray Water**.
- (iv) The commission may request **Lower Murray Water** to provide any additional information specified by the commission in connection with an **unforeseen events application**.

(b) Action by the commission

If the commission is satisfied of the matters set out in clause 3.1(c) in respect of an **unforeseen events application** or an event identified by the commission under clause 3.3(a)(iii), 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 Schedule 4 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 **Lower Murray Water** may charge for **prescribed services** in the **next regulatory period**.

4. 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**, and in clauses 40 to 44 of the **WCIR**.

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

ACCC pricing principles means the pricing principles for price approvals and determinations under the **WCIR** published by the Australian Competition and Consumer Commission pursuant to rule 63 of the **WCIR**.

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 services to which regulated charges apply or with **prescribed services**, charges for or prices in respect of which are either included in Schedule 2 and/or Schedule 3 or determined in accordance with the relevant pricing principles in Schedule 6.

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.

Part 6 operator has the meaning given in the **WCIR**.

prescribed services has the meaning given in the **WIRO** and (except to the extent that the **WCIR** applies to them) includes **miscellaneous services**.

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 3.2 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.

urban water user has the meaning given in the **WIRO**.

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

WCIR means the Water Charge (Infrastructure) Rules 2010 (Cth) as at the date of this Determination.

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 ‘ Σ ’ 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 (prescribed services to urban water users)

This schedule should be read in conjunction with Schedule 5, Schedule 6 and Schedule 7. Variable water, wastewater 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
WATER					
2.1 Water – Availability – Domestic & Non-domestic (per annum)					
20mm	206.33	-0.35%	-0.35%	-0.35%	-0.35%
25mm	322.36	-0.35%	-0.35%	-0.35%	-0.35%
32mm	528.16	-0.35%	-0.35%	-0.35%	-0.35%
40mm	825.64	-0.35%	-0.35%	-0.35%	-0.35%
50mm	1,289.52	-0.35%	-0.35%	-0.35%	-0.35%
65mm	2,180.28	-0.35%	-0.35%	-0.35%	-0.35%
80mm	3,301.24	-0.35%	-0.35%	-0.35%	-0.35%
100mm	5,160.44	-0.35%	-0.35%	-0.35%	-0.35%
150mm	11,605.92	-0.35%	-0.35%	-0.35%	-0.35%
2.2 Usage – Domestic (per kL)					
First Tier	0.4482	-0.35%	-0.35%	-0.35%	-0.35%
Second Tier	0.8156	-0.35%	-0.35%	-0.35%	-0.35%
Third Tier	1.0482	-0.35%	-0.35%	-0.35%	-0.35%
2.3 Usage – Non Domestic					
Volumetric (per kL)	0.8156	-0.35%	-0.35%	-0.35%	-0.35%
SEWERAGE					
2.5 Sewerage – Domestic & Non-domestic					
Availability (per kL)	487.07	-0.35%	-0.35%	-0.35%	-0.35%
2.6 Trade Waste					
Minor Trade Waste (Unit Charge)	67.80	-0.35%	-0.35%	-0.35%	-0.35%

Schedule 2 – Prices (prescribed services to urban water users)

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
Miscellaneous Minor Trade Waste Flow Charge* (per kL)	0.8563	0.0%	0.0%	0.0%	0.0%
Septic Tank Effluent Disposal* (per kL)	6.07	0.0%	0.0%	0.0%	0.0%
Trade Waste Establishment Fees* (per ML)	4,286.50	0.0%	0.0%	0.0%	0.0%
MISCELLANEOUS CHARGES					
2.7 Urban					
Subdivision Processing Fee – Water/Sewerage (per lot)	18.45	0.0%	0.0%	0.0%	0.0%
Subdivision Processing Fee – Overall* (per lot)	38.85	0.0%	0.0%	0.0%	0.0%
Tappings (per tapping)		0.0%	0.0%	0.0%	0.0%
– 20mm	391.95	0.0%	0.0%	0.0%	0.0%
– 25mm	587.95	0.0%	0.0%	0.0%	0.0%
– 32mm	1,045.20	0.0%	0.0%	0.0%	0.0%
– 40mm	1,175.90	0.0%	0.0%	0.0%	0.0%
Inspection fee (additional to tapping) (per inspection)	65.30	0.0%	0.0%	0.0%	0.0%
Special meter read (per read)	45.50	0.0%	0.0%	0.0%	0.0%
New connections (per connection)		0.0%	0.0%	0.0%	0.0%
– standard residential	143.65	0.0%	0.0%	0.0%	0.0%
– non-standard residential	195.95	0.0%	0.0%	0.0%	0.0%
– small industrial commercial	195.95	0.0%	0.0%	0.0%	0.0%
– large industrial commercial	391.95	0.0%	0.0%	0.0%	0.0%
Fire service Tappings (100 dia AC/UPVC) (per tapping)		0.0%	0.0%	0.0%	0.0%
– 25mm	309.75	0.0%	0.0%	0.0%	0.0%
– 32mm	406.55	0.0%	0.0%	0.0%	0.0%
– 40mm	466.70	0.0%	0.0%	0.0%	0.0%
Fire service Tappings (150 dia AC/UPVC) (per tapping)		0.0%	0.0%	0.0%	0.0%
– 25mm	315.85	0.0%	0.0%	0.0%	0.0%
– 32mm	417.75	0.0%	0.0%	0.0%	0.0%
– 40mm	470.75	0.0%	0.0%	0.0%	0.0%
Information statement fee (per statement)	90.15	0.0%	0.0%	0.0%	0.0%
Non-core miscellaneous services	Actual Cost				

Schedule 2 – Prices (prescribed services to urban water users)

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
2.8 New Customer Contributions					
Water (per lot)					
Category one charge – Lot size <= 750 sq m	1,907.50	0.0%	0.0%	0.0%	0.0%
Category one charge – Lot size > 750 sq m	3,815.00	0.0%	0.0%	0.0%	0.0%
Sewer (per lot)					
Category one charge – Lot size <= 750 sq m	1,304.50	0.0%	0.0%	0.0%	0.0%
Category one charge – Lot size > 750 sq m	2,609.00	0.0%	0.0%	0.0%	0.0%

As set out in clause 1.1(e) of this Determination, the role of the Commission in making this Determination is limited to specifying the maximum prices that **Lower Murray 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 **Lower Murray Water** to apply a tariff in accordance with the **Water Act**. The Commission does not have a role in hearing disputes about individual billing issues that users may have.

Schedule 3 – Prices (services to users other than urban water users)

This schedule should be read in conjunction with Schedule 4, Schedule 5 and Schedule 6. All charges are rounded down to 2 decimal places.

Tariff and Price Component		Price (1 July 2018)
Irrigation		
3.1 Mildura Irrigation		
Delivery Share Fee	Per DS	593.28
Metered Water Usage Fee	Per ML	52.90
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13
GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89
Service Charge	Per Ass	100.00
Casual User Fee	Per DS	593.28
Excess Use of Allocated Water Charge	Per ML	1,000.00
3.2 Mildura Irrigation Garden		
Unmetered Domestic and Stock Charge	Per Cust	471.96
Service Charge	Per Ass	100.00
3.3 Mildura High Pressure Irrigation		
Delivery Share Fee	Per DS	734.24
Metered Water Usage Fee	Per ML	95.15
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13

GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89
Service Charge	Per Ass	100.00
Casual User Fee	Per DS	734.24
Excess Use of Allocated Water Charge	Per ML	1,000.00

3.4 Merbein Irrigation

Delivery Share Fee	Per DS	394.36
Metered Water Usage Fee	Per ML	45.46
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13
GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89
Service Charge	Per Ass	100.00
Casual User Fee	Per DS	394.36
Excess Use of Allocated Water Charge	Per ML	1,000.00

3.5 Merbein Irrigation Garden

Unmetered Domestic and Stock Charge	Per Cust	471.96
Service Charge	Per Ass	100.00

3.6 Red Cliffs Irrigation

Delivery Share Fee	Per DS	458.28
Metered Water Usage Fee	Per ML	45.43
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13
GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89
Service Charge	Per Ass	100.00
Casual User Fee	Per DS	458.28
Excess Use of Allocated Water Charge	Per ML	1,000.00

3.7 Red Cliffs Irrigation Garden

Unmetered Domestic and Stock Charge	Per Cust	471.96
Service Charge	Per Ass	100.00

3.8 Robinvale Irrigation

Delivery Share Fee	Per DS	947.72
Metered Water Usage Fee	Per ML	81.59
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13
GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89
Service Charge	Per Ass	100.00
Casual User Fee	Per DS	947.72
Excess Use of Allocated Water Charge	Per ML	1,000.00

3.9 Robinvale Irrigation Garden

Unmetered Domestic and Stock Charge	Per Cust	471.96
Service Charge	Per Ass	100.00

Drainage

3.10 Mildura Drainage

Property Drainage Fee – Division 1	Per DS	59.00
Property Drainage Fee – Division 2	Per DS	44.24
Property Drainage Fee – Division 3	Per DS	29.48
Property Drainage Fee – Division 4	Per DS	14.72

3.11 Merbein Drainage

Property Drainage Fee – Division 1	Per DS	93.72
Property Drainage Fee – Division 2	Per DS	70.28
Property Drainage Fee – Division 3	Per DS	46.84
Property Drainage Fee – Division 4	Per DS	24.16

3.12 Red Cliffs Drainage

Property Drainage Fee – Division 1	Per DS	94.00
Property Drainage Fee – Division 2	Per DS	76.08
Property Drainage Fee – Division 3	Per DS	47.00

Schedule 3 – Prices (services to users other than urban water users)

Property Drainage Fee – Division 4	Per DS	23.64
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3.13 Robinvale Drainage

Property Drainage Fee – Division 1	Per DS	89.80
Property Drainage Fee – Division 2	Per DS	67.36
Property Drainage Fee – Division 3	Per DS	44.88
Property Drainage Fee – Division 4	Per DS	22.44

Stock & Domestic

3.14 Millewa Rural (Irrigation)

Delivery Charge	Per kL	0.18
Service Charge	Per Ass	100.00
Rural Access – House	Per Connection	552.05
Rural Access – Scrubland	Per ha	0.58
Rural Access – Stock Area	Per ha	2.36

3.15 Millewa Urban (Irrigation)

Delivery Charge	Per kL	0.61
Service Charge	Per Ass	100.00
Urban Access – No Offtake	Per Connection	276.02
Urban Access – Offtake	Per Connection	552.05

3.16 Other Stock & Domestic (Irrigation)

Connection Charge (Pipeline)	Per Connection	310.40
Delivery (Pipeline)	Per ML	413.96
Service Charge	Per Ass	100.00

Licensing

3.17 Diversions (Irrigation)

Domestic and Stock Registration	Per Licence	144.13
Operational Fee	Per ML/AUL	2.44
GMW Entitlement Storage Fee Murray Basin HR*	Per ML/Ent	9.10
GMW Entitlement Storage Fee Murray Basin LR*	Per ML/Ent	4.13
GMW Entitlement Storage Fee Goulburn Basin HR*	Per ML/Ent	7.40
GMW Entitlement Storage Fee Goulburn Basin LR*	Per ML/Ent	3.80
GMW Above Entitlement Storage Fee Murray Basin*	Per ML	4.13
GMW Above Entitlement Storage Fee Goulburn Basin*	Per ML	3.80
DELWP Water Share Fee*	Per Share	12.89

Schedule 3 – Prices (services to users other than urban water users)

Service Charge	Per Ass	100.00
Excess Use of Allocated Water Charge	Per ML	1,000.00
Lake Cullulleraine Diversion Fee	Per ML	13.01

3.18 Other Drainage Schemes

Nangiloc-Colignan – Operating Rate	Per AUL	3.12
Boundary Bend – O&M	Per AUL	3.12
Bumbang – O&M	Per AUL	3.12
Tol Tol – O&M	Per AUL	3.12

3.19 Miscellaneous Fees and Charges

Actual Cost

*Pass through fees from Goulburn-Murray Water and the Department of Environment, Land, Water and Planning are excluded from revenue cap

Schedule 4 – Calculation of revenue cap revenue requirements for each regulatory year

This schedule should be read in conjunction with clause 2.3(d) and Schedule 3.

Revenue requirements for regulatory years

\$m2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Revenue cap revenue requirement	21.67	21.91	22.16	22.43	22.72

Note: excludes pass through costs

Schedule 5 – Application of prices

5.1 Urban water usage – domestic customers

Lower Murray Water's usage tiers are structured as follows:

	1 Apr – 30 Sept	1 Oct – 31 Mar
First Tier	0-50kL per quarter	0-100 kL per quarter
Second tier	51-100 kL per quarter	101-200 kL per quarter
Third Tier	Over 100 kL per quarter	Over 200 kL per quarter

5.2 Urban sewerage and minor trade waste – domestic and non-domestic customers

Lower Murray Water's fixed sewerage and minor trade waste charge is derived from the unit or availability charge and is calculated as set out below:

Customer class	Application formula
Residential (Domestic)	
Residential	Base charge multiplied by cistern factor (usually 1)
Vacant land	Base charge multiplied by cistern factor (usually 0.5)
Flats/units	Base charge multiplied by cistern factor (usually 1)
Non-residential (Non-domestic)	
Municipal/recreation	Base charge multiplied by cistern factor (usually 1)
Schools/churches	Base charge multiplied by cistern factor (usually 1)
Commercial/industrial	Base charge multiplied by cistern factor (usually 1)
Vacant commercial	Base charge multiplied by cistern factor (usually 0.5)
Holiday flats/backpackers	Base charge multiplied by one plus the number of rooms (or a load factor of 0.375) (a)
Hotel/motel/guest houses	Base charge multiplied by one plus the number of rooms (or a load factor of 0.150)

Customer class	Application formula
Hotels with accommodation	Base charge multiplied by one plus a cistern factor plus the number of rooms (or a load factor of 0.150) (b)
Caravan parks —inner	Base charge multiplied by one plus the number of powered sites (or a load factor of 0.300) (c)
Public hospitals/nursing homes	Base charge multiplied by the sum of the cistern factor, the number of medical/surgical beds and the number of nursing psychiatric and geriatric beds (d)
Private hospitals/nursing homes	Base charge multiplied by the sum of the cistern factor, the number of medical/surgical beds and the number of nursing psychiatric and geriatric beds (d)
Caravan parks-outer	Base charge multiplied by one plus the number of powered sites (or a load factor of 0.300) (c)

Note: Cistern factor is defined as the number of cisterns divided by 5. **a** For Holiday Flats if a Manager occupies one flat, number is reduced by one. For backpackers the equivalent number of rooms is calculated by the number of persons that can be accommodated divided by 2.5 (Number if not reduced if owner/manager is on site). **b** For hotels with accommodation rooms are counted as well as cisterns associated with the Bars, Dining room etc. **c** The number of powered sites includes on site vans, cabins and powered sites. **d** Add the surgery/chemotherapy type beds (divided by 3) to the medical bed count. Apply the full cistern count to those cisterns associated with residential and miscellaneous (for example, common room, nurses home, office, pathology, X-ray, ED etc). Cistern count includes those cisterns not associated with the wards or operating theatres etc. Stand alone nursing homes & hostels with communal kitchen/dining facilities count bed numbers only not cisterns.

5.3 Urban day labour construction – security amount

The security amount is refunded when the construction is finished, analysed and a refund given if the up front amount paid (based on an estimate of cost of construction) was greater than the actual cost of construction. The security amount is used if the actual construction cost is greater than the original estimate paid up front by the developer.

5.4 Rural irrigation and diversions – delivery share

Lower Murray Water's Delivery Share tariff is applied to a customer's Delivery Share over a 14 day period, calculated as 12 per cent of a customer's water entitlement in the absence of any prior arrangement otherwise.

5.6 Rural drainage services – divisions

Drainage divisions are categorised as:

Drainage divisions	
Division 1	Full rate. Greater than two thirds capable of being drained directly into Lower Murray Water's system.
Division 2	Three quarter rate. Between half and two thirds capable of being drained directly into Lower Murray Water's system.
Division 3	Half rate. Between quarter and half capable of being drained directly into Lower Murray Water's system.
Division 4	Quarter rate. Less than one quarter capable of being drained directly into Lower Murray Water's system.

5.7 Inclining block tariffs

Where multiple customers are being serviced by a single meter, the consumption tiers will be applied on a pro-rata basis.

5.8 Miscellaneous fees and charges

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

Miscellaneous service	Definition
Information Statement Fee (includes one meter reading)	Section 158(i) of the <i>Water Act 1989</i> states that any person may apply to Lower Murray Water for an information statement in relation to any land that is within a district of the Lower Murray Water or its area of interest. These are requested as part of the sale of properties for information Lower Murray Water has relating to a particular property. The fee includes one meter reading.
Fire service charge	The fire service charge is an access charge for private fire services. Lower Murray Water maintains the service point which includes the annual re-sealing of service program.
Fire Service Tapping Fee	This fee covers the installation of a fire service tapping band and ferrule to Lower Murray Water's system.
Fire Service Information Fee	Provision of flow and pressure data.

Miscellaneous service	Definition
Special Meter Read Fee	The fee is payable for any meter reading in addition to Lower Murray Water 's normal four scheduled readings i.e. Residential Tenancies and Solicitor Readings
New Connection Standard Residential	This is an administration fee for handling the administration of organising the connection, creating the property file etc.
Tappings 20mm Meter	This fee covers the installation of a tapping band and ferrule to Lower Murray Water system. The plumber is required to excavate around Lower Murray Water 's main with adequate clearance to enable Lower Murray Water to install a tapping band and ferrule. The plumber is responsible for backfilling, road opening fees and permits and safety of the site.
Subdivision Processing Fee — Water/Sewerage	This is an administration fee for investigation, correspondence and administration associated with the compliance of processing a subdivision, including setting requirements and conditions for the subdivision to occur.
Sewer Point Construction	Provision of an additional sewer point as a result of subdivision.
Inspection Fee	Inspection of connections to Lower Murray Water infrastructure by contractors.

Schedule 6 – Pricing principles

6.1 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 **Lower Murray 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 **Lower Murray Water** or pursuant to other government policies that apply to **Lower Murray Water** or there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.

6.2 Pricing principles where scheduled prices do not apply

Where the prices set out in Schedule 2 and Schedule 3 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; and
- 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.

6.3 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; and
- 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

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

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

6.4 Pricing principles for miscellaneous services not included in Schedule 2 or Schedule 3

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.

6.5 Guidelines

Lower Murray 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 6 relates.

6.6 Pricing principles for termination fees

Lower Murray Water may apply termination fees to irrigation customers who surrender delivery entitlements during the **regulatory period**.

Any termination fee levied by **Lower Murray Water** must be calculated and applied in accordance with the Water Charge (Termination Fees) Rules 2009.

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

If in any **regulatory year** Condition A applies, the formula set out in clause 2.3(c) is not applicable to the extent it relates to the prices outlined in Schedule 7A. These prices are set out in items 2.1, 2.2, 2.3, 2.5 and 2.6 of Schedule 2.

If in any **regulatory year** Condition B applies, the formula set out in clause 2.3(c) is not applicable to the extent it relates to the prices as outlined in Schedule 7A. 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**.

Lower Murray 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 6 relates.

Schedule 7A – Adjustments to prices

	Condition A (Annual cost of debt update)	Condition B (Energy costs)
2.1 Water - Availability - Domestic & Non-domestic service charge	X	
2.2 Usage - Domestic	X	
2.3 Usage – Non Domestic	X	
2.5 Sewerage – Domestic & Non-domestic	X	
2.6 Trade Waste – Minor Trade Waste	X	
Schedule 2 tariffs – volumetric tariffs		X

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

Schedule 7B – 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 **Lower Murray 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 7A.

Formula 1: Determining the nominal cost of debt

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

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

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

π^{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 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

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 regulatory year ‘t’ 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 Lower Murray Water’s PREMO rating, which is equal to 4.5% 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 7A 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 regulatory year ‘t’
RRR_t^{det}	Is the determination real post tax ‘vanilla’ regulatory rate of return in regulatory year ‘t’
$RAB_{opening,t}^{det}$	Is the determination opening regulatory asset base in regulatory year ‘t’
$RAB_{closing,t}^{det}$	Is the determination closing regulatory asset base in regulatory year ‘t’
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 regulatory year
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 2018 equal to 112.6
α_t^j	Is the price for tariff j at regulatory year ‘t’ 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 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

p_{t-1}^j Is the price for tariff j in **regulatory year** 't-1'

$q_{j,t}^{det}$ Is the determination quantity for tariff j in **regulatory year** '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 7A to which the cost of debt adjustment will apply

Formula 4 outlines the process for calculating the adjustment to prices outlined in Schedule 7A 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 7A to which the cost of debt adjustment will apply.

Condition B – Price adjustment to account for energy cost changes from forecast only for volumetric tariffs in Schedule 2

Condition B will apply to account for energy cost changes from forecast in any **regulatory year** 't,' subject to Condition C. The adjustment is calculated as per formula 5.

The energy cost changes will be apportioned across the volumetric tariffs listed in Schedule 2.

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

Formula 5: Energy cost pass-through

$$\frac{PEC_{t-1}}{\sum_{j=1,n}^{t=t} q_{j,t}}$$

Condition C:

$\frac{IEC_{t-1}}{FMWH_{t-1}} > 60\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}}$	or,	$\frac{IEC_{t-1}}{FMWH_{t-1}} < -60\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}}$
&		&

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

$$TAEC_{t-1} > 60\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}} \quad TAEC_{t-1} < -60\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

Where,

PEC_t is the incremental electricity cost calculated on forecast megawatt hours to be passed through in prices

When,

$$\frac{IEC_{t-1}}{FMWH_{t-1}} > 60\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}} \quad \& \quad TAEC_{t-1} > 60\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

then,

$$PEC_t = EC_t - FEC_t \times 160\% \times \frac{CPI_t}{CPI_{base}} + FEC_t \times \frac{60\%}{2} \times \frac{CPI_t}{CPI_{base}}$$

or,

When,

$$\frac{IEC_{t-1}}{FMWH_{t-1}} < -60\% \times \frac{FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}}{FMWH_{t-1}} \quad \& \quad TAEC_{t-1} < -60\% \times FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

then,

$$PEC_t = EC_t - FEC_t \times 40\% \times \frac{CPI_t}{CPI_{base}} - FEC_t \times \frac{60\%}{2} \times \frac{CPI_t}{CPI_{base}}$$

IEC_{t-1} is the incremental electricity cost calculated on forecast megawatt hours

$$IEC_{t-1} = EC_{t-1} - FEC_{t-1} \times \frac{CPI_{t-1}}{CPI_{base}}$$

$TAEC_t$ is outturn February to January electricity prices in **regulatory year** 't' (in year \$) x actual February to January megawatt hours

EC_t is outturn February to January electricity prices in **regulatory year** 't' (in year \$) x forecast February to January megawatt hours as per the Table 14 in Annexure A

FEC_t is total forecast February to January electricity costs for **regulatory year** 't' as per the Table 14 in Annexure A

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

$FMWH_t$	is February to January forecast megawatt hours in regulatory year 't' as per Table 14 in Annexure A
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 regulatory year
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 2018 equal to 112.6
$\sum_{j=1,n}^{t=t} q_{j,t}$	is the sum of all forecast quantities for all volumetric tariff components as per Table 13 in Annexure A

Formula 6: Schedule 7A tariffs

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

$p_t^{j,COD}$	Is the price for tariff j at regulatory year 't' that accounts for the cost of debt adjustment. The cost of debt adjustment will apply to the tariffs listed in Schedule 7A
p_{t-1}^j	Is the price for tariff j in regulatory year '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 regulatory year
PPM_t^j	The prescribed price movement for the price component for tariff j in regulatory year '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 7A to which the cost of debt adjustment will apply.

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

$$\frac{PEC_{t-1}}{\sum_{j=1,n}^{t=t} q_{j,t}}$$

Energy cost pass-through

Schedule 7 – Adjustment for costs associated with annual updates to the trailing average cost of debt and energy cost pass through

**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) - urban

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 - urban

Per cent

	2018-19	2019-20	2020-21	2021-22	2022-23
Regulatory rate of return	3.97%	3.97%	3.97%	3.97%	3.97%

Table 3 Weighted average cost of capital - rural

Per cent

	Post-tax WACC	Implied pre-tax WACC
	4.00%	4.00%

Table 4 **Benchmark revenue requirement - urban**
\$m 2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Operating expenditure	24.7	23.5	22.9	23.1	23.0
Return on assets	6.6	6.8	7.0	7.1	7.2
Regulatory depreciation	8.3	8.6	8.7	8.9	9.2
Adjustments from last period	0.0	0.0	0.0	0.0	0.0
Non-prescribed revenue offset of revenue requirement	-0.9	-0.9	-0.9	-0.9	-1.0
Tax allowance	0.0	0.0	0.0	0.0	0.0
Total	38.6	38.1	37.8	38.2	38.4

Table 5 **Updated regulatory asset base - urban**
\$m 2018-19

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB at 1 July	150.1	150.8	155.9	156.8	160.4
<i>Plus</i> Gross capital expenditure	6.7	13.3	9.6	11.7	6.6
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	0.7	1.6	1.6	0.9	1.7
<i>Less</i> Proceeds from disposals	0.3	0.7	0.6	0.2	0.1
<i>Less</i> Regulatory depreciation	5.0	5.9	6.5	7.0	7.2
Closing RAB at 30 June	150.8	155.9	156.8	160.4	157.9

Table 6 **Rolled forward regulatory asset base - urban**

\$m 2018-19

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB at 1 July	157.9	159.1	171.2	173.9	179.2	181.0
<i>Plus</i> Gross capital expenditure	10.0	21.6	12.6	15.2	12.0	12.5
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	0.8	0.8	0.8	0.8	0.8	0.8
<i>Less</i> Proceeds from disposals	0.4	0.4	0.4	0.4	0.4	0.4
<i>Less</i> Regulatory depreciation	7.6	8.3	8.6	8.7	8.9	9.2
Closing RAB at 30 June	159.1	171.2	173.9	179.2	181.0	183.2

Table 7 **Approved licence fee and environmental contribution assumptions - urban**

\$m 2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Essential Services Commission licence fee	0.02	0.02	0.02	0.02	0.03
Department of Health and Human Services licence fee	0.02	0.02	0.02	0.02	0.02
Environment Protection Authority licence fee	0.04	0.04	0.04	0.04	0.04
Environmental contribution	0.08	0.08	0.08	0.08	0.09

Table 8 **Benchmark revenue requirement - rural**
 \$m 2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Operating expenditure	20.9	20.2	19.9	19.8	19.6
Return on assets	3.2	3.5	3.6	3.6	3.7
Regulatory depreciation	2.3	2.5	2.6	2.6	2.8
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
Total	26.4	26.1	26.1	26.1	26.1

Table 9 **Updated regulatory asset base - rural**
 \$m 2018-19

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB at 1 July	69.6	79.6	55.7	45.9	75.5
<i>Plus</i> Gross capital expenditure	13.7	12.6	46.7	54.4	13.7
<i>Less</i> Government contributions	0.0	32.9	52.8	19.5	0.0
<i>Less</i> Customer contributions	1.5	0.5	0.3	0.2	0.1
<i>Less</i> Proceeds from disposals	0.3	0.6	0.6	2.1	0.1
<i>Less</i> Regulatory depreciation	1.9	2.5	2.8	2.8	2.8
Closing RAB at 30 June	79.6	55.7	45.9	75.5	86.2

Table 10 **Rolled forward regulatory asset base - rural**

\$m 2018-19

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB at 1 July	86.2	75.4	85.5	88.4	90.4	91.5
<i>Plus</i> Gross capital expenditure	2.7	14.2	6.1	5.3	4.5	5.0
<i>Less</i> Government contributions	6.3	1.1	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	0.3	0.3	0.3	0.3	0.3	0.3
<i>Less</i> Proceeds from disposals	4.0	0.4	0.4	0.4	0.4	0.4
<i>Less</i> Regulatory depreciation	2.9	2.3	2.5	2.6	2.6	2.8
Closing RAB at 30 June	75.4	85.5	88.4	90.4	91.5	93.1

Table 11 **Approved licence fee and environmental contribution assumptions - rural**

\$m 2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Essential Services Commission licence fee	0.02	0.02	0.02	0.02	0.03
Department of Health and Human Services licence fee	0.00	0.00	0.00	0.00	0.00
Environment Protection Authority licence fee	0.00	0.00	0.00	0.00	0.00
Environmental contribution	0.51	0.50	0.49	0.48	0.47

Table 12 Bulk water purchases
\$m 2018-19

	2018-19	2019-20	2020-21	2021-22	2022-23
Bulk water purchases - urban	0.69	0.70	0.71	0.71	0.72
Bulk water purchases - rural	3.25	3.25	3.25	3.25	3.25

Table 13 Demand forecast - urban

	2018-19	2019-20	2020-21	2021-22	2022-23
Water assessments (no.)					
Residential	30,700	31,038	31,380	31,693	32,010
Non-residential	7,060	7,137	7,216	7,288	7,361
Total	37,760	38,176	38,596	38,981	39,371
Sewerage assessments (no.)					
Residential	26,880	27,218	27,560	27,873	28,190
Non-residential	4,588	4,623	4,658	4,693	4,728
Total	31,468	31,841	32,218	32,566	32,918
Billable water consumption (kL)					
Residential	14,681	14,814	14,948	15,071	15,196
Non-residential	4,299	4,346	4,394	4,438	4,483
Total	18,980	19,160	19,342	19,509	19,678

Table 14 Energy forecast - urban
\$m 2018-19

	Feb 18 - Jan 19	Feb 19 - Jan 20	Feb 20 - Jan 21	Feb 21 - Jan 22	Feb 22 - Jan 23
Electricity usage (MWh)	8,236	8,182	8,238	8,291	8,343
Electricity expenditure (\$)	1,723,927	1,825,881	1,850,189	1,855,455	1,862,897
Electricity unit cost (\$/MWh)	209.32	223.16	224.60	223.78	223.29

Table 15 Energy forecast - rural
\$m 2018-19

	Feb 18 - Jan 19	Feb 19 - Jan 20	Feb 20 - Jan 21	Feb 21 - Jan 22	Feb 22 - Jan 23
Electricity usage (MWh)	20,134	20,572	20,716	20,861	21,008
Electricity expenditure (\$)	4,627,514	4,904,554	4,946,102	4,932,323	4,958,652
Electricity unit cost (\$/MWh)	229.84	238.40	238.76	236.44	236.03

Table 16 Major capital projects - urban

Projects	Expected start date	Expected completion date
Kerang replace treated water pump station	2018-19	2018-19
Merbein wastewater treatment plant divert to Koorlong	2018-19	2018-19
Swan Hill – replace wastewater treatment plant rising main stage 2	2018-19	2018-19
Koorlong – wastewater treatment plant construct 400 ML wet weather storage no 1	2018-19	2019-20
Swan Hill DN450 Truck main Arnoldt/Stratbroke (1,245 m)	2020-21	2020-21
Swan Hill – North water treatment plant 6 ML ground level storage	2020-21	2020-21
Swan Hill – North water treatment plant treated water pump station (stage 1)	2020-21	2020-21
Koorlong – wastewater treatment plant upgrade to clear supervisory control and data acquisition	2019-20	2021-22
All sites – ultraviolet treatment plants	2018-19	2022-23

Table 17 Major capital projects - rural

Projects	Expected start date	Expected completion date
Mildura central pump station replace manifold/rising main	2018-19	2018-19
Millewa replace river pump station	2018-19	2018-19
Red Cliffs main pump station upgrade to clear supervisory control and data acquisition	2018-19	2018-19
Robinvale – HPPS 100 kilowatt solar photovoltaic pilot	2018-19	2018-19
Millewa upgrade to clear supervisory control and data acquisition	2019-20	2020-21