Water

Robusto Investments Pty Ltd Drinking Water Regulatory Determination: Review Application Decision

Statement of Reasons

August 2021

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Decision

Pursuant to section 31 of the *Essential Services Commission Act 2002* and in accordance with Part 3 of that Act, the decision of the Essential Services Commission on its review of the price determination made on 25 May 2021 applying to Robusto Investments Pty Ltd (ACN 117 034 545), '*Regulatory Determination – Robusto Investments Pty Ltd (ACN 117 034 545)*', is to:

1. subject to paragraph 2 below, confirm that price determination for the reasons set out in the HoustonKemp report '*Review of Robusto drinking water regulatory determination*', dated 16 August 2021, which, after careful consideration, the Commission accepts and adopts as its own reasons for its decision on review, in conjunction with this overarching decision document (together, the **Statement of Reasons**), and

2. for the reasons set out in the Statement of Reasons, vary that price determination as follows:

   a. the prudent and efficient operating cost allowance for bad debt, mediation and dispute resolution expenses made within the overall revenue allowance is varied from $15,000 (December $2018) to $625 (December $2018)

   b. consequentially, the maximum revenue that Robusto Investments can recover from residential customers and Mount Compass Sand and Loam over the regulatory period (1 April 2021 to 30 June 2022) is varied from $248,395 (in nominal terms) to $233,538 (in nominal terms) or $238,963 (December $2018) to $224,670 (December $2018), and

   c. consequentially, the maximum prices set under the price determination are varied as follows, to apply for the period 26 August 2021 to 30 June 2022:

Tariff element	Original Regulatory Determination	Varied Regulatory Determination
Quarterly supply charge	$92.26	$86.74
Tier 1 charge per kL (0-30kL)	$3.36	$3.16
Tier 2 charge per kL (30-130kL)	$4.81	$4.52
Tier 3 charge per kL (>130kL)	$5.20	$4.89

3. make a subsequent determination under Part 3 of the *Essential Services Commission Act 2002,* as authorised by Part 4 of the *Water Industry Act 2012,* giving effect to the decisions set out at paragraph 2.

Essential Services Commission

26 August 2021

1 Background

1.1 On 25 May 2021, the Essential Services Commission (**Commission**) made a price determination to apply to Robusto Investments Pty Ltd (ACN 117 034 545) (**Robusto Investments**), the holder of a water retail licence under the *Water Industry Act* 2012 (**WI Act**). That price determination was accompanied by a Statement of Reasons, published on the same day.

1.2 That price determination was made by the Commission pursuant to section 25(1) of the *Essential Services Commission Act 2002* (**ESC Act**), as authorised by section 35 of the WI Act.

1.3 In making the price determination, the Commission acted in accordance with its primary statutory objective (as set out in section 6(a) of the ESC Act) – the protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services and, at the same time, have regard to the matters in section 6(b) – as well as the other statutory factors and requirements as set out in the ESC Act and the WI Act.

1.4 The price determination set out the maximum total revenue that Robusto Investments can recover from its residential customers and one non-residential customer (Mount Compass Sand and Loam) and the maximum prices that can be charged to residential customers over the regulatory period (1 April 2021 to 30 June 2022).

1.5 On 23 June 2021, Robusto Investments lodged an application for a review of the price determination made by the Commission in accordance with section 31 of the ESC Act. The ESC Act provides that an entity to which a price determination applies may seek a review of that determination by the Commission by lodging an application within 20 working days after the determination is published.

2 The review process

2.1 Part 6 of the ESC Act contains a legislative scheme permitting reviews and appeals in relation to price determinations made by the Commission, and the conduct of those reviews.

2.2 Section 31(1)(a) of the ESC Act provides that:

> *An application may be made to the Commission by the Minister, or by a regulated entity to which the determination applies, for a review of a price determination.*

2.3 Section 31(2) of the ESC Act sets out the requirements as to the form for an application for review:

(2) An application for a review must—

(a) be in writing; and

(b) set out the price determination or part of the price determination, or the decision, to which the application relates; and

(c) set out in detail the grounds on which the applicant seeks review and the decision sought on the review; and

(d) be accompanied by any information that the applicant considers should be taken into account by the Commission on the review; and

(e) be lodged with the Commission within 20 working days after the price determination is published or within 10 working days after receipt of the written notice referred to in subsection (1) (as the case requires).

2.4 On 23 June 2021, Robusto Investments lodged an application for a review of the price determination made by the Commission in accordance with section 31 of the ESC Act. Robusto Investments met the requirements as to the timing and form of that application under section 31(2) of the ESC Act. The Commission therefore proceeded to assess and determine the review application.

2.5 Section 31(3) of the ESC Act requires that the Commission do two things upon receipt of a review application:

(3) If an application is made for a review of a price determination—

(a) the Commission must give a copy of the application to each other person who could also have applied for review of the determination; and

(b) invite each such person to join as a party to the review and make submissions on the matter the subject of the review, within 20 working days after receiving a copy of the application, and in a manner specified by the Commission.

2.6 On 24 June 2021, as required by section 31(3) of the ESC Act, the Commission provided a copy of the review application to the Treasurer (being "the Minister" for the purposes of the ESC Act) and invited the Treasurer to join as a party to the review and to make submissions on the matters subject of the review. The Treasurer did not join as a party to the review.

2.7 Under section 31(6)(a) of the ESC Act, the Commission is required to make a decision on the review application within 10 weeks of the application being lodged (if it does not do so, it is taken to have confirmed the price determination – section 31(7)).

3 Conduct of the review

3.1 A price determination made by the Commission is not an assessment of a claim put forward by a regulated business (in this case, Robusto Investments), nor is it a decision by the Commission as to two competing claims put forward by Robusto Investments and another party (for example, Robusto Investments' customers).

3.2 Instead, a price determination is the independent decision of the Commission, acting in accordance with and taking into account all relevant matters required by law. While the price determination has direct application to Robusto Investments, in terms of regulating its revenue earned from the provision of water retail services to its customers, it has equal applicability to those customers: it is the customers who are ultimately required to provide that revenue to Robusto Investments through the water prices that they must pay to it.

3.3 In this sense, all information and materials gathered by the Commission, including the information and materials obtained from or provided by Robusto Investments, are simply matters which are considered by the Commission. The Commission is not bound to adopt, accept or assess as correct any person's submissions or claims in making its own, independent, decision under the statutory regime.

3.4 The review application lodged by Robusto Investments triggered the commencement of the statutory review process and set out specific aspects of the price determination with which Robusto Investments was dissatisfied.

3.5 The Commission's role on the review is to consider, in the light of the issues raised by Robusto Investments in its review application and in the context of the overall statutory scheme, whether or not the price determination made by the Commission should be confirmed, varied or substituted. In that regard, while the Commission gave careful consideration to the specific matters raised by Robusto Investments in its application, it considered the determination in its entirety.

3.6 As a part of its review application, Robusto Investments noted that section 31 of the ESC Act requires the Commission to review its own determination. Robusto Investments requested confirmation that different personnel (within the Commission or external to it) would assist and advise the Commission in its conduct of the review process.

3.7 The Commission agreed that, rather than relying on its own staff, it would engage an independent economic consultant, HoustonKemp, to advise it on the matters relating to the review in the place of its staff and advised Robusto Investments of that fact. HoustonKemp is a firm of economic and business consultants with experience in evidence-based decision-making in the areas of competition, finance, regulation and policy, which assists clients throughout the Asia Pacific region.

3.8 In doing so, the Commission put in place measures to ensure that its staff were not in any way involved in the consideration of the merits of the matters raised on review nor in providing any advice to the Commission; it only relied on its staff to the extent necessary to give effect to administrative arrangements (for example, recording the proceedings of Commission meetings and facilitating communications between the Commission and HoustonKemp).

3.9 HoustonKemp provided written advice to the Commission (**HoustonKemp report**), a copy of which is published along with this decision document. The Commission has carefully considered that advice, and the reasons contained within it, and adopts the HoustonKemp report, in conjunction with this overarching decision document, as its Statement of Reasons.

4 The grounds of review

4.1 As specifically set out in its application for review, Robusto Investments seeks the following:

4.1.1 Ground 1: An interim variation of the determination to exclude from it any restriction in respect of income from non-residential customers in relation to the supply of water when that water that is not intended for human consumption.

4.1.2 Ground 2: A variation of the determination to increase the maximum revenue control figure from $248,395 in nominal terms (2.1(b) in the Determination) to $597,033 per annum (in dollars at June 2021) or $746,291 for the 15-month regulatory period of the determination. The explanation of the calculation of the sum of $597,033 is as follows:

(a) Pricing Submission: $264,495

(b) Depreciation: $88,300

(c) Return on Capital: $135,000

(d) Amortised losses: $109,239

The pricing submission is the original March 2017 figures escalated by three per cent per annum to 2021 figures.

4.1.3 Ground 3: A variation of the determination to increase the maximum supply and consumption charges set out in the determination as follows:

	Current (as set by the Commission)	Proposed (by Robusto Investments)
A quarterly supply charge	$92.26	$722.00
a Tier 1 charge per kL	$3.36	$3.38
a Tier 2 charge per kL	$4.81	$4.50
a Tier 3 charge per kL	$5.20	$5.63

5 The Commission's decision and reasons

5.1 The Commission's decision and reasons on each ground of review are as follows:

5.1.1 Ground 1: The Commission confirms its decision for the reasons set out in the Statement of Reasons. In doing so it confirms that, contrary to the submissions put in Robusto Investments' review application, the final use of drinking water (whether for drinking purposes or otherwise) is not determinative of its regulatory treatment under a determination such as this: the product sold is drinking water and amenable to regulation under this determination as a result.

5.1.2 Ground 2: Subject to paragraph 5.2, the Commission confirms its decision for the reasons set out in the Statement of Reasons.

5.1.3 Ground 3: Subject to paragraph 5.2, the Commission confirms its decision for the reasons set out in the Statement of Reasons.

5.2 The Commission's reasons and decision on the prudent and efficient operating cost allowance made within the overall revenue requirement in relation to bad debt, mediation and dispute resolution expenses, a matter identified by the Commission as a result of this review, are as follows:

5.2.1 While not a ground raised by Robusto Investments, in reviewing the price determination in its entirety, the Commission has reached the decision that, for the reasons set out in the Statement of Reasons, it made an error in that price determination in relation to the prudent and efficient operating cost allowance made within the overall revenue requirement in relation to bad debt, mediation and dispute resolution expenses.

5.2.2 As set out in the Statement of Reasons, the Commission has determined that its original allowance of $15,000 (December $2018) in relation to those operating costs does not reflect a prudent and efficient cost (based on prudent and efficient practice and comparator analysis).

5.2.3 As a result, the prudent and efficient operating cost allowance for bad debt, mediation and dispute resolution expenses made within the overall revenue is varied from $15,000 (December $2018) to $625 (December $2018).

5.2.4 Consequentially, the maximum revenue that Robusto Investments can recover from residential customers and Mount Compass Sand and Loam over the regulatory period (1 April 2021 to 30 June 2022) is varied from $248,395 (in nominal terms) to $233,538 (in nominal terms) or $238,963 (December $2018) to $224,670 (December $2018).

5.2.5 Consequentially, the maximum prices under the determination are varied as set out below, to apply for the period 26 August 2021 to 30 June 2022 (noting that maximum prices for the period 1 April 2021 to 25 August 2021 were set in the Regulatory Determination made by the Commission on 25 May 2021):

Tariff element	Original Regulatory Determination	Varied Regulatory Determination
Quarterly supply charge	$92.26	$86.74
Tier 1 charge per kL (0-30kL)	$3.36	$3.16

Tariff element	Original Regulatory Determination	Varied Regulatory Determination
Tier 2 charge per kL (30-130kL)	$4.81	$4.52
Tier 3 charge per kL (>130kL)	$5.20	$4.89

5.3 Upon publication in the South Australian Government Gazette, the Commission makes a subsequent determination under Part 3 of the *Essential Services Commission Act 2002*, as authorised by Part 4 of the *Water Industry Act 2012*, giving effect to the decisions set out above in paragraph 5.2.

6 HoustonKemp Report

HOUSTONKEMP
Economists

Review of Robusto drinking water regulatory determination

A report for the Essential Services Commission for South Australia

16 August 2021

Final report

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Disclaimer

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1. Introduction

Water services in South Australia are regulated by the Essential Services Commission of South Australia (the Commission). Where appropriate, the Commission can, under the *Water Industry Act 2012* (WI Act) and the *Essential Services Commission Act 2002* (ESC Act), exercise its discretion to make a price determination to mandate prices, conditions relating to prices or price-fixing factors, as the Commission considers appropriate.[1]

Robusto Investments Pty Ltd (Robusto) is a licenced water retailer operating in Mount Compass under the trading name, Compass Springs.[2] Robusto became licenced in August 2016 after acquiring the water network assets in Mount Compass.[3] It is considered to be a monopoly supplier of retail drinking water services to the residents and commercial businesses that it serves.[4]

In May 2021, the Commission made a final regulatory determination for Robusto (the determination), which set out the maximum revenue it can recover from its customers and the maximum tariff it can charge for residential customers. The Commission's determination applies for a 15-month period, from 1 April 2021 to 30 June 2022.[5]

Robusto subsequently made an application for review of the price determination.[6] Under Part 6 of the ESC Act, the Commission is required to consider Robusto's application for review.[7] By means of the review process, the Commission may confirm, vary, or substitute the price determination. Following the review, the Commission must give written notice of the outcome to the applicant and provide a statement of reasons.

The Commission has engaged HoustonKemp to undertake an independent review of its determination. This report sets out the findings of our review.

The remainder of our report is structured as follows:

- section 2 provides a contextual overview that encompasses Robusto's network, its pricing proposal, the Commission's determination and Robusto's request for review;
- section 3 describes our understanding of the requirements governing the Commission's determination and Robusto's request for review, as set out in the relevant acts and National Water Initiative (NWI) pricing principles, and the framework we have applied in undertaking our review;
- section 4 describes Robusto's proposed allowance for operating costs (opex) allowance, the amount provided for in the Commission's determination, and our review of that assessment;
- section 5 sets out Robusto's proposed allowance for capital related costs, being the return on capital and return of capital (or depreciation) allowances, and the amount allowed for capital expenditure (capex) in the Commission's final determination, and our review of the Commission's assessment;
- section 6 discusses other relevant matters that we have reviewed, including the potential exclusion of non-residential customers from the determination and the potential amortisation of losses; and
- section 7 summarises our findings and the conclusion of our review.

[1] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 11.

[2] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 8.

[3] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 8.

[4] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 11.

[5] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 6.

[6] Robusto Investments Pty Ltd, Connor, S, *Application for review*, 23 June 2021, p 1.

[7] *Essential Services Commission Act 2002*, Part 6 – Reviews.

2. Contextual overview

In this section we provide a contextual overview that encompasses Robusto's water supply service, its pricing proposal, the Commission's determination, and Robusto's request for review.

2.1 Robusto's water supply service

In June 2016 Robusto purchased the Compass Springs water business assets from Hillrise Investments Pty Ltd,[8] and subsequently became licenced as a water retailer by the Commission in August 2016.[9]

The water assets were initially acquired in conjunction with the purchase of the Mount Compass Golf Course by Capitoline Property Pty Ltd (Capitoline) and were then subsequently acquired by Robusto for a reported purchase price of $1.05 million using 100 per cent debt financing.[10] Robusto and Capitoline are related companies, and share a sole company director and shareholder.[11]

Robusto's water supply assets are located in Mount Compass in South Australia (SA) and supply water exclusively to a small number of residential properties and two commercial entities in the area. At the time of the determination in 2021, Robusto's water supply assets serviced 174 customers, comprising:[12]

- 172 residential customers;
- Mount Compass Sand and Loam (MCSL), a non-residential (or business) customer; and
- Capitoline Property Pty Ltd (Capitoline), which owns and operates the Mount Compass Golf Course and Clubhouse (MCGC) and a nearby land development business.

Robusto has indicated that its customer base and water demand may increase over the 15 month period, by consequence of:[13]

- an additional 22 residential customers currently being added to the supply network and a further 18 scheduled to be added in the next year; and
- an indication by MCSL that it may require increased water use for potential additional business activities.

Robusto's water supply network entails three kilometres of pipe network, tanks, pumps, meters and other associated infrastructure, and bores.[14] Although Robusto owns and licences four bores, only two are directly connected to the water supply network.[15] The Commission estimates that, of the total volumes of water extracted from the two bores:[16]

- one third is used by residential customers and MCSL; and
- two thirds is used by Capitoline.

[8] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 10.

[9] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 8.

[10] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 9.

[11] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 75.

[12] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 8. The Commission has indicated that there are 174 customers in some places and 175 in other places. We have assumed that the 174 figure is correct but note this does not affect the findings and recommendations arising from our review.

[13] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 9.

[14] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 9.

[15] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 9.

[16] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 9.

2.2 Robusto's fifth pricing proposal

Robusto used a building block model (BBM) framework to determine the annual revenue requirement to be recovered from its water supply customers. Applying a BBM framework, Robusto proposed a total revenue requirement of $694,479[17] (expressed in December 2018 dollar terms, which we denote as 'December $2018') over the 15 month period.[18] This amount comprised:[19]

- $140,754 for the three month period from April to June 2021; and
- $553,724 for financial year 2021-22.

At Table 2.1 below we set out Robusto's proposed revenue requirement by reference to the different building block cost categories. We describe our understanding of Robusto's approach to estimating each cost category in further detail in each relevant section of our report.

Robusto's pricing proposal also sought to exclude non-residential customers from the determination. Put another way, the revenue expected to be collected from non-residential customers would not be taken to contribute to achieving the revenue requirement derived by reference to the BBM framework, thereby allowing Robusto to recover the entire revenue requirement from residential customers.

Overall, the Commission estimates that, if accepted, Robusto's pricing proposal would result in a maximum price increase for residential customers of more than 230 per cent over the 15 month regulatory period.[20]

Table 2-1: Robusto's proposed maximum allowable revenue – fifth pricing proposal (December $2018)

Cost category	2020-21	2021-22	April – June 2021	2021-22	Total (15 months)
Operating costs	$242,661	$233,368	$60,665	$233,368	$294,033
Depreciation	$88,300	$88,300	$22,075	$88,300	$110,375
Return on capital	$135,000	$135,000	$33,750	$135,000	$168,750
Amortised losses	$97,057	$97,057	$24,264	$97,057	$121,321
Taxes	$0	$0	$0	$0	$0
Maximum revenue requirements	**$563,018**	**$553,724**	**$140,754**	**$553,724**	**$694,479**
Revenue per customer	$3,273	$3,219			
Customer numbers	172	172			

Source: ESCOSA, Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons, May 2021, p 30.

Robusto did not propose a maximum water supply tariff that it would apply to its residential customers in its fifth submission. We have therefore assumed that its proposed maximum tariff for residential customers remains unchanged from its fourth submission, being those set out at table 2-2 below.

[17] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 30.

[18] The Commission noted that Robusto's fifth proposal did not state the applicable financial year, whether these values should be extrapolated to future years, or the proposed consumer price inflation adjustment. Where appropriate, the Commission has adjusted Robusto's proposed values so as to be specified in December 2018 terms.

[19] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 30.

[20] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 92.

Robusto noted that it does not intend to implement the maximum possible charges. Rather, Robusto stated its intention as being to:[21]

> demonstrate to our customers that our pricing changes were well under what was theoretically claimable under the NWIPP and that we only sought to increase prices to a point that ensured the ongoing viability of the business.

Table 2-2: Maximum tariffs proposed in Robusto's fourth submission

	Price prior to determination	2019-20	2020-21	2021-22
Supply charge per quarter	$75.40	[redacted]	[redacted]	[redacted]
Tier 1 charge (0-30kL)	$2.75	[redacted]	[redacted]	[redacted]
Tier 2 charge (30-130kL)	$3.93	[redacted]	[redacted]	[redacted]
Tier 3 charge (>130kL)	$4.25	[redacted]	[redacted]	[redacted]

Source: ESCOSA, Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons, May 2021, p 111; and [redacted]

2.3 Commission's final determination

In its determination, the Commission concluded that Robusto's fifth pricing proposal contained a number of deficiencies, noting in particular that:[22]

- opex costs did not reflect efficient costs and lacked transparency on how common costs have been allocated across businesses;
- on depreciation and return on assets:
  - the use of two starting asset values;
  - incorrect application of the asset roll over methodology;
  - assumed asset lives not reflecting life of actual assets;
  - insufficient justification of proposed rate of return;
  - incorrect application of the rate of return; and
  - disregard of efficient financial structure;
- lack of reasoning and justification to charge customers for amortisation of losses; and
- proposed exclusion of non-residential customers.

After adjusting for these deficiencies, the Commission determined the appropriate annual revenue requirement for Robusto over the 15 month regulatory period to be $270,562 (December $2018). [23] This amount represents a reduction of $423,917 (December $2018), or 61 per cent, relative to that applying under Robusto's pricing proposal.

Furthermore, the Commission determined that the maximum allowable revenue to be recovered from Robusto's residential customers and one non-residential customer, MCSL at $238,963 (December $2018). [24] It follows the Commission has allocated $31,599 (December $2018) of its estimated total efficient costs as

[21] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 11.

[22] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 36.

[23] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 6.

[24] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 6.

being appropriate for recovery from Capitoline, for the water use associated with the golf course and nearby land development.

Table 2-3: Commission's final determination as regards efficient costs (December $2018)

Cost category	2020-21	2021-22	April – June 2021	2021-22	Total (15 months)	Difference with Robusto's proposal
Operating costs	$143,630	$143,630	$35,907	$143,630	$179,537	-$114,496
Depreciation	$24,804	$24,804	$6,201	$24,804	$31,005	-$79,370
Return on capital	$44,009	$42,644	$11,002	$42,644	$53,647	-$115,103
Amortised losses	$0	$0	$0	$0	$0	-$121,321
Taxes	$5,333	$5,040	$1,333	$5,040	$6,373	6,373
Building block revenue	**$217,776**	**$216,118**	**$54,444**	**$216,118**	**$270,562**	**-$423,917**

Source: ESCOSA, Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons, May 2021, pp 53-54.

The Commission also specified the price structure and maximum nominal prices that Robusto can charge residential customers, which we reproduce at Table 2-4. The Commission noted that, if implemented by Robusto, these maximum prices would represent a 22 per cent increase in residential customer bills. [25]

Table 2-4: Maximum nominal price for residential customers – 1 April 2021 to 30 June 2022

	1 April 2021 to 30 June 2022	Robusto's price prior to determination
Quarterly supply charge	$92.26	$75.40
Tier 1 charge per kL (0-30kL)	$3.36	$2.75
Tier 2 charge per kL (30-130kL)	$4.81	$3.93
Tier 3 charge per kL (>130kL)	$5.20	$4.25

Source: ESCOSA, Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons, May 2021, p 6.

2.4 Robusto's application for review

On 23 June 2021, Robusto made an application for review of the Commission's final determination that was gazetted on 25 May 2021. In its application, Robusto requests:[26]

1. An interim variation of the determination to exclude any restriction in respect of income from non-residential customers in relation to the supply of water when that water is not intended for human consumption.
2. A variation of the determination to increase the maximum total revenue from $248,395 per annum in nominal terms to $597,033 per annum (in dollars at June 2021) or $746,291 for the regulatory period. The explanation of the calculation of the sum of $597,033 is as follows:
   a. Pricing Submission $264,495
   b. Depreciation $88,300

[25] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 6.

[26] ESCOSA, *Robusto Investments Pty Ltd – application for review*, 3 August 2021, p 1.

c. Return on Capital $135,000

d. Amortised losses $109,239

The pricing submission is the original submission lodged by Robusto in March 2017, escalated by 3% per annum to 2021 figures.

3. A variation of the determination to increase the maximum supply and consumption charges as follows:

	Current (as set by the Commission)	**Sought by Robusto on review**
Quarterly supply charge	$92.26	$722.00
Tier 1 charge per kL	$3.36	$3.38
Tier 2 charge per kL	$4.81	$4.50
Tier 3 charge per kL	$5.20	$5.63

3. Our assessment framework

In this section we describe our understanding of the requirements governing the Commission's determination and Robusto's request for review, as set out in the relevant acts and NWI pricing principles, and the assessment framework we have applied in undertaking our review.

3.1 Requirements applying under the ESC Act and WI Act

The Commission has statutory powers under the WI Act and the ESC Act to regulate revenue and prices in the water industry.

The WI Act provides limited guidance on how the Commission is to set revenue and prices for retail water services, beyond that the Commission may make a determination. In particular, section 35 of the WI Act states that:[27]

> the Commission may make a determination under the Essential Services Commission Act 2002 regulating prices, conditions relating to prices, and price-fixing factors for retail services.

The ESC Act specifies that price regulation can be conducted in any manner the Commission considers appropriate, including setting maximum price or maximum average revenue.[28] In performing its regulatory duties, including setting prices and revenue, the ESC Act states that the Commission must:[29]

> (a) have as its primary objective protection of the long term interests of South Australian consumers with respect to the price, quality and reliability of essential services; and
>
> (b) at the same time, have regard to the need to —
>
> (i) promote competitive and fair market conduct; and
>
> (ii) prevent misuse of monopoly or market power; and
>
> (iii) facilitate entry into relevant markets; and
>
> (iv) promote economic efficiency; and
>
> (v) ensure consumers benefit from competition and efficiency; and
>
> (vi) facilitate maintenance of the financial viability of regulated industries and the incentive for long term investment; and
>
> (vii) promote consistency in regulation with other jurisdictions.

3.2 National Water Initiative pricing principles

The NWI pricing principles were developed jointly by the Australian government and State and Territory governments. The purpose of the NWI pricing principles is stated as being:[30]

- to provide guidelines for rural and urban water pricing practices; and
- to assist jurisdictions implement the NWI pricing principles in a consistent manner.

[27] *Water Industry Act 2012*, Part 4, Division 3, s 35(1).

[28] *Essential Services Commission Act 2002*, Part 3, s 25(3).

[29] *Essential Services Commission Act 2002*, Part 2, s 6.

[30] See https://www.agriculture.gov.au/water/policy/nwi for further information on the National Water Initiative and https://www.agriculture.gov.au/water/policy/nwi/pricing-principles for the NWIPP.

The NWI pricing principles contains four sets of principles, which are:

- principles for the recovery of capital expenditure (capex), including asset valuation and cost recovery of capex;
- principles for urban water tariff setting where a monopoly provider exists;
- principles for recovering costs of water planning and management activities; and
- pricing principles for recycled water and stormwater use.

Only the first two sets of principles are relevant for the Commission's determination in relation Robusto's proposal. We discuss these two sets of principles in further detail below.

3.2.1 Capital expenditure recovery principles

Approach to calculating revenue requirement for capital investment

The NWI pricing principles note that there are two main approaches to calculating the revenue requirement in relation to capital investment to provide water services, ie:[31]

- the annuity approach; and
- the regulated asset base (RAB), which is part of the building block model (BBM) framework.

Robusto used a BBM approach to determine its revenue requirement for providing water services. This same approach is adopted by the Commission in its determination in relation to Robusto. Consistent with this confluence of conceptual approach, we have undertaken our review by reference to the BBM framework.

The BBM framework is almost universally adopted by Australian regulators for the purpose of determining prices to apply in relation to infrastructure services for which a single provider serves a particular geographic area. The essence of the BBM framework is the derivation of a forward-looking estimate of the total efficient cost of providing the relevant service.

Under the BBM framework, the various cost components (or building blocks) relevant to the provision of the service are summed to derive an annual total revenue requirement (also known as a 'maximum allowed revenue' or MAR), usually applying over a period of several future years. Maximum prices can then be derived by calculating charges for the service that, when applied to forecast demand for the service over the same period, will ensure the service provider is able to recover that total revenue requirement.

The NWI pricing principles describe three main *building blocks* costs to be considered in the BBM approach, including:[32]

- benchmark operating expenditure;
- the return of capital (depreciation); and
- a return on capital, derived by reference to a benchmark firm's weighted average cost of capital (WACC).

When the form of WACC applied in the BBM framework excludes any allowance for the cost of corporate tax (known as a post-tax WACC), the BBM cost components will include a separate allowance for the cost of corporate taxes.

In the BBM framework, capital refers to the value of the assets employed in the provision of the service, which is generally referred to as the regulatory asset base (RAB).

[31] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 5.

[32] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 4.

The NWI pricing principles state that:[33]

> Where a water business is using a RAB approach to recover capital expenditure, a number of factors have an effect on the revenue requirement: determination of the initial value for the asset base; the process for rolling forward the asset base over time; and the assumptions used to calculate the WACC.

We provide a more detailed explanation of the BBM framework, as it applies in the Commission's determination of Robusto's pricing proposal, in section 3.4 below.

NWI pricing principles for capital related costs

The NWI pricing principles set out six cost recovery principles for capital related costs, ie:[34]

1. cost recovery for new capex;
2. valuation of new assets;
3. valuation of legacy access;
4. recovery of legacy capex;
5. rolling forward asset values after legacy date; and
6. contributed assets.

Robusto's pricing proposal did not include any allowance for new capital expenditure or for the value of assets contributed by other parties. It follows that only the third, fourth and fifth of the NWI pricing principles we identify above are relevant for the Commission's determination and our review. We discuss these principles further below.

NWI pricing principle 3 relates to the valuation of legacy assets, or past investments made prior to a legacy date. The pricing principle states that legacy assets should be valued at depreciated replacement cost (DRC), depreciated optimised replacement cost (DORC), optimised replacement cost (ORC), indexed actual cost, optimised deprival value (ODV) or using another recognised valuation method.[35] It clarifies that legacy assets are those which existed before the legacy date.

NWI pricing principle 4 concerns the recovery of the cost of legacy capex. The pricing principle states the cost or value of legacy capex should be recovered by means of a:

- depreciation charge or annuity charge; and
- positive return on the asset value.

In other words, a service provider should be allowed to recover the value of the legacy capex, including a reasonable rate of return.

NWI pricing principle 5 concerns how the legacy capex or asset base should be valued (or rolled forward) over time, after the legacy date. The pricing principle states that:[36]

> the RAB comprising prudent new investments and legacy investments should be rolled forward each year taking in accordance to the following formula, which can be expressed in nominal or real terms:

[33] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 5.

[34] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, pp 6-8.

[35] It is our understanding that Robusto and the Commission agreed to use the depreciated replacement cost (DRC) for the purposes of determining the value of the asset base.

[36] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 8.

> $RAB_t = (RAB_{t-1} + \text{Prudent Capital Expenditure}_t - \text{Depreciation}_t - \text{Disposal}_t \text{ (discarded assets))}$.
> (Where t = the year under consideration).

3.2.2 Principles for urban water tariffs

The NWI sets out 10 principles for the setting of urban water tariffs. The principles have been developed for application in circumstances involving a single, large urban water services provider. Robusto is a small water provider and Mount Compass is located in a rural location. Nevertheless, the circumstances in which Robusto supplies water services, ie, by means of a piped network to a group of residential and non-residential customers imply that many of the urban water pricing principles are relevant for our review.

In our opinion, the two most relevant pricing principles are principle 1, on cost recovery, and principle 2, on tariff structures. Principle 1, on cost recovery, states that:[37]

> Water businesses should be moving to recover efficient costs consistent with the National Water Initiative (NWI) definition of the upper revenue bound: 'to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes, provision for the cost of asset consumption and cost of capital, the latter being calculated using a Weighted Average Cost of Capital (WACC)

In other words, water businesses should aim to recover their efficient costs, but to avoid monopoly rents, not more than these costs.

Principle 2, in relation to tariff structures, states that:[38]

> two part tariffs (a service availability charge and a water use charge) should be used to recover the revenue requirement from residential, non-residential and bulk customers.

This principle suggests that a water business should seek to recover its efficient costs from all customers that use the relevant infrastructure.

3.3 Our assessment framework

We have been asked to consider whether the Commission's final determination was reasonable.

It is important to emphasise that, in almost all applications of a forward-looking BBM framework for the administrative determination of maximum allowed revenues or tariffs for an infrastructure service provider, there will not be a unique outcome that is reasonable. Put another way, a different party applying the same framework and following a similar process of review and inquiry may well reach a modestly different decision.

Notwithstanding, it is also important to emphasise that the process by which such determinations are made is itself an important contributor to the strength of the judgements that must necessarily be applied. Processes that provide for an initial proposal and then further amended proposals to be made on the part of the service provider, and for a draft and then final determination on the part of the administrative decision maker, allow the benefit of all relevant considerations to be available prior to the final determination.

In conducting our review of the reasonableness of the Commission's final determination, we have considered whether it is likely to promote the principles and objectives set out in the WI Act and ESC Act, and the NWI pricing principles.

In our opinion, the objectives of the WI Act, the ESC Act, and the NWI pricing principles may be synthesised as being to promote the long term interest of customers with respect to the price, quality and reliability of water services. To this end, we have assessed whether the Commission's determination is reasonably likely:

[37] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 10.

[38] Natural Resource Management Ministerial Council, *National Water Initiative pricing principles*, 2010, p 10.

- to protect consumers from the misuse of the monopoly power, ie, prevent a service provider from earning more than the efficient cost of providing the service;
- to provide a service provider a reasonable opportunity to recover its efficient costs, including a reasonable rate of return, so that there is an incentive to continue to provide the services;
- to promote economic efficiency, which is widely accepted by economists as having three distinct dimensions, ie:[39]
  - productive efficiency, which is concerned with the means by which goods and services are produced, and is attained when production takes place with the least-cost combination of inputs;
  - allocative efficiency, which is concerned with what is produced and for whom, and is attained when the optimal set of goods and services is produced and allocated to provide the maximum benefit to society; and
  - dynamic efficiency, which is concerned with society's capacity to achieve efficient production and allocation of goods and services through time; and
- to be consistent with the NWI pricing principles, including:
  - valuation and recovery of legacy assets;
  - recover no more than efficient costs; and
  - recovering efficient costs from residential, non-residential and bulk consumers.

We have also considered whether the extent to which the Commission's determination conforms with the approaches adopted by other regulators of water service providers, as well as the Commission's own determinations for SA Water.

We note that Robusto provided a range of further information by way of support for its request for review, including minor changes to its proposed opex allowance and new information on asset lives. We have not considered this new information when assessing the reasonableness of the Commission's determination, since this further information was not available at the time the Commission made its determination.

In the period prior to the Commission's final determination, Robusto provided five pricing submissions. For the purpose of our review, we have focused on Robusto's fifth pricing proposal, since this was the subject the Commission's final determination.

3.4 BBM framework for determining revenue requirement

We noted in section 3.2.1 that the BBM framework is almost universally adopted by Australian infrastructure service regulators for the purpose of administrative price determinations. In this sub-section we describe the BBM framework in more detail, and its application for the purposes of the Commission's determination

3.4.1 Overview of the BBM framework

The essence of the BBM framework is its bringing together of all components of the cost of an infrastructure service providers. Robusto and the Commission have both used the BBM framework to determine the total annual revenue requirement for providing drinking water services by means of Robusto's network.

The BBM framework distinguishes four main types of cost that an infrastructure service provider needs to recover, ie:

- operating costs (opex), including maintenance costs and overhead costs;
- capital-related costs, including:

[39] For further discussion of the dimensions of efficiency and their relation to public policy see Productivity Commission, *On efficiency and effectiveness – some definitions*, May 2013.

  - return of capital (depreciation), which allows a service provider to recoup its initial investment over the life of the asset – such costs are typically recovered on a straight line depreciation basis so that an annual allowance is typically derived by dividing the value of each asset or asset class by the corresponding remaining asset life; and
  - return on capital, which allows a service provider to earn a reasonable return on its investment and is typically derived by multiplying an allowed rate of return (as calculated by reference to the WACC for a benchmark firm facing a similar degree of risk) by the value of the regulatory asset base or RAB; and
- a tax allowance, recognising that service providers need to pay corporate income tax on the profits they earn.

The estimation of these cost components is generally undertaken on a forward-looking basis, and by reference to the standard of an efficient provider of the relevant services. The actual cost of the particular service provider may play a role in determining the forward-looking efficient costs, but are often not determinative of that concept. These principles imply that:

- service providers have an incentive to reduce the costs they incur in providing the service – service providers can increase the return on their investment if can deliver services at lower costs and vice versa; and
- consumers do not pay more than the efficient costs of providing the service.

We explain some of the key concepts underpinning the BBM in further detail below.

3.4.2 Regulatory asset base

The RAB or, in other words, the value of the capital required to provide the services changes over time. The RAB increases when a service provider undertakes additional capex, and decreases with depreciation and asset disposals. The RAB is therefore an evolving variable, rising or falling over time as assets depreciate and are replaced, or the service envelope or capability expands.

Once an initial value of assets at a particular time is established for price setting purposes, the RAB then changes on a year-by-year basis, through application of a process generally referred to as being ‘rolled forward’ over time. Consistent with the NWI pricing principles, the RAB is typically rolled forward by taking:

- the value of the RAB as at the end of the prior year, which is also the starting value of RAB of this year;
- adding prudent new investments; and
- removing depreciation and disposals; so as
- to derive a value of the RAB at the end of this year or start of the coming year.

One consequence of this roll forward process is that, if a service provider does not undertake any new investment, and is compensated for the depreciation of its existing assets, then the value of the RAB will decline over time. Of course, the converse applies in circumstances where a service provider is undertaking a level of new investment that exceeds the amount deducted for depreciation.

3.4.3 Return on capital

The BBM framework ensures that a service provider has an opportunity to earn a reasonable rate of return on the value of its capital. It follows that a key question on determining the maximum allowed revenue is the amount assessed as being a reasonable return on investment.

The return on capital component of the BBM framework is almost always derived by reference to an estimate of the weighted average cost of capital, or WACC, for a benchmark firm facing risks commensurate with those of the service provider. It is derived by combining the return required by debt and equity holders for committing debt and equity capital for the purpose of providing the services. The WACC is derived by refence to an efficiently managed, benchmark service provider.

Economic regulators use a benchmark estimate of the WACC rather than an estimate derived by reference to the actual cost of debt faced by the relevant service provider (as may be derived from its financial statements), or the particular returns it may have realised on its equity capital. The essential premise for the use of a benchmark WACC is that it creates incentives for a business to finance its operations efficiently. By way of example, if a regulator allows a business to recover its actual interest payments, this may blunt the financial incentive for a service provider to make prudent debt financing decisions, including to manage its debt arrangements so as to secure the least possible interest costs.

The form of WACC adopted in the context of a BBM framework must be consistent with the specification of the cash flows implied by the other cost building blocks – most particularly, the interaction between debt interest costs, which are tax deductible, and the allowance for the cost of corporate taxes.

In its usual formulation, the WACC is expressed in vanilla, post tax form, as weighted average of the return on equity and the return on debt, expressed in the following terms:

$$\frac{E}{D+E} \times R_e + \frac{D}{D+E} \times R_d$$

Where:

- R_e= return on equity;
- R_d= return on debt;
- D = value of business funded by debt; and
- E = value of business funded by equity.

4. Operating costs

In this section we describe Robusto's proposed allowance for operating costs (opex), the amount provided for in the Commission's determination, and our review of that assessment.

4.1 Robusto's proposed opex allowance

Robusto's proposed annual opex allowance immediately prior to the Commission's draft determination was for $251,954 in 2020-21 and $239,563 in 2021-22.[40] [41]

In its draft determination, the Commission made a number of observations in relation to Robusto's opex proposal, including that:[42]

- Robusto did not provide evidence that its proposed costs reflected those of an efficient entity, as consistent with the regulatory framework; and
- that Robusto's proposal was not consistent or verifiable with its reported annual returns.

Robusto maintained that its proposed opex was appropriate. Following the draft determination, the only adjustment it made was to the bad debt provision element. In relation to the bad debt provision, Robusto accepted the Commission's reasoning and decision, which was to reduce its proposed allowance by $6,195 in 2020-21 and $9,294 in 2021-22. [43]

At Table 4-1 below we set out Robusto's proposed opex allowance, as applicable prior to the Commission's draft and final determinations.

Table 4-1: Robusto's proposed opex – draft and final determination (December $2018)

Cost Category	2020-21	2021-22
Annual license fees	$2,065	$2,065
Bank fees and charges	$1,033	$1,033
Accounting fees	$5,163	$5,163
Financial service charges (BPay, EFT etc)	$1,033	$1,033
Annual license fees	$2,065	$2,065
Water testing (compliance)	$12,391	$12,391
Infrastructure inspections and reporting	$4,130	$4,130
Insurance	$12,391	$12,391
Statutory charges	$1,033	$1,033
Legal fees	$10,326	$10,326
Meter reading	$1,033	$1,033

[40] ESCOSA, *Robusto Investments Pty Ltd Water Draft Regulatory Determination*, p 56.

[41] We note that the Commission assumed that Robusto's opex proposals were quoted in March 2017 prices unless stated otherwise. This assumption is based on the fact that Robusto's first pricing proposal was submitted in March 2017, and that the majority of the opex numbers remained constant in further proposals (although the numbers initially proposed for 2017-18 were shifted forwards to 2020-21 in line with the regulatory determination). The Commission's approach was to convert all values to December 2018 dollars. In this respect, we have followed the approach of the Commission. By consequence, all dollar values in this section of our report are quoted in December 2018 dollars, unless otherwise specified.

[42] ESCOSA, *Robusto Investments Pty Ltd Water Draft Regulatory Determination*, pp. 36-40.

[43] ESCOSA, *Robusto Investments Pty Ltd Water Draft Regulatory Determination*, p 56.

Staff costs (bookkeeping, management, vehicle)	$61,956	$61,956
Office accommodation	$5,163	$5,163
Computer equipment, software licenses	$1,033	$1,033
Stationary and postage	$2,065	$2,065
Web site maintenance and updating	$1,033	$1,033
Public relations and communications	$24,782	$24,782
Debt recovery, mediation and dispute resolution costs	$20,652	$20,652
Provision for bad and doubtful debts	$37,174	$24,782
Engineering consulting fees	$5,163	$5,163
Emergency repairs and maintenance (contract staff, plumbers, suppliers)	$20,652	$20,652
Power costs (bore pumps, lighting)	$15,489	$15,489
Pump maintenance	$2,065	$2,065
Bore maintenance	$2,065	$2,065
UV system maintenance	$2,065	$2,065
Total proposed opex – draft determination	$251,954	$239,563
Bad and doubtful debt adjustment	-$9,294	-$6,195
Total proposed opex – final determination	$242,661	$233,368

Source: ESCOSA, Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons, May 2021, pp 56, 142-143.

Robusto did not appear to provide a clear basis for its proposed opex allowance in either its fourth or fifth pricing proposal. However, [redacted]

Robusto's proposed cost categories and the corresponding amounts applying in its fifth pricing proposal remained largely consistent with its first pricing proposal. Notwithstanding, the financial year applying in relation to the first year of each proposed opex allowance changed in line with the timing of the submission of each proposal. For example, Robusto's proposed opex allowance prior to the Commission's draft determination for 2020-21 in table 4-1 above is consistent with the proposed opex allowance for 2017-18 appearing in Robusto's first pricing proposal.

The numerical consistency of the proposed opex allowance for each of these years implies that the particular amounts for each cost category were not precisely in line with the actual costs incurred by Robusto. However, there is only a very limited amount of further information as to the basis for Robusto's proposed opex allowance.

4.2 Commission's determination assessment

4.2.1 Information request to Robusto

In its draft determination, the Commission noted that there was a lack of transparency in how Robusto had developed its proposed opex allowance. The Commission further noted that Robusto's submission was not consistent and verifiable against the annual returns that had otherwise been provided to the Commission by

44 [redacted]

Robusto, and which are requirement of Robusto's licence. To this end, the Commission asked Robusto to provide additional information.

Robusto provided the Commission with additional information, setting out the actual annual return numbers in further detail, which we present at table 4-2 below.

Table 4-2: Additional information (consistent with annual return numbers) provided by Robusto (December $2018)

Actual costs	2016-17	2017-18	2018-19	2019-20
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: [redacted]

We note that once the professional fee component is removed from the category of actual costs, the numbers provided by Robusto in response to the Commission's December 2020 request for information align with the annual returns that Robusto provided in complying with its licence reporting requirements.

Robusto further noted that its proposed opex allowance includes cost elements not included in its annual licence reporting requirement. In particular, Robusto clarified that four categories of costs which were included in its proposed opex allowance were excluded from its annual reporting requirement, pending resolution of its pricing submission: [45]

- infrastructure inspections and reporting;
- PR and communications;
- provisions for bad and doubtful debts; and
- UV system maintenance.

[45] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 60.

[redacted]

- [redacted]
- [redacted]

4.2.2 Commission's approach to determining appropriate opex allowance

In its final determination, the Commission observed that Robusto's proposed opex allowance involved two key deficiencies, ie:[47]

- its proposed costs did not reflect efficient costs; and
- there was a lack of transparency regarding common cost apportionment.

In light of these concerns, the Commission's undertook its own assessment of the efficient, forward-looking opex allowance, by means of an analysis of comparator water supply entities.

Comparative assessment of efficient opex

The Commission's comparative assessment involved two steps, ie:[48]

- normalise the level of actual costs by removing significant, non-recurring opex items; and
- adjust forecast costs to an efficient cost level, drawing on external information from a range of sources to establish the efficient level of cost for each opex category.

In its final determination, the Commission made adjustments to ten of the 24 categories contained in Robusto's opex proposal. These adjustments are set out in table 4-3.

Table 4-3: The Commission's adjustments to Robusto's proposed opex (annual, December $2018)

Cost Category	Proposed by Robusto	Proposed by the Commission	Difference	The Commission's reasoning
Bank fees and charges	$1,033	$500	($533)	Although costs were very high in 2016-17, bank fees and charges over the 2017-18 to 2019-20 period were around $500. Costs have been adjusted to $500 as the Commission did not consider there was evidence to suggest a higher fee would be appropriate.
Accounting fees	$5,163	$4,100	($1,063)	Based on average account fee between 2016-17 to 2018-19 period. While fees spiked in 2019-20, there was no evidence of a permanent increase outside of Robusto's control.
Financial service charges (BPay, EFT etc)	$1,033	$0	($1,033)	No allowance has been made as the Commission considers these costs are covered elsewhere in the proposal.
Water testing (compliance)	$12,391	$5,300	($7,091)	Based on costs over 2017-18 to 2019-20 period. Although Robusto has indicated a desire to have more frequent testing, the Commission did not consider Robusto has demonstrated the need for more testing.
Legal fees	$10,326	$5,850	($4,476)	Based on costs over 2016-17 to 2019-20, except for a spike in 2017-18. No evidence of a sustained permanent increase outside of Robusto's control.
Staff costs (bookkeeping, management,	$61,956	$30,000	($31,956)	Based on the Commission's assessment of bookkeeping costs ($10,000), vehicle costs based on public information and Robusto's 50 percent pro-rata

[46] [redacted]

[47] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 58.

[48] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 58.

vehicle)				share ($5,000), and staff costs for one day a week of management time ($15,000).
Public relations and communications	$24,782	$5,000	($19,782)	ESCOSA assessment based on an external consultant not being required for these reasons: Public meetings supported by mailouts will suffice to engage with customers on future capex plans, and the Commissions regulatory determination process is being used to implement pricing proposals.
Debt recovery, mediation and dispute resolution	$20,652	$12,000	($8,652)	The Commission has considered confidential information from the Energy and Water Ombudsman SA (EWOSA) on its revised fee structure and the volume of cases presented relating to Robusto.
Provision for bad and doubtful debts	$27,880 in 2020-21 and $18,587 in 2021-22	$5,500	($22,380) in 2020-21 and ($13,087) in 2021-22	The Commission determined that bad debts should not exceed 3 per cent of revenues.
UV system maintenance	$2,065	$0	($2,065)	UV system not yet installed.
Total 2020-21	**$242,660**	**$143,630**	**($99,030)**	
Total 2021-22	**$233,368**	**$143,630**	**($89,738)**	

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, Appendix E: pp 128-132.

Analysis of comparator entities

Other licensed water service providers in South Australia also provide annual reports to the Commission on their revenue and expenditure. The Commission assessed the opex of comparable entities available to it by that process, as a means of understanding whether its final decision in relation to the opex allowance for Robusto was reasonable.

The Commission selected comparator entities that serve a similar customer base or face similar operating conditions, by means of the following process:

- select entities that service between 100 and 450 residential customers[49] – ten entities were identified that matched this criteria;
- remove entities that serve 'material numbers of non-residential customers'[50] – three entities were removed by reference to this criteria; and
- include costs incurred by SA Water's operations at Mount Compass – this step added one entity.

Overall, this process resulted in the Commission identifying eight suitable comparator entities.

Although the Commission did not disclose further details of the comparator entities in its final determination for confidentiality reasons, the Commission provided us with information in relation to these entities for the period 2016-17 to 2019-20, including:

- the services they provide, eg, whether drinking water, non-drinking water, sewerage and/or community waste management services (CWMS);
- the number of customers, by service type;
- operating costs for retail, drinking water and non-drinking water services; and
- the list of entities in relation to which the Commission had access to available data but had been excluded from the analysis.

[49] The Commission has provided us with a spreadsheet with further detail than what was available in the final determination.

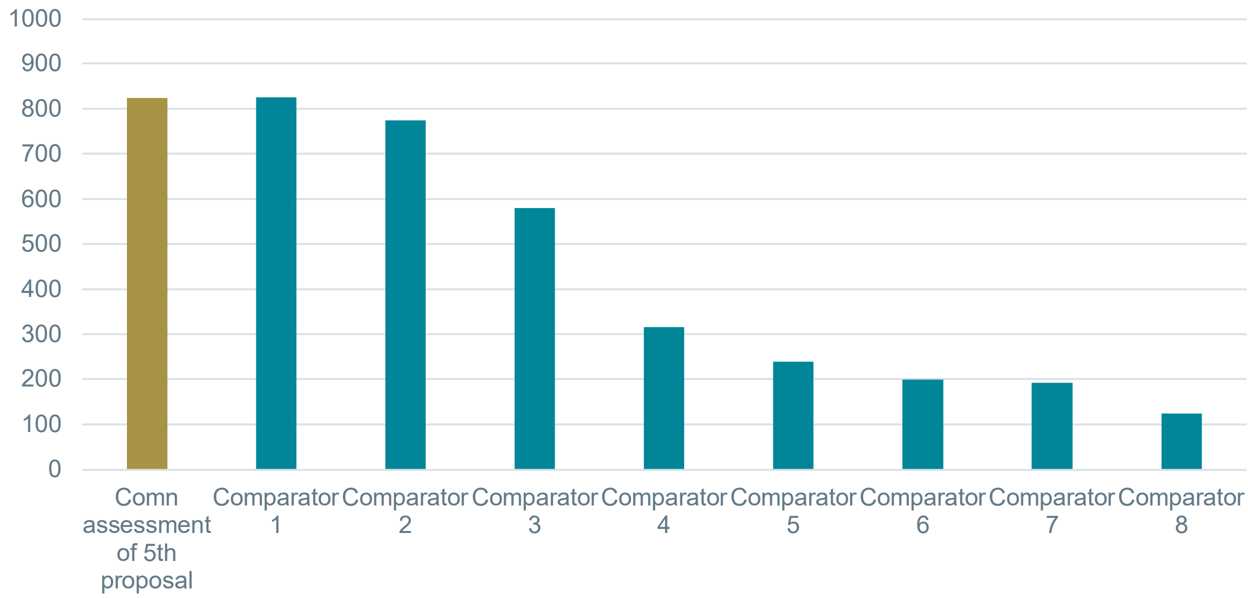
[50] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 148.

On the information available to us, we observe that the Commission's set of eight comparator entities included:

- five entities that provide drinking water services; including
  - two that provide only drinking water services
  - two that, in addition, provide CWMS; and
  - one that, in addition, provides both CWMS and sewerage services; and
- three entities that, in addition to CWMS, provide non-drinking water services.

At Figure 4-1 below we present the observed operating costs per customer for each of the Commission's comparator entities, alongside the Commission's assessment of the appropriate opex allowance, by reference to Robusto's fifth pricing proposal. The data presented are for opex excluding any bulk water charges, depreciation and interest payments.

Figure 4-1: Opex partial benchmarking analysis



Source: HoustonKemp analysis of data provided by the Commission.

The Commission noted there were a wide range of values for annual opex per customer across the comparator entities – ranging from $124 for one entity to over $800 for another.

The Commission concluded that its assessment of the efficient level of annual opex per customer for Robusto ($825) was at the upper end of the comparator range.[51] The Commission determined that although 'a case could be made for a lower operating cost outcome' based on its analysis of comparator entities, the Commission did not consider it appropriate for this fifteen month regulatory period. [52]

We set out our assessment of the Commission's approach in more detail in section 4.3, below.

[51] The Commission's proposed annual opex of $143,630 divided by 174 customers yields $825.46 per customer.

[52] ESCOSA, *Robusto Investments Pty Ltd: Drinking water final regulatory determination. Statement of reasons*, May 2021, p 64.

Summary of adjustments

In Table 4-4 below we show the outcome of the Commission's assessment of an efficient opex allowance for Robusto, by reference to both Robusto's opex proposal and the adjustments made by the Commission in light of its analysis of comparators.

Table 4-4: Summary of Commission's adjustments to Robusto opex proposal (December $2018)

	2020-21	2021-22	2020-21 (25%)[53]	Total (15 months)
Robusto January 2021 proposal	$242,660	$233,368	$60,665	$294,033
Commission adjustments (per above)	($99,030)	($89,738)	($24,758)	($114,496)
Commission Assessment	$143,630	$143,630	$35,907	$179,537
Cost per customer (174 customers)	$825	$825	$206	$1032

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, pp 64 and 132.

4.3 Review of the Commission's assessment

In this section, we consider whether the Commission's approach to determining an efficient opex allowance for Robusto is reasonable. We have undertaken our review by reference to three considerations, ie:

- the reasonableness of the Commission's approach and whether it aligns with the approach taken in other contexts;
- the particular adjustments made by the Commission to Robusto's proposed opex allowance; and
- the Commission's use of benchmarking to inform its determination of an efficient opex allowance.

4.3.1 Reasonableness of the Commission's approach

By way of summary, the Commission's approach to determining an efficient opex allowance for Robusto involves:

- the removal of significant non-recurring opex items;
- the adjustment of forecast costs to an efficient level, by reference to external information; and
- a comparison of the final outcome with benchmark water service providers.

To inform our assessment of the Commission's approach, we reviewed the approach taken by:

- the Commission itself, in assessing the efficient opex allowance in its 2020 regulatory determination for SA Water;
- the Essential Services Commission (ESC) in Victoria, in assessing the opex allowance to apply in the 2020 Goulburn-Murray Water price review; and
- the Independent Pricing and Regulatory Tribunal (IPART) in New South Wales, in assessing the opex allowance to apply in its 2020 review of prices for Sydney Water.

[53] Reflects that only April – June 2021 were included in the regulatory period from the 2020-21 financial year.

SA Water determination

In its 2020 SA Water regulatory determination, the Commission sets out its decisions and reasoning in relation to the prudent and efficient opex that SA Water should incur in providing water retail services during the four-year regulatory period.

In assessing SA Water's proposed opex, the Commission applies a 'prudent and efficient' standard. The Commission considered expenditure to be prudent if there is clear justification for the activity, such as to comply with a legislative obligation, an expectation that the activity will deliver net benefits to customers, or a clear expectation from customers that they are willing to pay for a certain outcome to be achieved.[54] Expenditure was considered to be efficient if it represented the lowest sustainable or long-term cost of achieving an intended outcome.[55]

To determine prudent and efficient opex, the Commission:[56]

- establishes an efficient, normalised base year, which reflects actual opex in the previous financial year (2018-19 in the 2020 determination), adjusted to remove one-off or abnormal costs or savings incurred in that year so that the amount represents the costs likely to be incurred by SA Water in future years under normal circumstances; then
- adds or subtracts additional expenditure for a range of known changes to operating circumstances in future years, categorised by five key investment drivers; and
- applies a top-down efficiency savings factor, which has the effect of reducing allowed opex to encourage efficiency improvements over time.

The Commission engaged an independent expert to assess whether SA Water's opex proposals for the next regulatory period were prudent, clearly identified intended outputs and outcomes, and reflected efficient costs of delivery.[57]

In cases where SA Water was not able to provide sufficient justification for an increase in expenditure for certain categories and programs above the efficient base year, the proposed increases were not included in the allowance it determined for an efficient level of opex.[58]

Essential Services Commission of Victoria

A similar approach was adopted by the ESC when assessing opex as part of its Goulburn-Murray Water 2020 price review.

The ESC states that it adopts the approach set out in the Victorian water charge (infrastructure) rules (WCIR) and the principles adopted by the Australian Competition and Consumer Commission (ACCC) for assessing opex.[59]

In a similar approach to the Commission, the ESC assesses efficient, forward-looking opex by considering changes in forecast annual opex relative to a baseline year, which is normally the last full financial year of actual costs. Water businesses are also required to demonstrate that efficiency improvements have been reflected in proposed expenditure.[60]

[54] ESCOSA, *SA Water regulatory determination 2020*, June 2020, p 117.

[55] ESCOSA, *SA Water regulatory determination 2020*, June 2020, p 117.

[56] ESCOSA, *SA Water regulatory determination 2020*, June 2020, pp 113-114, 145.

[57] ESCOSA, *SA Water regulatory determination 2020*, June 2020, p 117.

[58] ESCOSA, *SA Water regulatory determination 2020*, June 2020, pp 118, 145.

[59] Essential services commission of Victoria, *Goulburn-Murray Water final decision - 2020 water price review*, 3 June 2020, pp 8-9.

[60] Essential, Services Commission of Victoria, *Water pricing framework and approach - Implementing PREMO from 2018*, October 2016, p 25.

In the Goulburn-Murray Water 2020 price review, the ESC:[61]

- reviews actual operating costs from the last full year of expenditure data available (2018-19) and removes any one-off or non-recurring expenditure items and any inefficient costs to establish a base year opex;
- assesses the proposed changes to annual opex in each forthcoming regulatory year, including any new costs or savings arising from expected changes to service standards,[62] and evaluates whether the adjustments represent efficient expenditure; and
- adjusts the allowable forecast opex based on its findings.

The ESC engaged an independent expert to provide advice to inform the assessment of controllable opex in Goulburn-Murray Water's price review.[63]

Independent Pricing and Regulatory Tribunal (NSW)

Water services in New South Wales are regulated by the Independent Pricing and Regulatory Tribunal (IPART). In its review of prices for Sydney Water in July 2020, IPART assesses Sydney Water's opex by reference to the level of expenditure an efficient utility would incur in delivering the same service to customers. The approach includes an assessment of:[64]

- the efficiency of actual opex incurred in the previous, four-year 2016 determination period;
- the efficiency of proposed opex for the 2020 determination period; and
- the efficiency savings that could reasonably be made over the 2020 determination period, resulting in the application of an efficiency factor that had the effect of reducing the opex allowance by 0.8 per cent per annum, after other adjustments.[65]

IPART also engaged an independent expert to review the efficiency of Sydney Water's proposed opex and available savings.[66]

Our assessment

Our review finds that the Commission's approach to assessing Robusto's opex (ie, to remove significant non-recurring opex, and to make adjustments so as to be consistent with efficient levels) is consistent with that adopted by both other regulators and the Commission itself in its determination of an efficient opex allowance for SA Water. Notwithstanding, we note that:

- a yearly efficiency factor is sometimes applied in other contexts but has not been applied by the Commission in its determination for Robusto – we consider that, given the short duration over which its determination is to apply, it was reasonable of the Commission not to apply an efficiency factor in this instance; and
- regulators typically engage an independent expert to review the appropriateness of the opex allowance proposed by a service provider but the Commission has not done this for this determination – we consider this to have been a reasonable decision in light of the quantum of the total allowance.

In light of these considerations, we find that the Commission's methodological approach to determining an efficiency opex allowance for Robusto was reasonable.

[61] Essential services commission of Victoria, *Goulburn-Murray Water final decision - 2020 water price review*, 3 June 2020, p 9.

[62] In the context of Goulburn-Murray Water, this included a modernisation of its irrigation infrastructure network in the regulatory period.

[63] Essential services commission of Victoria, *Goulburn-Murray Water final decision - 2020 water price review*, 3 June 2020, p 10.

[64] IPART, *Final report - Review of prices for Sydney Water*, June 2020, p 36.

[65] IPART, *Final report - Review of prices for Sydney Water*, June 2020, p 44.

[66] IPART, *Final report - Review of prices for Sydney Water*, June 2020, p 34.

4.3.2 Commission's assessment of different cost categories

Robusto proposed an opex allowance disaggregated by 24 cost categories, of which:

- 20 categories involved recurring costs, and Robusto had based its forecasts on actual historical costs; and
- four cost categories were 'new' expenditure items.

For the 20 cost categories that involve recurring costs, the Commission adjusted these by:

- removing non-recurring costs; and
- for staff costs (which include book keeping, management and vehicle costs), reviewing the assumptions adopted by Robusto to calculate these costs and adjusting them as it deemed appropriate.

We note that – but for the exception we discuss below – we have not undertaken any independent primary research for the purpose of validating the Commission's approach to adjusting these 20 cost categories. However, we observe that the Commission's approach is consistent with that adopted by other regulators and appears to be reasonable for most cost categories.

The principal exception to this broad conclusion applies in relation to the allowance determined by the Commission for debt recovery, mediation and dispute resolution, which appears to reflect Robusto's actual costs rather than an explicit assessment of the likely efficient level of such costs.

We explain below our reasoning that a downward adjustment to the allowance for these costs is warranted.

Robusto's proposal also included four new cost categories that it claimed have not been historically incurred. In relation to these categories, the Commission:

- approved Robusto's opex for infrastructure inspections and reporting ($4,130 per year) – on the material available it is unclear as to why such inspections were not undertaken historically, but the Commission's decision to approve this nevertheless appears to be reasonable if such costs have been omitted;
- reduced Robusto's opex allowance for public relations and communications expenditure from $24,782 per year to $5,000 per year, on the basis that the Commission did not consider there to be a need to use external consultants – we find the Commission's approach to be reasonable, particularly given the number of customers serviced by Robusto;
- made no allowance for UV system maintenance on the basis that the system is not yet in place – we find this decision to be reasonable, particularly since Robusto did not propose any capex over the regulatory period; and
- noted that it considered that provisions for bad and doubtful debts should not exceed three per cent (or $5,500) per year – we find the Commission's approach to be reasonable, although we note that, ideally, the Commission would have informed its decision by reference to the level of bad and doubtful debts for comparable entities, but also acknowledge that this information may not be available.

We noted above that the Commission's allowance for debt recovery, mediation and dispute resolution appears to reflect the actual costs incurred by Robusto, rather than an assessment of its efficient costs. In particular, we understand that the Commission's allowance is based on the fee that Robusto was expected to pay to the Energy and Water Ombudsman South Australia (EWOSA) in 2020-21.

We understand that the allowance of $12,000 reflects the actual costs Robusto expects to pay to EWOSA and which comprise:

- [redacted]
- [redacted]

- [redacted]

Of this amount, more than [redacted] of Robusto's fee is due to the time spent by EWOSA on Robusto related cases.

However, the evidence suggests that the number of complaints received by EWOSA that relate to Robusto is significantly higher than what which could be expected in relation to an efficient water services provider.

For example, in 2019-20, EWOSA received 31 complaints in relation to the water and/or sewerage services provided by Minor and Intermediate Retailers. Of those complaints, 22 related to Robusto with billing being the leading complaint category.[67]

The number of cases per customer also indicated that the number of EWOSA cases related to Robusto is unusually high. In particular, the number of cases per customer that EWOSA received for SA Water is 6 per 10,000 customers in 2018-19 and 5 per 10,000 customers in 2019-20.[68] By way of contrast, the number of cases per customer received by EWOSA in relation to Robusto was:

- 230 per 10,000 customers in 2018-19,[69] which is around 38 times higher than SA Water over the same period; and
- 1264 per 10,000 customers in 2019-20,[70] which is around 250 times higher than SA Water over the same period.

A separate question arises as to an appropriate debt recovery allowance for Robusto. We note that most minor and intermediate water retailers are not part of the EWOSA scheme, and so do not pay any EWOSA fees. However, we understand that minor and intermediate water retailers will soon be required to join the EWOSA scheme.

In our opinion, the efficient level of cost should be set with reference to the fixed annual fee of being part of the EWOSA scheme, plus a small allowance for time spent by EWOSA on Robusto cases. We estimate that if time spent on Robusto's cases were around 40 to 250 times lower (ie, if Robusto had a similar number of cases per customer received by EWOSA to SA Water), then Robusto's actual costs in 2020-21 would have been \$300 to \$500.

4.3.3 Assessment of commission's approach to benchmarking

The Commission undertook a benchmarking exercise as a means of checking whether its efficient opex allowance was appropriate. The Commission noted that Robusto's efficient annual opex per customer was at the upper end of the comparator range, which its benchmarking found to fall between \$124 and over \$800 per customer. The Commission noted that this finding could support a lower opex per customer allowance for Robusto, but did not consider this to be appropriate for this determination.

In our opinion, the Commission's approach and finding is reasonable. We note that the efficient level of operating costs for a water service provider is likely to vary depending on a range of factors, such as the size of its network, source of water, total water supplied and the age of its assets. In other words, a benchmarking exercise would need to account for all such potential factors that drive cost before one can reasonably conclude that the allowance is higher than the efficient costs of providing the service.

On these considerations, including the related and reasonable decision not to incur the likely disproportionate cost of seeking an independent expert review of Robusto's operating costs, we find that it

[67] ESOSA, *Water Fact Sheets – Minor and intermediate retailers regulatory performance report 2019-20*, May 2021, p 6.

[68] EWOSA, *Annual report 2019-20*, n.d., p 43.

[69] We understand that EWOSA received 4 cases related to Robusto in 2018-19. As such, this is calculated as 4 cases divided by 174 customers.

[70] Calculated as 22 cases divided by 174 customers.

was appropriate for the Commission not to have made any further downward adjustment to its opex allowance by reference to the outcomes of the benchmarking exercise.

Finally, we also acknowledge that the Commission only had a limited number of comparable entities (eight in total) available to it, which itself would likely have constrained the ability of the Commission to perform a more sophisticated ‘like-for-like’ benchmarking exercise.

5. Return of and on capital

In this section we describe Robusto's proposed allowance for capital related costs, being the return on capital and return of capital (or depreciation) allowances, the amount allowed for capital expenditure (capex) in the Commission's final determination, and our review of the Commission's assessment.

5.1 Robusto's proposed return on and return of capital

In its fifth pricing proposal, Robusto proposed: [71]

- a depreciation allowance of $88,300 per year, derived by reference to assumptions in relation to the value and remaining lives of assets; and
- a return on capital allowance of $135,000 per year, calculated as DRC of its asset ($0.9 million) multiplied by its assumed WACC (15 per cent).

Notably, Robusto does not appear to have 'rolled forward' its asset base, so that its proposed depreciation and return on capital allowances remain unchanged throughout the 15 month period over which the determination is to apply.

We describe Robusto's proposed approach to these two components of capital related costs in further detail below.

5.1.1 Robusto's proposed approach to deriving a return of capital allowance

Developing an initial RAB

The Commission's determination is the first time that the assets underpinning the provision of the service have been valued for a regulatory purpose. It follows that a valuation of the assets was required to establish an initial RAB for application within the BBM framework. Robusto and the Commission agreed to value the assets on a depreciated replacement cost (DRC) basis.[72]

To develop a replacement cost estimate, in July 2018 Robusto engaged engineering firm Wallbridge Gilbert Aztec (WGA) to undertake an infrastructure replacement cost estimate, with a more detailed assessment of the condition of the assets made in December 2018.[73] WGA estimated the as-new replacement cost of Robusto's water assets, including preliminaries and contingency allowances, to be $1,958,399 in December 2018 terms.[74]

In January 2019, the Commission engaged chartered accountants BRM Holdich to determine the depreciated replacement cost (DRC) value of Robusto's water assets. Using information in the WGA report (ie, the replacement cost of the various assets, the as-new life of such assets, and remaining life of the existing assets), BRM Holdich calculated the DRC to be $861,950 (December $2018).[75] This included $716,406 for the water distribution network, $88,964 for the bores and $56,958 for the water tanks.

[71] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 12.

[72] Email from Stephen Connor to ESCOSA, 3 September 2018.

[73] WGA, *Compass Springs infrastructure replacement cost estimate report*, 5 July 2018; and WGA, *Compass Springs infrastructure condition report for Robusto Investments – Mount Compass*, 18 December 2018.

[74] WGA, *Compass Springs infrastructure condition report for Robusto Investments – Mount Compass, Attachment B*, 18 December 2018, p 1.

[75] BRM Holdich, Richardson, M, *Robusto Investments Pty Ltd - Water pricing submission*, 10 January 2019, p 3.

Robusto continued to dispute this valuation, but adopted the $861,950 valuation to get a resolution on pricing.[76] However, Robusto appears to have interpreted this sum as the value of the assets as at June 2016, and so inflated this value to $900,410, so as to be expressed in September 2018 dollar terms.

Robusto's proposed remaining life and depreciation

BRM Holdich also set out the remaining life of the different types of asset (based on the WGA report), which was then used to derive a depreciation allowance. Robusto disputed the remaining asset life used by BRM Holdich (and by the Commission) in calculating the DRC. We review the Commission's assumption on the remaining useful life further below.

Robusto noted that it disputed the use of a 60 year remaining life for all distribution network assets.[77] Instead, Robusto considered that a proportion of the distribution network assets (around 35 per cent) had a remaining life between 0 – 5 years.

At Table 5-1 we present Robusto's depreciation proposal, by reference to its DRC, estimated remaining life and so proposed depreciation schedule. On this basis, Robusto's proposed depreciation allowance is $88,300 for 2020-21 and 2021-22. The Commission assumed this sum to be expressed in December 2018 dollar terms.[78]

Table 5-1: Robusto's proposed depreciation schedule*

	DRC	Depreciation schedule	Remaining asset life quoted by Robusto	*Average remaining asset life adopted by Robusto**
Water distribution network (65%)	$485,000	$8,000	60 years	*60 years (approx.)*
Water distribution network (35%)	$262,000	$65,000	0 – 5 years	*4 years (approx.)*
Bores	$93,000	$9,300	10 years	*10 years*
Water tanks	$60,000	$6,000	0 – 10 years	*10 years*
Total	**$900,000**	**$88,300**	**10 years**	-

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, p 31 and 66

** Note: the last column of this table has been added by HoustonKemp. Values in this column are equal to the DRC divided by the depreciation schedule.*

[76] Robusto, *Compass Springs – pricing submission*, 16 April 2019, p 3.

[77] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 7.

[78] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 64. Further, based on table 5 2, the Commission has taken Robusto's reference to a valuation of $0.862m *over 10 years* (emphasis added), and its proposal of an $88,300 depreciation allowance, to mean that the total DRC asset value used by Robusto was $883,000, ie, $88,300 multiplied by 10 years. Given that there are inconsistencies between Robusto's letters and attachments in its pricing proposals (ie, between table 5 1 and table 5 2 as presented above), we take the Commission's interpretation to be as reasonable as any other.

5.1.2 Robusto's proposed return on capital

In its fifth pricing proposal, Robusto proposed a return on capital allowance of $135,000 for 2020-21 and 2021-22. This allowance was derived on the basis of a 15 per cent allowed rate of return, multiplied by an asset base of $900,000.[79]

Robusto's proposed allowed rate of return of 15 per cent remained constant from the time of its first pricing proposal, provided to the Commission in March 2017, and was established by reference to an assumed:[80]

- [redacted]
  - [redacted]
  - [redacted]
- [redacted]

The Commission inferred Robusto's proposal to be a form of WACC expressed in a pre-tax, real (or inflation exclusive) terms.

EY's report to support Robusto's proposed WACC

In its fourth pricing proposal, Robusto submitted a report prepared by EY by way of support for its proposed allowed rate of return, with the EY report stating that:[81]

- Robusto faces a greater level of uncertainty compared to larger businesses such as SA Water;
- Robusto's small and local customer base presents risks such as competition from water tanks and non-payment of bills;
- Robusto's water supply faces risks from factors outside of its control, such as power outages;
- major Australian banks were unwilling to provide debt financing for Robusto's acquisition of Compass Springs; and
- Robusto faces a higher cost of debt than SA Water.

By way of conclusion, the EY report stated that: [82]

> the return on assets for Compass Spring's drinking water business would likely be in the order of 10-12% post-tax nominal which has been estimated using a top-down assessment based on our experience in undertaking valuations for similar entities.

Robusto considered that EY's 10-12 per cent post tax nominal (or inflation inclusive) WACC supported its use of a pre-tax real (or inflation exclusive) WACC of 15 per cent.

5.2 Commission's final determination and our assessment

The Commission considered that Robusto's approach to deriving the return of and return on capital involved a number of key deficiencies.[83]

We present our review of the Commission's approach to determining the return of capital, the return on capital, and the RAB roll forward, in sections 5.2.1, 5.2.3, and 5.2.3, respectively.

[79] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 11.

[80] [redacted]

[81] Ernst & Young, *Economic advice in respect of Compass Springs drinking water pricing proposal*, September 2019 p 1-2.

[82] Ernst & Young, *Economic advice in respect of Compass Springs drinking water pricing proposal*, September 2019, p 2.

[83] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 36.

The Commission's determination also responded to several criticisms that Robusto had put forward in its fifth pricing proposal response to the Commission's draft determination. We review these responses in section 5.2.4.

5.2.1 Initial asset value, remaining life and depreciation

We describe below the approach taken by the Commission to estimate the initial value of Robusto's water assets, the remaining life of the assets, and the corresponding allowance for depreciation.

Commission's approach

The Commission used the engineering report prepared by WGA for Robusto as the basis for its depreciation calculations. The WGA report contains information by asset type, as follows, ie:

- the replacement cost and asset life of the different assets as-new;
- the remaining asset life and condition of the asset; and
- an assessment as to whether the asset needed to be 'replaced now'.

We set out this information at appendix A.1 of our report.

Using the information we describe above, the Commission calculated the DRC of individual assets that form part of Robusto's water network, bores and water tanks, using the formula:

$$DRC = \frac{remaining\ asset\ life}{asset\ life\ as\ new} * \text{as new}\ replacement\ cost$$

The Commission then calculated the depreciation schedule for each individual asset using the formula:

$$Depreciation\ schedule = \frac{DRC}{remaining\ asset\ life}$$

We present the aggregate results by asset type in table 5-2, below.

Table 5-2: Commission's assessment of depreciation (December $2018)

Asset type	DRC	Depreciation schedule	Remaining asset life (years)
Water network	$716,407	$11,940	60.0
Bores	$88,964	$8,379	10.6
Water tanks	$56,580	$4,485	12.6
Total	**$861,951**	**$24,804**	**34.8**

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, p 66.

Given the above information and in light of Robusto not proposing any new capital expenditure, the Commission determined an appropriate depreciation allowance of $24,804 per year (December $2018) for 2020-21 and 2021-22.

Assessment of the Commission's approach

We find the Commission's approach to valuing Robusto's opening asset base to be reasonable. We draw this conclusion on the basis that:

- the Commission's approach to valuing the asset is reasonable – it used a DRC approach to valuing Robusto's legacy assets, which is consistent with NWI pricing principles and was also agreed by Robusto;

- the Commission's calculation of DRC and remaining life is based on the best available information – the Commission determined a DRC and remaining life for Robusto's legacy assets by reference to an engineering report prepared by WGA for Robusto – our review of the Commission's calculations undertaken by reference to this report show them to be accurate and appropriate; and
- the Commission's approach to calculating depreciation is reasonable – it reflects a mainstream approach to valuing assets, the best available information on remaining life and total life of the assets, and was derived using straight line depreciation – all of which amount to a typical approach.

5.2.2 Roll forward of RAB

Commission's approach

The Commission rolled forward the RAB by asset type (ie, water network, bores, and water tanks). In practice, the Commission's process:

- assumes the DRC value presented in table 5-3 represents the opening RAB for 2018-19;
- calculates depreciation on a straight line basis; and
- calculates the closing RAB for this year (being the opening RAB in the next year) as the opening RAB this year minus depreciation this year.

We understand that Robusto has not undertaken any capital expenditure since 2017-18 and did not propose any capex during the period for which the determination is to apply. Consistent with the absence of any such anticipated expenditure, the Commission did not add any capital expenditure to the projected, rolled forward RAB.

The Commission then aggregated the RAB of the three asset types to estimate the total RAB for Robusto's water assets and the weighted average asset life.

Table 5-3: Commission's roll forward approach – total assets (DRC) (December $2018)

	2018-19	2019-20	2020-21	2021-22
Opening RAB	**$861,951**	**$837,147**	**$812,343**	**$787,539**
Weighted average asset life (years)	35	34	33	32
Depreciation	$24,804	$24,804	$24,804	$24,804
Closing RAB	**$837,147**	**$812,343**	**$787,539**	**$762,735**

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, p 72.

Assessment of the Commission's approach

We have assessed the Commission's approach by reference to its consistency with the NWI pricing principles and the information available to the Commission. We find the Commission's approach to the roll forward of the RAB to be reasonable, because:

- the initial RAB has been estimated by reference to the best available information (the WGA report) and aligns with the timing at which the WGA report asset values were effective; and
- it is consistent with principle 5 of the NWI pricing principles which, consistent with our discussion of them at section 3.2.1, set out how the RAB should be rolled forward.

5.2.3 Return on capital

The estimation of an appropriate benchmark WACC requires the Commission to determine each of the parameters listed below, all by reference to a firm providing water services in similar circumstances and facing similar risks to those of Robusto. Those parameters are:

- the return required by debt providers, ie, the cost of debt;
- the return required by equity holders, ie, the cost of equity; and
- the appropriate financial structure, ie, the relative proportion of funding from debt and equity.

The combination of these three parameters allows the Commission to derive a benchmark WACC and so an allowed rate of return. We describe the approach taken by the Commission in further detail below.

Commission's approach

In its final determination, the Commission noted that Robusto provided certain information on its financial situation, such as that Robusto:

- acquired its water assets using 100 per cent debt funding at a 14 per cent interest rate in June 2016;[84]
- refinanced that debt at a variable interest rate of 5.5 per cent at the end of 2016, secured by assets including those owned by its managing director;[85]
- paid interest on a loan from Capitoline (a related entity to Robusto) at the rate of 9.52 per cent;[86] and
- that its current interest rate payments are $100,000 per year, being a 9.52 per cent interest rate times a loan value of $1.05 million. [87]

In contrast to the tenor of the above information, the Commission's approach adopts as its reference point the notion of a standalone, benchmark efficient entity, rather than the actual financing arrangements applying in relation to Robusto.

We note that the principle of assessing the allowed rate of return for infrastructure service providers by reference to such a benchmark, efficiently financed entity is applied on a near universal basis in regulatory pricing determinations.

Consistent with this principle, the Commission effectively set aside information in relation to Robusto's actual financial structure and associated interest payments. The Commission also concluded that the material put forward by Robusto and its consultant, EY, was of limited substantive assistance.[88]

The Commission also noted the limited extent of regulatory precedence for determining the WACC that might apply to small scale water service providers and that further work is required.[89] Notwithstanding, the Commission's approach to determining an appropriate WACC was to consider: [90]

- the extent to which there was evidence to support the addition of a rate of return premium to small scale network providers; and
- if so, what would be an appropriate premium, and so allowed rate of return.

[84] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 73.

[85] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 73.

[86] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 76.

[87] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 76.

[88] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 80.

[89] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 138.

[90] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 138.

In making its assessment, the Commission relied on research undertaken by KPMG on the extent of any size of premium appropriate for Robusto's water network. KPMG suggested that while the evidence of size premium was inconclusive and did not relate to businesses as small as Robusto, on the balance of evidence, there was a case to support the application of a size premium.[91]

To estimate the appropriate rate of return for Robusto, KPMG took the WACC framework and assumptions used for SA Water and made adjustments:

- to provide for a small firm premium; and
- a debt constraint finance adjustment.

Adopting these adjustments, KPMG estimated an appropriate WACC for Robusto. The Commission's final determination notes that KPMG's approach used the SA Water WACC framework and assumptions as the starting point and then made adjustments, as below: [92]

> Step 1: Identify an assumption for the small firm premium and how to apply it: KPMG assumed the size premium to be 6.46 percent[293] based upon the research undertaken in developing the June 2020 report. It applied this adjustment to the cost of equity.[294]
>
> Step 2: Identify the adjusted WACC for an efficient debt-equity structure: This provides a crude proxy for the WACC, if the efficient debt-equity structure used for SA Water also applied to small scale businesses. This was calculated by applying the size premium adjustment, with all other SA Water assumptions held constant.
>
> Step 3: Identify the maximum adjusted WACC with debt constrained finance: This provides a crude proxy for the WACC, if small-scale businesses access to debt markets is constrained and they can only finance via equity. In addition to applying the size premium adjustment, this requires two additional adjustments. These are to un-lever SA Water's asset beta[295] and to amend the capital structure to only include equity.

We present the outcome of KPMG's adjustments in Table 5-4 below. KPMG also noted the challenge with estimating a WACC for small firms such as Robusto and the limited regulatory precedent involved, and that the Commission would need to exercise judgement when setting an appropriate WACC.[93]

Table 5-4: Estimates of Robusto's WACC

	SA Water final determination, June 2020	KPMG – efficient capital structure	KPMG – Debt constrained
Risk free interest rate (percent)	0.91	0.91	0.91
Unlevered asset beta			0.33
Equity beta	0.67	0.67	
Equity market risk premium (percent)	6.00	6.00	6.00
Small firm premium (%)		6.46	6.46
Cost of equity (post-tax, nominal) (%)	4.93	11.39	9.33
Cost of debt (pre-tax, nominal) (%)	5.21	5.21	5.21
Proportion of debt (%)	60	60	0
Proportion of equity (%)	40	40	100
WACC (post-tax, nominal) (%)	5.10	7.69	9.33
Long-term inflation expectation (percent)	2.07	2.07	2.07

[91] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 138.

[92] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 139.

[93] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 138.

WACC (post-tax, real) (percent)	**2.96**	**5.50**	**7.11**

Based on the findings of KPMG's analysis, the Commission concluded it was appropriate to include a small firm premium, but noted that Robusto appears to have been able to access debt financing, and so did not consider it was appropriate to adjust the estimated WACC for the potential presence of debt financing constraints.

Drawing together these considerations, the Commission concluded that the appropriate WACC for Robusto's water business was 5.50 per cent, expressed in post-tax, real (or inflation exclusive) terms.

Accordingly, the Commission applied a 5.50 per cent rate of return and a standard RAB roll-forward approach to derive a return on capital allowance for the regulatory period as set out in table 5-5. The average asset value was calculated as a simple average of the start and end year asset values presented in table 5-3 above.

Table 5-5: The Commission's final determination for return on capital (December $2018)

	2020-21	2021-22	2020-21 (25%)[94]	2021-22 (100%)	Total (15 months)
WACC (post tax real) (%)	5.50				
Average asset value	$799,941	$775,137	$799,141	$775,137	
Return	$44,009	$42,644	$11,002	$42,644	$53,647

Source: ESCOSA, Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons, May 2021, p 87.

Assessment of the Commission's approach

We find the Commission's approach and conclusion in relation to an appropriate return on capital allowance to be reasonable, and not warranting any adjustment. In drawing this conclusion, we note that the task of determining an appropriate WACC and so allowed rate of return for small scale, benchmark water service provider is intrinsically challenging, particularly by reference to the difficulty in obtaining market-based benchmarks that reflect the circumstances faced by Robusto.

Notwithstanding, we find that the Commission approached this task in a considered manner, seeking opinions from respected third parties and then applying an appropriate degree of judgement by reference to the material at hand. As to the particular considerations before the Commission and its findings in light of them, we note that:

- it was appropriate for the Commission to place little or no weight on evidence as to the particular financing arrangements applying to Robusto itself, for the principal reason that such arrangements appear to be inconsistent with the standalone principle that needs to be applied;
- the EY material put before the Commission by Robusto was insufficiently substantive to be capable of receiving any weight; and
- the advice obtained by the Commission from both KPMG and Incenta involved different and, in some respects competing perspectives as to the matters that deserve closest attention being, on one hand, the presence or otherwise of a small firm equity premium and, on the other the extent to which the usual benchmark level of debt financing should be applied.

In light of these various and diverse considerations, we find that it was reasonable for the Commission to adopt a real, post-tax WACC consistent with the mid-point of the range identified by KPMG. Consistent with

[94] Reflects that only April – June 2021 were included in the regulatory period from the 2020-21 financial year.

the Commission's own observations, we note that this area would benefit from further research in order to assist the potential refinement of future determinations. To that end, we observe that:

- Incenta is correct to question the applicability of the small firm premium findings of KPMG in the context of a regulated provider of an infrastructure-related monopoly service; but
- it remains likely to be appropriate for some form of small firm cost of equity premium to continue to apply; and
- that while a service provider of the scale of Robusto cannot be expected to raise debt finance by way of corporate bonds typically issued by large infrastructure service providers, we would expect a service provider in the circumstances of Robusto to be able to obtain debt finance for a reasonable proportion of this asset value.

By these summary observations, we conclude that although further research and evidence may well better inform the relevant considerations, there is no basis upon which can be reasonably concluded that such further evidence would be likely to suggest either a downward or upward revision to the allowed return element of the Commission's determination.

5.2.4 Robusto's criticism of the Commission's draft determination

In its fifth pricing proposal, Robusto put forward several criticisms of the approach that the Commission had taken in its draft determination to deriving allowances for the return of and return on capital. Those criticisms were that the Commission:

- ascribed a zero value to some its assets;
- did not consider its actual debt structure or interest rate payments;
- did not consider EY's report in making its decision on WACC; and
- did not acknowledge Robusto's difficulty to obtain finance for its water business.

The Commission responded to each of these criticisms in its final determination. At Table 5-6 we summarise the Commission's response to Robusto's criticisms and provide our assessment of the Commission's responses.

Table 5-6: Our assessment of the Commission's responses to Robusto's criticisms

Robusto criticism	Commission response	Our assessment
There are assets still in use to which the Commission has ascribed zero value in its calculation of DRC. Notwithstanding the engineering report of WGA, which state that these assets are in poor condition and require immediate replacement, Robusto contends that these assets have value as they continue to be used. Given this, it is appropriate to include these assets in the DRC (with 1-5 years remaining life) and for them to be part of the depreciation calculation.[95]	The Commission states that these assets have been valued at zero to reflect the information contained in the WGA report. The Commission also noted that failure to replace assets that are in poor condition/in need of replacement may lead to a lower service standard for consumers and that Robusto could earn a return for any efficient replacement capex.[96]	WGA's assessment appears to be based on the age of the asset and whether this has exceeded the expected life of these assets. It is standard regulatory practice to value assets that are older than their expected life as zero, even if they continue to be in use. Furthermore, WGA has assessed that these assets are in poor condition and require immediate replacement. In light of these considerations, it was reasonable for the Commission to have valued these assets at zero. Further, we note that even if these assets were included in the DRC (assuming it has 3 years remaining life), this would only increase the DRC from \$0.862 to \$0.9 million and depreciation from \$24,804 to

[95] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, pp 7-8.

[96] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, pp 69-70.

		\$37,434.[97] Furthermore, the WGA report was undertaken in 2018, so that the roll forward of these assets to 2021, being for three years, would in any case cause these assets to have minimal or zero value.
Robusto had demonstrated that the acquisition for \$1.05 million was 100 per cent debt financed and that financing costs of \$100,000 were reasonable and commercial.[98]	These concerns are based on Robusto's actual financing structure and business arrangements. The regulator must assess how an efficient entity would operate. Water customers ought not to bear the risk associated with Robusto's particular business decisions.[99]	It is standard regulatory practice the estimate the cost of debt by reference to that for a benchmark efficient entity, as distinct from the actual financing costs of an entity. This ensures the regulated entity has an incentive to reduce its financing costs, and that consumers do not pay more than the efficient costs of financing the business. In light of these considerations, the Commission's approach was reasonable.
The Commission has failed to consider the independent expert report provided by EY. EY's report argued that a small company such as Robusto would have a higher efficient cost of debt than larger entities such as SA Water. EY indicated that an appropriate post tax nominal rate of return would be in the order of 10 – 12 per cent. Robusto argues that this would align with its proposed 15 per cent pre tax rate.[100]	The Commission has used a small firm premium to raise the WACC applied to Robusto above that which would be applied to larger entities such as SA Water. EY and Robusto provide limited detail regarding EY's 'top down' assessment of 10 – 12 per cent post tax nominal, and no justification is provided for seemingly assuming a 100 per cent debt financing structure for determining a regulated WACC.[101]	We describe in section 3.4.3 and 5.2.3 that the derivation of an appropriate WACC requires careful consideration of several parameters. The EY report does not discuss how it derived its estimate of 10-12 per cent (post tax nominal) WACC, or its implied assumptions as to the various parameter values. For these reasons, the EY report offers limited guidance as to how the Commission should calculate the WACC other than there should be a small firm premium, which the Commission incorporated into its WACC calculation.
Robusto has been unable to obtain credit at lower interest rates (Robusto is currently in a debt financing arrangement at a rate of 9.52% with its related entity, Capitoline). This is because lenders view Robusto's 'specialised assets' as high risk such that Robusto must obtain unsecured, short-term credit.[102]	Circumstances affecting Robusto's ability to obtain lower cost financing are largely a result of business decisions made by Robusto and Capitoline. Water business assets can provide at least some form of security for financing, and efficiently incurred asset costs can be recovered with considerable certainty under the regulatory process.[103]	Robusto was able to obtain 100 per cent debt financing for its initial purchase of the business, which was then refinanced at variable interest rate of 5.5 per cent, albeit with other assets as security. The above suggests that Robusto has been able to obtain debt financing at lower interest rates than its current rate. It is also likely that Robusto would be able to achieve lower interest rates without security of other assets if it had a lower debt to asset value ratio.

[97] These numbers have been calculated using the same approach as the Commission, described in section 5.2.1, above. This approach is based on the independent engineering valuation set out in Appendix 7.4A1. For each asset where the engineers have commented that the asset 'needs replacing now' we have calculated the DRC and annual depreciation values based on a remaining asset life of zero and a remaining asset life of three.

[98] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, pp 5-6.

[99] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 76.

[100] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 10.

[101] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, pp 83-85.

[102] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 5; ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 76.

[103] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, pp 78-79

6. Other relevant matters

In this section we discuss other relevant matters that we have reviewed, being the potential exclusion of non-residential customers from the determination and the potential amortisation of losses.

6.1 Pricing and inclusion of non-residential customers

6.1.1 Robusto's proposal

Robusto's pricing proposal was that the entire revenue requirement determined by the Commission should recovered from residential customers only. Robusto contends that the inclusion of non-residential customers in the determination could hinder its ability to service its customers. The basis for this proposal is Robusto's contention that it has entered into an emergency supply arrangement with one of its commercial customers, which could potentially involve large volumes of water to be delivered at short notice.[104]

Robusto stated that, if this was to occur, particularly it if becomes an ongoing requirement, then Robusto would either not be able to provide water to the commercial customer or would need to curtail the water it provides to residential customers.[105]

6.1.2 Commission's determination

The Commission concluded that non-residential customers should be included in the determination. In making this determination, the Commission:[106]

- considered that all users needed to pay an appropriate amount for using the network, including a contribution to infrastructure costs; and
- noted that Robusto had a contractual obligation to provide drinking water to residential customers, including meeting supply and service reliability obligations, under its standard customer contract.

The Commission's decision to include non-residential customers in its determination meant that it was also required to consider how efficient costs should be recovered across Robusto's customer groups, ie:

- the 172 residential customers;
- MCSL; and
- Capitoline, which is a related entity to Robusto.

The Commission adopted a 'users pay' approach to determine how the efficient costs should be recovered across the three identified customer groups. To this end, the Commission adopted a cost allocation approach, where different costs are allocated to different consumer groups based on their contribution to the cost allocator.

By way of example, number of connections is used to allocate the return on capital and depreciation allowances associated with the water distribution network, since the Commission considered that these costs largely relate to the number of connections. Since residential customers represent 172 connections (out of 173 connections, noting that Capitoline is not connected to the water distribution network), 99.4 per cent of these costs are allocated to residential customers.

[104] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 49.

[105] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 49.

[106] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 49.

Drawing on its cost allocation methodology, the Commission determined that the maximum amount of revenue to be recovered from residential customers and MCSL is $238,963 (December $2018).[107] This amount implicitly allocates $31,599 (December $2018) to be recovered from Capitoline, or around 12 per cent of the total revenue requirement.

The Commission noted that, in principle, it can adopt any pricing structure it considers appropriate and that Robusto had indicated a desire to recover a higher proportion of its revenue from fixed charges. The Commission also noted that:[108]

> From a purely economic perspective, it is generally considered that the supply charges should represent the infrastructure or fixed costs associated with providing the drinking water service, with the variable costs associated with the usage charges.

The Commission undertook an assessment of the proportion of fixed and variable costs and found that 78 per cent of the revenue requirement is related to fixed costs and 22 per cent is related to variable costs.[109] It follows that there is economic merit in Robusto's proposal to recover a higher proportion of revenue from fixed charges.

Notwithstanding, the Commission considered it appropriate to maintain the existing pricing structure to reduce the bill impact on low volume users.[110] The Commission noted that its determination, if adopted by Robusto, would already result in a 22 per cent increase in prices for residential customers. Recovering a higher proportion of revenue from fixed charges would lead to further price increases for customers with lower water consumption.

The Commission further noted that its decision to maintain existing pricing structures aligned with its price setting powers under the ESC Act and WI Act, by reference to its discretion to set prices as it considers to be appropriate.[111]

The Commission also noted that its decision to maintain the existing price structure aligns with the NWI pricing principles, ie:[112]

> Moreover, while NWI pricing principles provide that supply charges should be calculated as the difference between the utility's total revenue requirements, it also states that the usage charge should, in general, be set with reference to long-run marginal cost. As explained above, there are reasons why, for the purposes of a new determination set for a short regulatory period, the use of long-run marginal cost may not be appropriate - including the sudden and large distributional impacts

6.1.3 Assessment of the Commission's approach

By way of summary, the key decisions made by the Commission relate to:

- whether non-residential customers should be included in the determination;
- determining the revenue requirement to be recovered from different customer groups; and
- the pricing structure to apply to residential customers.

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[107] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 106.

[108] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 106.

[109] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 107.

[110] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 108-109.

[111] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 108-109.

[112] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 109.

Decision to include non-residential customers in the determination

We concur with the Commission's finding that all users should pay for, and contribute to, the efficient costs of the water infrastructure network.

The exclusion of non-residential customers would imply the total revenue requirement is allocated to, and so recovered from, residential customers. It follows that, if non-residential customers were excluded, the NWI pricing principles and the ESC Act may imply that it would be necessary for the Commission to set the maximum residential tariff at a level sufficient to recover all efficient costs. Since Robusto would still be able to charge non-residential customers for its use of water, Robusto would have the potential to earn revenue well in excess of its efficient costs.

The exclusion of non-residential customers would also mean that Robusto's pricing for non-residential customers would not be bounded by the Commission's determination. It follows that the determination would provide no protection for non-residential customers, contrary to the objectives of the ESC Act of protecting the long term interest of consumers.

Accordingly, we find that the long term interest of consumers would be promoted by including non-residential customers in the determination, while also preventing Robusto from recovering total revenue that would exceed its efficient costs.

Determine the amount that should be recovered from different customer groups

The Commission used a cost allocation approach to determine the amount that should be recovered from different consumer groups.

By way of general observation, there is rarely a single, correct method to allocate costs between one class of customers and another, ie, cost allocation typically involves a degree of judgement and there is likely to be more than one approach that is reasonable.

Notwithstanding, a well-accepted principle for allocating costs between different classes of customers is to do so having regard to the causal principle. In other words, if particular cost categories can be attributed to a particular group of users or a cost driver, these costs should be so allocated. We find that the Commission's cost allocation approach takes into account how the different user groups use the network and the likely costs drivers of the relevant items of infrastructure. On these considerations, we find the Commission's approach to be reasonable and appropriate.

We note that the Commission specifies a maximum revenue that should be recovered from residential customers and MCSL, the implicit effect of which is to allocate around 12 per cent of the revenue requirement to Capitoline. In our opinion, it is appropriate that the Commission set a maximum revenue requirement for all customers except for Capitoline. This is because Robusto and Capitoline are related entities, so that Robusto can be presumed to have a financial incentive to recover its total allowed revenue from other customers.

Approach to price setting

Robusto indicated its desire to shift a higher proportion of its revenue towards recovery by means of fixed charges and the Commission's analysis suggests there is economic merit in such an evolution. However, the Commission's determination is to maintain the existing price structure, while applying a 22 per cent price increase across all charges. The Commission's principal reason for maintaining the existing price structure is to manage the bill impacts for residential customers.

On this matter, we make the following observations:

- a shift towards fixed charges would mean that prices better reflect the structure of costs – it follows that there may be economic merit in recovering a higher proportion of total costs by means of fixed charges, although we note that more complex economic considerations, such as the relationship between changes in water consumption and the potential change in future costs may also be important considerations;

- the impact on customer bills is a relevant consideration when regulators set prices – we therefore find it reasonable and appropriate for the Commission to consider the bill impact that its final decision is likely to have on customers;
- the Commission's determination, if implemented by Robusto, will increase the revenue to be collected from residential customers by 22 per cent – this is a significant price effect, for which we note that such bill impacts are typically 'phased in' over a longer regulatory period (usually around 4-5 years) but acknowledge a 'phase in' may not be appropriate or practicable given the short duration for which the determination is to apply (15 months); and
- recovering a higher proportion of costs from the fixed charge component of a water supply tariff would also involve reducing the variable consumption charge – this would increase the price impact for customers who have relatively low water consumption but decrease the price impact for customers who have higher water consumption.

The above considerations highlight the trade-off between introducing tariffs that better reflect the structure of costs, which may assist in promoting better water usage decisions, but with corresponding bill impacts for some consumers. Typically, infrastructure service providers would seek to smooth the implementation of such changes over a long period of time to assist in reducing the bill impact on consumers. Notwithstanding, the speed with which a service provider may seek to transition towards cost reflective charges is often a 'judgement call', made following consultation with customers.

In light of these considerations, we find the Commission's determination to be reasonable, particularly in light of the significant price increases that could arise from the determination.

6.2 Amortised losses

In this section we discuss Robusto's proposal, and the Commission's response, in relation to amortised losses (or 'claimed losses'). In this context, amortised losses refer to the additional revenue that Robusto would have obtained had it been able to raise its prices to the level set out in its pricing proposals since 2017.

6.2.1 Robusto's proposal

Robusto proposed that it should be compensated for not having introduced a price change earlier. Robusto calculated such 'losses':[113]

> on the basis of the differential between the income we anticipated had our Pricing Submission been approved in 2017 (with amendments) compared with the actual income received, divided over a 5 year period.

Robusto proposed to recover these losses over a five year period, with this corresponding to an amount of $121,321 (December $2018) over the 15 month regulatory period, or $97,057 per year (December $2018).

6.2.2 Commission's assessment

The Commission excluded the claimed losses from its determination. It expressed the view that Robusto had provided 'a lack of reasoning and justification to charge customers' for amortised losses.[114]

In making this decision, the Commission noted that:[115]

[113] Robusto, *ESCOSA drinking water draft regulatory determination response*, 22 January 2021, p 9.

[114] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 36.

[115] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, pp 87-88.

- the pricing proposals submitted by Robusto were not compliant with 2013 regulatory determination, and that this was the reason for the elapsed time since the first pricing proposal;
- Robusto did not seek an interim pricing increase; and
- that the methodological approach Robusto used to calculate amortised losses was unclear.

The Commission indicated that the potential for an interim pricing adjustment may have been possible under a compliant pricing proposal.[116]

6.2.3 Assessment of the Commission's approach

On this aspect of the Commission's determination, we make the following observations:

- Robusto's pricing proposal remained largely unchanged over time – consistent with our observations and conclusions elsewhere in our review, we find that Robusto's previous submissions were not compliant with the NWI pricing principles and, as such, it was reasonable for the Commission not to approve previous pricing submissions;
- we are not familiar with the interim pricing requirements and are not in a position to comment as to whether it was feasible for an interim pricing arrangement to be put in place; and
- it is unclear how allowing Robusto to recover historical costs could promote the long term interest of its customers – such a decision would increase the price paid by customers without any corresponding change to service quality or reliability; and
- furthermore, the regulatory framework is generally forward looking, ie, being designed to ensure that Robusto has an incentive to recover future investments, rather than recoup historical losses.

On these considerations, we find the Commission's decision not to allow Robusto to recover amortised losses to be reasonable.

[116] ESCOSA, *Robusto Investments Pty Ltd: drinking water final regulatory determination | Statement of reasons*, May 2021, p 88.

7. Conclusion

In this section, we set out the overall findings of our review. We describe our findings in relation to process the Commission undertook to reach the final determination, our assessment framework, and then our findings as to the reasonableness of each main element of the Commission's determination and its associated reasoning. Finally, we set out the implications of adopting our recommendations for a lower allowance for bad debt, mediation and dispute resolution.

7.1 Commission's determination process

We find that the process by which the Commission made its final determination was thorough and went beyond that which would typically be expected of a regulator given the scale of Robusto's network. We note that the Commission has:

- engaged repeatedly with Robusto since it submitted its initial pricing submission in March 2017 – in total the Commission responded to five pricing proposals whereas, by contrast, it is more common for a regulator to consider just two pricing proposals from a regulated business, being an initial proposal and then a revised proposal following a draft determination;
- attempted to clarify the basis for Robusto's pricing proposal – in addition to responding to Robusto's five pricing proposals, the Commission issued Robusto with three requests for information to inform its final determination and met with Robusto on multiple occasions; and
- undertaken a thorough price determination process, which involved issuing a draft determination for consultation, public consultation, stakeholder meetings and a final determination.

By these steps, the Commission has followed a thorough and comprehensive process to reach its final determination.

7.2 Our assessment framework

We have been asked to consider whether the Commission's final determination was reasonable.

It is important to emphasise that, in almost all applications of a forward-looking BBM framework for the administrative determination of maximum allowed revenues or tariffs for an infrastructure service provider, there will not be a unique outcome that is reasonable. Put another way, a different party applying the same framework and following a similar process of review and inquiry may well reach a modestly different decision.

Notwithstanding, it is also important to emphasise that the process by which such determinations are made is itself an important contributor to the strength of the judgements that must necessarily be applied. Processes that provide for an initial proposal and then further amended proposals to be made on the part of the service provider, and for a draft and then final determination on the part of the administrative decision maker, allow the benefit of all relevant considerations to be available prior to the final determination.

We have assessed the reasonableness of the Commission's final determination by reference to the objectives of the WI Act, the ESC Act, and the NWI pricing principles, each of which may be synthesised as being to promote the long term interest of customers with respect to the price, quality and reliability of water services.

Consistent with these objectives, we have assessed whether the Commission's determination is reasonably likely:

- to protect consumers from the misuse of the monopoly power, ie, prevent a service provider from earning materially more than the efficient cost of providing the service;

- to offer the service provider with an opportunity to recover its efficient costs, including a reasonable rate of return, so that it has a strong incentive to continue to provide the services;
- to promote economic efficiency; and
- to be consistent with the NWI pricing principles.

We have also assessed the extent to which the Commission's determination conforms with the approaches adopted by other regulators of water service providers, as well as the Commission's own determinations for SA Water.

7.3 Our assessment of the Commission's determination

We have assessed the reasonableness of the Commission's:

- approach to setting Robusto's revenue requirement (including opex, return of capital and return of capital);
- decision to include non-residential customers in its determination and approach to setting prices for residential customers, and
- its decision not to approve Robusto's claims of amortised losses.

7.3.1 Assessment of Commission's opex allowance

Our review of the Commission's opex allowance has been made by reference to three considerations, ie:

- the reasonableness of the Commission's approach and whether it aligns with the approach taken in other contexts – we find the Commission's approach to assessing Robusto's opex to be consistent with that adopted by other regulators as well as the Commission itself in its determination of an efficient opex allowance for SA Water;
- the particular adjustments made by the Commission to Robusto's proposed opex allowance – we find the Commission's approach is consistent with those adopted by other regulators and is reasonable for most categories, except for its allowance for bad debt, mediation and dispute resolution; and
- the Commission's use of benchmarking to inform its determination of an efficient opex allowance – we find that it was appropriate for the Commission not to have made any further downward adjustment to its opex allowance by reference to the outcomes of the benchmarking exercise.

In light of these findings above, the Commission's opex allowance is generally reasonable, with the single exception of its allowance for bad debt, mediation and dispute resolution costs, where we find that a downward adjustment is warranted.

The Commission's allowance for bad debt, mediation and dispute resolution appears to reflect Robusto's actual costs rather than an explicit assessment of the likely efficient level of such costs. The evidence we have reviewed suggests that the number of complaints received by EWOSA that relate to Robusto is significantly higher than that which could be expected in relation to an efficient water services provider.

By way of example, the number of complaints per customer received by EWOSA in relation to Robusto customers is between 38 times and 250 times higher than those received by EWOSA in relation to SA Water customers. We estimate that if time spent attending to Robusto's cases was around 40 to 250 times lower (ie, if Robusto had a similar number of complaints per customer as those received by EWOSA in relation to SA Water), then Robusto's actual costs in 2020-21 would have been $300 to $500.

7.3.2 Assessment of Commission's return of capital and return on capital allowance

We have assessed the reasonableness of Commission's approach to three capital cost related components of the BBM framework as it applies to Robusto, ie:

- setting an initial asset value, remaining life and depreciation;
- applying the roll forward of the RAB; and
- calculating the allowed return on capital.

In light of our review, we find that the Commission's:

- **allowance for return of capital** is reasonable, because it reflects a mainstream approach to valuing assets, the best available information on replacement cost, remaining life and total life of the assets, and was derived using straight line depreciation – all of which amount to a typical approach;
- **approach to roll forward of the RAB** is reasonable, because it is consistent with NWI pricing principles and reflects the best available information on the value and remaining life of the relevant assets; and
- **allowance for return on capital** is reasonable, because the Commission sought the advice of respected third parties (ie, KPMG and Incenta) and then applied reasonable judgement.

7.3.3 Assessment of other relevant matters

We have also assessed the reasonableness of other relevant matters arising in relation to the Commission's decision:

- on pricing and the inclusion of non-residential customers in the determination; and
- to make no allowance for amortised losses.

We find the Commission's decision to include non-residential customers to be reasonable. Otherwise, Robusto would have the ability collect revenue that is materially above its efficient costs, which would be contrary to the requirements of the ESC Act and the long term interest of consumers.

We also find the Commission's decision to make no allowance for amortised losses to be reasonable. In making this finding, we observe that:

- Robusto's pricing proposal remained largely unchanged over time – consistent with our observations and conclusions elsewhere in our review, we find that Robusto's previous submissions were not compliant with the NWI pricing principles and, as such, it was reasonable for the Commission not to approve previous pricing submissions;
- it is unclear how allowing Robusto to recover historical costs could promote the long term interest of its customers – such a decision would increase the price paid by customers without any corresponding change to service quality or reliability; and
- furthermore, the regulatory framework is generally forward looking, ie, being designed to ensure that Robusto has an incentive to recover future investments, rather than recoup historical losses.

7.4 Implications of our finding for customer bills

Our review finds that a downward adjustment to the Commission's allowance of $12,000 (December $2018) for bad debt, mediation and dispute resolution costs is warranted, and that an allowance for an efficient water services provider would be between $300-$500 per year (December $2018).

Noting our finding that an amount between $300-500 would be reasonable, we recommend that the Commission adopt an allowance of $500 per year (December $2018) for bad debt, mediation and dispute resolution. Adopting an allowance at the higher end of our estimated range would recognise that Robusto's efficient costs may be higher (or lower) than those incurred by SA Water.

The implications of adopting our recommended allowance for the 15 month period of the Commission's determination would be that:

- the opex allowance for bad debt, mediation and dispute resolution would decrease from $15,000 (December $2018) to $625 (December $2018);
- the overall revenue requirement for Robusto's water retail business would reduce from $270,562 (December $2018) to $256,187 (December $2018), representing a decrease of around five per cent;
- the maximum revenue that Robusto can recover from residential customers and MCSL would reduce from $238,963 (December $2018) to $224,670 (December $2018), representing a decrease of around six per cent; and
- the maximum nominal prices Robusto can charge residential customers would also reduce by six per cent.

We set out at Table 7-1 below the prices that Robusto charged prior to the determination, the maximum nominal prices Robusto can charge based on the Commission's final determination, and the maximum nominal prices Robusto can charge if our recommended adjustment is adopted.

Table 7-1: Comparison of maximum nominal price for residential customers

	Robusto's price prior to determination	Commission's final determination	Prices if our recommendations are adopted
Quarterly supply charge	$75.40	$92.26	$86.74
Tier 1 charge per kL (0-30kL)	$2.75	$3.36	$3.16
Tier 2 charge per kL (30-130kL)	$3.93	$4.81	$4.52
Tier 3 charge per kL (>130kL)	$4.25	$5.20	$4.89

The Commission's final determination for maximum residential prices would represent a 22 per cent price increase for residential customers in Robusto's water network. In contrast, if our recommendation is adopted, the maximum residential prices would represent a 15 per cent price increase.

In our opinion, the reduction in the bill impact experienced by residential customers if our recommendation is adopted would be material for customers serviced by the Robusto water network.

A1. Approach to calculating depreciation

In the table below, we set out the relevant calculations arising from the 2018 independent engineering assessment prepared by WGA for Robusto. The first six columns of the table, ie, the asset, replacement cost, asset life, actual condition score out of ten, remaining life and comment are drawn directly from WGA's December 2018 report.

These data were used as the basis for the Commission's calculations, as well as for the accounting report prepared by BRM Holdich for the Commission. In the last two columns, we show the calculated DRC and depreciation values for each asset and in total, so that, in effect, we have replicated the depreciation calculations of both BRM Holdich and the Commission.

Table A-1: WGA December 2018 engineering report with DRC and depreciation calculations

Asset	Replacement cost	Asset life	Actual condition score / 10	Remaining life	Comment	DRC	Depreciation
Water network							
DN100 PVC PN12 pipe in trench 1 m deep	$644,681	80	5	60		$483,511	$8,058.5
DN80 PVC PN12 pipe in trench 1 m deep	$241,114	80	5	60		$180,836	$3,013.9
DN50 PVC/PE pipe in trench 1 m deep	$57,408	80	5	60	Copper was installed - needs replacing now	$43,056	$717.6
DN100 stop valve each	$20,976	20	1	0	Needs replacing now	$0	
DN80 stop valve each	$8,832	20	1	0	Needs replacing now	$0	
DN40 - DN50 stop valve each	$2,484	20	1	0	Needs replacing now	$0	
DN80 fire plug each	$51,612	30	1	0	Needs replacing now	$0	
DN100 bend each	$5,175	80	5	60		$3,881	$64.7
DN100x100 tee each	$4,347	80	5	60		$3,260	$54.3
DN100x80 and DN100x50 tee each	$2,484	80	5	60		$1,863	$31.1
Allotment Connections pipe side each	$89,700	80	1	0	Copper was installed - needs replacing now	$0	
Allotment Connections road crossing including road reinstatement each	$89,010	80	1	0	Copper was installed - needs replacing now	$0	
Water meter assembly each	$83,559	10	2	0		$0	
Road reinstatement main - pipe sqm	$30,636			0			
Pressure and compaction testing allowance item	$13,800			0			
Total water network	$1,345,818					$716,407	$11,940
Bores							

Construct DN100 bore 46 m deep each	$69,000	30	3	10		$23,000	$2,300.0
Construct DN100 bore 35 m deep each	$62,100	30	3	10		$20,700	$2,070.0
Hydrogeological engeenering and bore testing item	$13,800			0			
Bore pump 3 L/s each	$9,660	20	1	0	Needs replacing now	$0	
Bore discharge pipework DN50 m	$8,280	80	5	60		$6,210	$103.5
Bore head assembly including valves item	$22,080	20	1	0	Needs replacing now	$0	
Instrumentation item	$5,520	20	1	0	Needs replacing now	$0	
Power supply and controls item	$13,800	20	1	0	Needs replacing now	$0	
Power supply cable m	$66,240	20	1	0	Needs replacing now	$0	
Bore slab and fence item	$4,140	30	5	10		$1,380	$138.0
DN80 PVC PN12 discharge pipe in trench 1 m deep m	$113,022	30	5	10		$37,674	$3,767.4
Grass surface reinstatement sqm	$6,624						
Total bores	$394,266					$88,964	$8,379
Water tanks							
Site preparation sqm	$1,656	1		0		$0	
Construct 150 kL concrete water tank with roof each	$165,600	50	3	10		$33,120	$3,312.0
Pipework including nozzles, valves and supports item	$11,040	30	1	0	Needs replacing now	$0	
Level sensor and communication item	$16,560	20	1	0	Needs replacing now	$0	
Fencing m	$23,460	20		20		$23,460	$1,173.0
Total water tanks	$218,316					$56,580	$4,485
Total assets	$1,958,400					$861,951	$24,804

Source: HoustonKemp analysis of WGA, Compass Springs infrastructure condition report for Robusto Investments – Mount Compass, Attachment B, 18 December 2018, p 1.

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