

1 INTRODUCTION

This chapter provides an overview of the context, background and legislative and regulatory framework for the Economic Regulator's price determination investigation of the Tasmanian water and sewerage industry for the third regulatory period.

1.1 Background

Independent regulation of prices in the Tasmanian water and sewerage industry commenced on 1 July 2012, with the first regulatory period covering the three financial years from 1 July 2012 to 30 June 2015.

On 1 July 2013, the three previous regulated entities (Ben Lomond Water, Cradle Mountain Water and Southern Water) were amalgamated to form a single regulated entity, TasWater. Under the provisions of the *Water and Sewerage Corporation Act 2012* (Water and Sewerage Corporation Act), the Price Determinations made and the Price and Service Plans approved as part of the 2012 price determination investigation continued to apply to TasWater for the remainder of the first regulatory period.

In accordance with powers granted under the Industry Act, the Treasurer fixed the duration of the first regulatory period at three years and specified the minimum duration of each subsequent regulatory period (after the conclusion of the first regulatory period) to be three years. The Industry Act requires the Economic Regulator to declare the duration of each subsequent regulatory period.

The Economic Regulator declared the second regulatory period as the three year period from 1 July 2015 to 30 June 2018. The regulatory approach for the second price determination investigation reflected that TasWater was expected to earn revenue substantially below the level required to achieve full cost recovery, with further price reform required to achieve equitable outcomes for customers. The requirement under section 15(d) of the Industry Act to take into account the impact on customers of the rate of change in prices, combined with the level of revenue under-recovery by TasWater, meant that movements in annual prices were, once again, regulated (that is, prices were determined by applying a limit on annual price movements).

The Economic Regulator declared the third regulatory period as the three year period from 1 July 2018 to 30 June 2021. As part of the price determination investigation TasWater submitted a proposed PSP to the Economic Regulator.¹ TasWater's proposed PSP was required to clearly articulate and commit to a set of outcomes and prices to be delivered over the period.

The first and second price determinations focused on achieving much greater equity in water and sewerage service pricing across Tasmania. Prior to the water and sewerage reforms in 2009, local councils used a range of different methods for pricing. As a result, customers across Tasmania were paying widely varying amounts for similar services. By the end of the second regulatory period most customers will have transitioned from a range of different pricing regimes to common target tariffs. The third regulatory period is, therefore, primarily focused on compliance improvement, while managing price impacts on customers.

¹ <http://www.economicregulator.tas.gov.au/Documents/TasWater%20proposed%20PSP3.PDF>

1.2 Industry structure

TasWater owns, controls and operates water supply and sewerage systems in Tasmania. TasWater manages all aspects of the water supply chain from dams and reservoirs to customer property connections and from customer sewer connections to wastewater treatment and disposal. TasWater is subject to various public health, environmental and customer service regulatory requirements.

TasWater is incorporated as a proprietary company limited by shares and owned by Tasmania's 29 local government councils. The councils, as shareholders, receive dividends, income tax equivalents and guarantee fee payments.

TasWater is controlled by an independent board of management consisting of a chairperson and six directors. The board reports to the Owners' Representatives who, in turn, report to the council owners.

1.3 Purpose of price investigation and price determination

The purpose of a price determination investigation is to gather information to enable the Economic Regulator to make a price determination in respect of regulated water and sewerage services provided by TasWater.

The Price Determination specifies the method for determining the maximum prices that TasWater can charge for the supply of regulated water and sewerage services for each financial year of the third regulatory period.

The Price Determination is based on information provided by TasWater in its proposed PSP, which was submitted to the Economic Regulator on 30 June 2017, as well as information gathered by the Economic Regulator as part of the price determination investigation.

1.4 Scope of the investigation

The price determination applies only to prices charged for regulated services. Regulated services are services or activities requiring a licence under the Industry Act. In general, regulated services include reticulated water and sewerage services (including trade waste); activities that support those services (including the treatment of water and wastewater); and any ancillary activities where a miscellaneous fee is charged.

The Industry Act exempts some activities from economic regulation. In addition, section 31 of the Industry Act allows the Minister for Primary Industries and Water to decide if an activity is to be regulated or unregulated. In terms of the services provided by the regulated entities, the Industry Act, and Clause 3 of the *Water and Sewerage Industry Declaration Order 2011*, specify the provision of the following services to be unregulated services:

- water for irrigation;
- reuse water; and
- stormwater services via a combined sewerage/stormwater system.

The Minister has also exempted a number of entities providing water and sewerage services from the requirement to be licensed under the Industry Act. This effectively means that TasWater is currently the only entity required to be licensed.

A person or entity is exempt from the requirement to be licensed if it owns or operates infrastructure used for the provision of relevant water or sewerage services to another person, or provides a relevant water or sewerage service, but the provision of the relevant service is ancillary to their primary purpose.

The following persons, entities and activities are also exempt from the requirement to be licensed:

- the owner or operator of a caravan park providing water and/or sewerage services to caravan park site occupants;
- the owner or lessor of a building providing water and/or sewerage services to building occupants;
- the owner or manager of a shopping centre providing water and/or sewerage services to shopping centre occupants;
- where water and/or sewerage services are provided for free; and
- where water and/or sewerage services are provided to no more than 250 customers.

1.5 Regulatory Framework

1.5.1 Tasmanian legislative framework

Economic regulation of the Tasmanian water and sewerage industry, and the conduct of the price determination investigation in particular, are governed by the:

- Water and Sewerage Corporation Act;
- Industry Act;
- *Water and Sewerage Industry (Pricing and Related Matters) Regulations 2011* (Pricing Regulations);
- *Water and Sewerage Industry (Customer Service Standards) Regulations 2009* (Customer Service Regulations);
- *Customer Service Code* (Code); and
- *Tasmanian Water and Sewerage Industry 2018 Price Determination Investigation Price and Service Plan Guideline* (June 2016) (PSP Guideline).

Economic regulation of the Tasmanian water and sewerage industry and the resultant price determination is focussed on both price and service outcomes.

1.5.2 Water and Sewerage Corporation Act

The Water and Sewerage Corporation Act provided for the formation of TasWater; the transfer of liabilities, employees and water and sewerage assets from the previous regulated entities to TasWater; and the continued application of the Economic Regulator's 2012 Price Determinations and Price and Service Plans to TasWater until the end of the first regulatory period on 30 June 2015.

1.5.3 Water and Sewerage Industry Act

The Industry Act is the primary legislative instrument governing the economic regulation of the industry. In relation to pricing, the Industry Act provides for:

- an independent regulator (the Economic Regulator) for the sector with clear accountabilities and responsibilities to ensure effective and efficient outcomes for the sector and the protection of customers;
- independent pricing regulation with a regulated entity required to submit a proposed price and service plan to the Economic Regulator which outlines the services, revenue requirements and operational requirements of the regulated entity. The Economic Regulator bases its price determination on an assessment of the proposed price and service plan submitted by the regulated entity; and
- the Economic Regulator to be guided by legislated pricing principles when making a price determination.

The pricing principles, specified in section 68 of the Industry Act, are as follows:

- a regulated entity is to be given a reasonable opportunity to recover the efficient costs it incurs in:
 - providing a regulated service; and
 - complying with a regulatory obligation; or
 - complying with a requirement to make a regulatory payment under the Industry Act (except where the Industry Act provides otherwise);
- the price is to provide for efficient pricing by:
 - applying two-part pricing for water services based on the recovery of fixed costs and variable costs by way of a fixed charge and a variable charge (with the variable charge determined by the volume of water used as measured by a water meter); and
 - reflecting the costs of servicing particular customers or classes of customers in different locations, regions or schemes;
- the price is to provide effective incentives, with respect to a regulated service to:
 - promote economic efficiency;
 - reduce costs; or
 - otherwise improve productivity;
- the price is to allow a regulated entity to receive a return on assets used in providing the regulated service; and
- the price charged to a particular customer or class of customers is to reflect at least the costs that relate directly to providing the regulated service to that customer or class of customers to the extent that it is commercially and technically reasonable to do so.

In addition, section 68AA of the Industry Act acknowledges that the full application of the pricing principles will require a significant transition period. During this transition period, it is unlikely that all the pricing principles will be achieved and, therefore, reform objectives will need to be prioritised.

Section 68AA enables some of the pricing principles during the transition period not to be applied in Price and Service Plans and price determinations to the extent that the application of those principles would:

- result in a significant impact on customers, or a particular class of customers, due to the rate of change in prices;
- adversely affect the sustainability of a regulated entity in so far as it provides regulated services; or
- adversely affect the ability of a regulated entity to deliver regulated services.

For the purpose of section 68AA, the transition period is defined in the Pricing Regulations as the eight year period from 1 July 2012 to 1 July 2020 inclusive. As regulatory periods are at least three years duration, the third regulatory period will not align with the end of the transition period on 1 July 2020.

Section 68AA does not apply to the matters the Economic Regulator is to take into account under section 15 of the Industry Act, including the need for the Economic Regulator to consider the impact of the rate of change of prices on customers.

1.5.4 Water and Sewerage Industry Pricing Regulations

In addition to the pricing principles set out in the Industry Act, the Pricing Regulations contain additional pricing principles in relation to:

- pricing zones (nodal pricing);
- the structure of service introduction charges;
- the calculation of developer charges;
- the treatment of contributed assets; and
- the basis for setting fixed and variable charges (including the removal of free water allowances).

1.5.5 Customer Service Regulations and the Customer Service Code

The Customer Service Regulations stipulate minimum service standards for the water and sewerage industry. As required by the Customer Service Regulations, and to regulate the standards and conditions of supply for water and sewerage services, the Economic Regulator has:

- developed the Code;
- established minimum service standard targets within the Code; and
- required TasWater to develop a customer charter.

TasWater is required to comply with the Code, which was last updated in July 2015.

Chapter 4 provides more detail about service standards and TasWater's regulatory obligations with respect to service standards.

1.5.6 Price and Service Plan Guideline

The Price and Service Plan (PSP) Guideline assists TasWater to prepare its proposed Price and Service Plan for the third regulatory period, setting out the legislative and regulatory requirements that TasWater had to comply with when submitting its proposed Price and Service Plan. The PSP Guideline also sets out the key steps and timing for the third price determination investigation.

The Economic Regulator understands that the transition to an equitable pricing structure will be largely completed by the end of the second regulatory period. Therefore, for the third regulatory period, the Economic Regulator adopted an approach that reflects the following priorities:

- funding compliance investment in line with regulatory expectations;
- ensuring sufficient revenue for the efficient delivery of the required services; and
- continuing to manage the impact of price changes on customers.

Given these potentially competing objectives there will be some trade-offs between priorities. The overarching efficiency objective of the Industry Act will be given priority to resolve any conflicts between pricing objectives and principles.

In approving TasWater's proposed Price and Service Plan, the Economic Regulator must be satisfied that TasWater will have sufficient revenue to meet its obligations and deliver the agreed standards of customer service, while taking into account the impact of price changes on customers. The Economic Regulator is also required to ensure that any tariff reforms are consistent with the pricing principles under the Industry Act or represent a transition towards achieving those principles.

The Economic Regulator has assessed TasWater's proposed costs in providing water and sewerage services to customers, together with the prices it intends charging over the regulatory period for the services it proposed. In assessing TasWater's proposed PSP, the Economic Regulator considered the pricing principles and the requirements contained in the PSP Guideline.

1.5.7 National reforms and legislation

Tasmania is a signatory to the National Water Initiative (NWI) Agreement which provides a blueprint for water reform in Australia. As a signatory to the NWI, the Tasmanian Government has developed and published a plan of how it will implement its commitments to the NWI.

The Implementation Plan sets out the actions that Tasmania has already completed and provides information on the tasks and timelines to complete the remaining commitments and the context within which these actions are being implemented.

The NWI sets two limits on the revenue that can be earned by a regulated water and sewerage business:

- the upper revenue limit (full cost recovery); and
- the lower revenue limit (sustainability threshold).

Under the NWI principles, a water and sewerage business should recover revenue at least equal to the lower revenue limit but no greater than the upper revenue limit. Revenue above the upper revenue limit represents monopoly profits.

For the first and second regulatory period, the Economic Regulator calculated three revenue limits; upper, statutory and lower. Calculation of the three limits was considered necessary during the transition of revenues to a level that represented at least a lower bound of cost recovery. The upper and lower limits were calculated in accordance with the NWI principles while the statutory revenue limit factored in the requirements in section 68(1A) of the Industry Act, which are discussed in Chapters 9, 10 and 11.

By the end of the second regulatory period TasWater's revenue will be approaching, or meet, the Economic Regulator's calculated statutory revenue limit. For these reasons, and to reduce TasWater's regulatory burden, the Economic Regulator has calculated only one regulated revenue limit for the third regulatory period.

1.5.8 State reforms

In March 2017, the Tasmanian Government announced that it would introduce legislation to take over ownership of TasWater from 1 July 2018. The Second Reading Speech, outlining the purpose and objectives of the Government's reforms, is available on the Parliament of Tasmania website².

Two Bills were introduced into the House of Assembly on 8 August 2017 dealing with the proposed transfer of ownership of TasWater and its restructure as a Government Business Enterprise and regulatory reforms. The House of Assembly passed the Bills on 17 August 2017.

A Select Committee was set up by the Legislative Council to "...inquire into and report upon ...the benefits and challenges associated with the Tasmanian Government's proposal to take control of TasWater under State Government ownership."

The first reading in the Legislative Council occurred on 15 September 2017. Public hearings were also held in Launceston and Hobart during September 2017. Debate on the Government's legislation re-commenced in the Legislative Council on 15 November 2017. The Select Committee released its Final Report on 16 November 2017.³ The Legislative Council voted against the legislation on 23 November 2017.

Following the State Election on 3 March 2018, the returned Government announced its intention to reintroduce legislation to:

- takeover TasWater;
- freeze prices for one year, and then cap price increases between 2.75 per cent and 3.5 per cent per annum; and
- enshrine, in perpetuity, ongoing payments to Councils.⁴

On 1 May 2018, the Government announced that it had reached an agreement, with the Local Government Owners Chief Representative and TasWater, to progress further reforms in Tasmania's water and sewerage industry. The terms of the agreement were documented in a Memorandum of Understanding.⁵

2 http://www.parliament.tas.gov.au/bills/Bills2017/pdf/notes/41_of_2017-SRS.pdf

3 <http://www.parliament.tas.gov.au/ctee/Council/Reports/two.171116.rpt.FINAL.ne.001.pdf>

4 <https://www.tas.liberal.org.au/sites/default/files/First%20100%20Days.pdf> (accessed 19 March 2018)

5 http://www.premier.tas.gov.au/__data/assets/pdf_file/0008/376622/TasWater_Media_Release_and_MOU.pdf

1.5.9 Industry regulators

The Economic Regulator is responsible for implementing and administering the economic regulatory framework for the water and sewerage industry in accordance with the Industry Act and its subordinate legislation.

Responsibility for environmental, fire safety, public health and dam safety regulation of the industry lies with the Director of the Environment Protection Authority, the Director of Public Health, Chief Officer of the Tasmania Fire Service (TFS), and the Secretary of the Department of Primary Industries, Parks, Water and Environment (DPIPWE), who is the Delegate for Dam Safety Regulation, respectively.

Economic regulation of the industry and, more specifically, the price determination investigation, focuses on both price and service outcomes. Through the development of the Code and the PSP Guideline, the Economic Regulator has sought to assist TasWater in addressing the Industry Act requirements in its price and service plans, namely:

- identifying regulated water and sewerage services and determining service standards to be delivered to customers over the third regulatory period;
- determining the revenue required to deliver the regulated services to the agreed standards, based on efficient costs; and
- determining regulated prices (or tariffs) that meet the pricing principles.

The PSP Guideline requires TasWater to establish regulatory compliance improvement outcomes, in conjunction with the other Tasmanian water and sewerage industry regulators, based on compliance improvement priorities identified by those regulators. Capex programs proposed in TasWater's PSP must reflect these agreed compliance improvement priorities.

In conducting its price investigation, and making a price determination, the Economic Regulator expects TasWater will spend a certain amount of capex. However, this expectation is not a cap on the amount of capex that TasWater can spend. This means that TasWater can spend in excess of this allowance, with the excess taken into account in calculating TasWater's revenue requirement, provided the expenditure was necessary (prudent) and the most cost effective solution was adopted (efficient). More details about the prudence and efficiency tests are outlined in Chapters 6 and 7.

The price determination does not, however, authorise capex as being sufficient to meet the compliance improvement priorities of the Tasmanian industry regulators. Compliance improvement and compliance enforcement remain the responsibility of the other Tasmanian industry regulators. More information on regulatory compliance improvement is contained in Chapter 3.

1.5.9.1 Director, Environment Protection Authority

The Director of the EPA is one member of the Board of the EPA.

The EPA administers and enforces the provisions of the *Environmental Management and Pollution Control Act 1994* (EMPCA). The functions of the EPA, with respect to the water and sewerage sector, include the assessment and regulation of significant wastewater treatment plants (WWTPs), defined as Level 2 WWTPs (plants discharging greater than 100 kilolitres per day).

The responsibilities of the EPA in regulating Level 2 WWTPs include:

- undertaking environmental impact assessments in relation to proposals for new WWTPs or significant changes to existing WWTPs;

- developing legally binding environmental conditions for approved WWTPs, which are included as part of the planning permit or as a stand-alone environment protection notice (EPN);
- applying the Tasmanian policy framework in relation to water quality management as is relevant for wastewater activities and updating environmental conditions where necessary; and
- ensuring compliance with environmental conditions largely through collection and evaluation of data on specified discharge limits and the impacts on the receiving environment.

The EPA also offers advice and guidance in relation to a broad range of wastewater issues including pumping stations, wastewater reuse, trade waste and biosolids reuse through the provision of policies and guidelines.

The EPA has released environmental guidelines governing the use of recycled water and biosolids and the recycling of wastewater and biosolids in Tasmania. The guidelines provide a framework for the sustainable reuse and recycling of water, wastewater and biosolids in a manner which is not only practical and safe for agriculture, the environment and the public, but also consistent with industry standards and best practice environmental management.

1.5.9.2 Director of Public Health

The functions of the Director of Public Health with respect to drinking water are to:

- protect public health with respect to the supply of drinking water;
- establish drinking water quality performance standards;
- monitor water suppliers performance against the standards and requirements prescribed by the *Public Health Act 1997* (and the associated Tasmanian Drinking Water Quality Guidelines 2005), the *Fluoridation Act 1968*, the *Fluoridation (Interim) Regulations 2009* and the *Australian Drinking Water Guidelines 2011*;
- enforce compliance with the requirements prescribed by the above mentioned Acts and guidelines;
- report on the water supplier's compliance with the prescribed standards;
- provide oversight of the fluoridation program in Tasmania through the Fluoridation Committee; and
- develop and implement strategies to promote and improve public health.

1.5.9.3 Chief Officer of the Tasmania Fire Service (TFS)

The regulatory authority for fire safety in Tasmania is the TFS. The responsibilities of its Chief Officer, who is also Chairperson of the State Fire Commission, include:

- developing and implementing appropriate fire prevention and community preparedness strategies;
- establishing fire brigades that are trained, resourced and available to respond to fires; and
- maintaining other arrangements as are necessary to ensure ongoing capacity to deliver effective and efficient fire prevention and protection measures throughout Tasmania.

Under the *Building Regulations 2014* and *Fire Service (Miscellaneous) Regulations 2007*, the TFS is required to inspect and report on the installation of new fire hydrants. The TFS is also required to

comment on the suitability of the water flows and pressure as part of this reporting, including testing for the required flows and pressures when a new hydrant is commissioned.

TasWater's obligations under the Industry Act, with respect to fire safety, relate to:

- the installation of fire hydrants in its water infrastructure at distances and locations as necessary for the ready supply of water to control and extinguish fires; and
- the need to keep its water infrastructure charged with water where that infrastructure supplies water to a fire hydrant.

The Industry Act provides that TasWater can also impose a ban on the use of outdoor water on days declared by the TFS to be days of total fire ban. Limiting non-essential water use such as garden watering or lawn sprinklers on days of total fire ban can help to ensure that the TFS and residents who may be facing a bushfire threat have water available for fire-fighting and prevention.

1.5.9.4 Delegate for Dam Safety Regulation

The Minister for Primary Industries and Water has regulatory oversight for dam safety through administration of the *Water Management Act 1999* and the *Water Management (Safety of Dams) Regulations 2003*. The key functions of the Minister concerning dam safety regulation, which have been delegated to the General Manager, Water and Marine Resources Division, relate to:

- developing prescribed standards required for the design, construction, maintenance, surveillance and decommissioning of dams, and ensuring compliance with those standards (these standards are largely based on the criteria and guidelines produced by the Australian National Committee on Large Dams); and
- formulating measures to ensure the safety of dams and, in particular, plans to remove or minimise risks to persons, property or the natural environment arising from a dam safety incident.

The Water Operations Branch, of the Water and Marine Resources Division of DPIPW, administers the dam safety legislation. This is primarily implemented through:

- reviewing new dam applications to ensure dams are constructed to contemporary safety standards and in accordance with the statutory requirements; and
- a program ensuring owners of existing dams meet their statutory dam safety responsibilities by monitoring, reviewing and managing dam safety as required by the Water Management Act and the Water Management (Safety of Dams) Regulations which incorporate the national dam safety guidelines.

1.6 Approach to third Price Determination Investigation

This section:

- provides an overview of the Economic Regulator's approach to the third independent price determination investigation for the Tasmanian water and sewerage industry;
- outlines the Economic Regulator's approach to assessing the appropriateness of TasWater's proposed opex and capex; and
- provides background on key regulatory issues and explains how they were managed during the investigation.

1.6.1 Building block approach

As for the first and second regulatory periods, the Economic Regulator has applied a building block approach to determine TasWater's maximum allowed regulated revenue (MARR) for each year of the regulatory period. The MARR caps the amount of regulated revenue that TasWater can earn and is used to determine TasWater's maximum prices during the regulatory period.

Under a building block approach the MARR for each year of the regulatory period is calculated as the aggregate of the costs incurred in providing regulated services. These costs, referred to as building blocks, include:

- opex;
- return of capital (regulatory depreciation); and
- the return on capital (cost of capital).

Each of these building blocks are discussed in detail in Chapters 7, 8 and 9 of this Report. Other inputs used in determining the MARR are Capex and the RAB which are discussed in Chapters 6 and 10 respectively.

Chapter 11 summarises the Economic Regulator's estimated value for each component of the MARR together with the Economic Regulator's calculation of TasWater's MARR for the third regulatory period.

1.6.2 Investigation process

As part of the 2018 price determination investigation, TasWater was required to prepare, and submit to the Economic Regulator by 30 June 2017, its proposed PSP setting out its costs and proposed prices and services.

TasWater's proposed PSP was submitted to the Economic Regulator on 30 June 2017.

The Economic Regulator reviewed the information contained in TasWater's proposed PSP. Where the Economic Regulator considered the information was deficient or did not comply with the Industry Act, the Pricing Regulations, the Code or the PSP Guideline, the Economic Regulator requested TasWater to submit additional or revised information.

This Final Report outlines the Economic Regulator's decisions on TasWater's proposed service levels, revenue requirements, demand forecasts and pricing proposals taking into account any additional or revised information submitted by TasWater and after considering issues stakeholders have raised in submissions on the Economic Regulator's Draft Report.

The Economic Regulator has also made a Price Determination (Appendix 1) specifying the method for determining the maximum prices that TasWater can charge for the supply of regulated water and sewerage services during the third regulatory period. As the Determination specifies maximum prices, TasWater has the flexibility to charge less than the stated maximum price for each service.

1.6.3 Publicity and consultation

1.6.3.1 Publicity and consultation carried out prior to investigation

On 17 June 2016, the Economic Regulator published its PSP Guideline for the price determination investigation.

The PSP Guideline specifies the legislative and regulatory requirements that TasWater must comply with when submitting its proposed PSP. TasWater was required to prepare its proposed Price and Service Plan in accordance with the PSP Guideline, including consulting with customers and other stakeholders, and submit it to the Economic Regulator by 30 June 2017.

The Economic Regulator published a draft guideline and associated Consultation Paper which highlighted the issues addressed in the draft guideline and sought stakeholder feedback. The Economic Regulator considered the comments made in submissions on the draft guideline before releasing the final version of the PSP Guideline.

On 1 July 2017, the Economic Regulator gave notice, through the three regional Tasmanian newspapers, of its intention to conduct a price determination investigation and make a price determination (Notice).⁶

On 27 April 2018, the Economic Regulator amended the Notice to extend the date for making the price determination from 30 April 2018 to 4 May 2018 to allow sufficient time for the Economic Regulator to address the error in the number of water connections in TasWater's pricing model (see further discussion in Chapter 13).

1.6.3.2 Consultation during investigation

The Economic Regulator published a Draft Report and Draft Price Determination on 30 November 2017, inviting written comments by 25 January 2018. Submissions were considered prior to this Final Report and the Price Determination being released. Appendix 11 of this Final Report summarises the issues raised in submissions.

⁶ Tasmanian Economic Regulator, *Notice of intention to conduct a water and sewerage price determination investigation and make a price determination*, 1 July 2017.

1.6.4 Key steps and timelines

Table 1.1 sets out the key steps in, and timelines for, the investigation.

Table 1.1 Timetable for the third price determination investigation

Action	Dates
Draft Report and draft Price Determination released for public consultation	30 November 2017
Consultation on Draft Report and draft Price Determination closed	25 January 2018
Publication of Final Report and final Price Determination	4 May 2018
Making of Price Determination advertised in the <i>Tasmanian Government Gazette</i>	9 May 2018
TasWater to submit revised 2018-21 Price and Service Plan reflecting the requirements outline in the Price Determination and Final Report	31 May 2018
Economic Regulator approves Price and Service Plan	14 June 2018
Third Price Determination commences	1 July 2018

1.7 Assessing opex and capex

The Economic Regulator engaged Arup to carry out an independent expert review of TasWater's proposed opex and capex. Arup's review considered the adequacy, appropriateness and efficiency of the levels of opex and capex incurred by TasWater since the start of the second price determination, and TasWater's current, forecast and proposed levels of opex and capex. In particular, Arup assessed the efficiency and prudence of:

- the actual opex incurred by TasWater for the period 1 July 2015 to 30 June 2017;
- the actual capex incurred by TasWater for the period 1 July 2015 to 30 June 2017;
- TasWater's budgeted opex for the period from 1 July 2017 to 30 June 2018;
- TasWater's budgeted capex for the period from 1 July 2017 to 30 June 2018;
- TasWater's proposed opex for the period from 1 July 2018 to 30 June 2021; and
- TasWater's proposed capex for the period from 1 July 2018 to 30 June 2021.

Assessing the prudence of capex helped the Economic Regulator to determine how much of the capex incurred/to be incurred during the second regulatory period should be included in TasWater's RAB at the start of the third regulatory period. The Economic Regulator then applied a (Weighted Average Cost of Capital (WACC) to this RAB value to arrive at TasWater's return on capital. The calculation of the WACC and TasWater's RAB and return on capital are discussed in Chapters 9 and 10 of this Final Report respectively.

Arup's review also assisted the Economic Regulator in ensuring that only those assets used to deliver regulated services, and only efficient costs, were taken into account when calculating TasWater's MARR for the purpose of determining prices. Arup's Draft Report⁷ was released with the Economic Regulator's Draft Report.

⁷ Arup, Tasmanian Economic Regulator, *Review of the Tasmanian Water and Sewerage Corporation's Operating and Capital Expenditure*, Draft Report, 2017.

Arup also provided a short Final Report⁸ to the Economic Regulator, updating some of its draft findings and responding to certain issues raised in the submissions to the Economic Regulator’s Draft Report. As Arup’s Final Report dealt only with specific matters of concern, its Draft Report findings stand unless noted otherwise.

TasWater provided its proposed capex, opex and depreciation expense data to determine annual revenue limits reflecting the amount to be invested in new regulated assets required to deliver its water and sewerage services. In assessing the proposed capex programs, the Economic Regulator consulted with officers of the other Tasmanian water and sewerage industry regulators to ascertain whether the proposed capex program will achieve their respective expected outcomes in relation to regulatory compliance improvement over the third regulatory period.

Chapter 3 provides further details about regulatory compliance improvement expectations during the third regulatory period.

1.8 Assessment of proposed Price and Service Plan

In assessing TasWater’s proposed PSP, the Economic Regulator considered:

- whether the proposed PSP was consistent with, or was working towards, the pricing principles;
- how and to what extent the proposed PSP addresses the price reform priorities established by the Economic Regulator;
- customer engagement undertaken by TasWater; and
- the customer impacts flowing from the proposed PSP.

Consistent with the “propose and respond” nature of the regulatory framework, the Economic Regulator considered that TasWater was best placed to develop models to support pricing proposals and assess customer impacts, as it holds detailed customer and usage information. TasWater was also required to have the capability to model alternative price constraint scenarios. The PSP Guideline further requires TasWater to propose the structure and the amount of constraints on annual price changes in its proposed PSP.

For TasWater’s proposed price constraints, its proposed PSP was required to specify the estimated total regulated revenue and Net Profit After Tax for each financial year of the third regulatory period.

In relation to customer impacts, the PSP Guideline states that TasWater’s pricing proposal should:

- explain and justify any proposed price movements including any constraints upon price movements;
- explain and justify how the transition of all customers to the relevant target tariff will be achieved by 1 July 2020;
- demonstrate and quantify expected customer impacts of proposed price movements and any proposed price constraints; and
- be supported by a model that:

⁸ Arup, Tasmanian Economic Regulator, *Review of the Tasmanian Water and Sewerage Corporation’s Operating and Capital Expenditure*, Final Report, 2018.

- is based on TasWater's Regulatory Financial Statements (as defined in the Economic Regulator's *Water and Sewerage Regulatory Accounting Ring Fencing Guideline - March 2016* (Ring Fencing Guideline)); and
- includes the calculations used to develop the proposed pricing proposals.

TasWater provided its Pricing Model to the Economic Regulator on 30 June 2017, when it submitted its proposed PSP.

1.9 Amending the price determination within the regulatory period

The need for certainty is important as the industry continues to move through a reform transition period. To maximise certainty for TasWater, owner councils, stakeholders and customers, the Pricing Regulations only permit changes to the price determination in limited specified circumstances. Prices may be adjusted if there has been a material change in the costs incurred by a regulated entity as a result of complying with one or more of the following events, which may occur after the Price Determination has been made:

- new or amended legislative requirements; or
- a tax event (as defined in the Pricing Regulations).

Prices will not be reviewed annually. Rather, TasWater will be responsible for proposing any adjustments in line with the terms of the Price Determination and the requirements of the Pricing Regulations. All other variations between forecasts and actual outcomes over the third regulatory period will, be managed by TasWater, including any differences between forecast and actual CPI.

The next (fourth) price determination investigation will review any differences between forecast and actual outcomes that occurred during the third regulatory period and recommend appropriate actions to account for those variations.

1.10 Regulatory Accounting

The Economic Regulator requires an understanding of the nature and substance of TasWater's business activities to effectively monitor TasWater's compliance with the relevant price determination and conduct pricing inquiries and investigations.

Section 64(2) of the Industry Act gives the Economic Regulator the power to issue guidelines requiring the separation of a regulated entity's accounts and functions. The Economic Regulator released the current version of its Ring Fencing Guideline in March 2016. The purpose of the Ring Fencing Guideline is to establish the detailed accounting and information requirements necessary to enable the Economic Regulator to carry out its responsibilities under the Industry Act. The objectives of accounting ring fencing are to:

- provide the Economic Regulator with sufficiently detailed and accurate information to undertake Price Determination investigations;
- facilitate the monitoring of compliance with any relevant Price Determinations;
- facilitate the effective regulation of monopoly activities by identifying and attributing expenditure and revenue to relevant business segments;

- facilitate the introduction of competition wherever possible by identifying and ring fencing, regulated and unregulated services; and
- prevent the anti-competitive effects of cross-subsidies between regulated and unregulated activities.

1.11 Expression of values

Unless noted otherwise, all values in this Report are in nominal terms.

Values from the Economic Regulator's 2015 Price Determination Investigation were expressed in real (2014-15) terms. For comparison purposes in this Report, these values have been converted into nominal dollars relevant to the year in question.