



Independent Pricing and Regulatory Tribunal

# **Review of prices for water, sewerage, stormwater drainage and other services for Hunter Water Corporation**

From 1 July 2013

**Water — Issues Paper**

June 2012





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## Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

**Submissions are due by 12 October 2012.**

We would prefer to receive them electronically via our [online submission form](#).

You can also send comments by fax to (02) 9290 2061, or by mail to:

**Review of prices for water, sewerage, stormwater drainage and other services  
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PO Box Q290

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We may choose not to publish a submission – for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. IPART will then make every effort to protect that information, but it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website.



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# 1 Introduction

The Independent Pricing and Regulatory Tribunal of NSW (IPART - hereafter referred to as "we," "us," or "our") regulates the charges or prices for the provision of water, sewerage, stormwater drainage, recycled water (price monitoring), trade waste and other ancillary and miscellaneous services.

The current Determination for Hunter Water was released in July 2009.<sup>1</sup> The period for that Determination is 17 July 2009<sup>2</sup> to 30 June 2013. In this review, we will determine Hunter Water's charges for water, wastewater and stormwater drainage services to apply from 1 July 2013 (the upcoming determination period). Before setting these prices, we will examine Hunter Water's water, sewerage, stormwater drainage functions, its regulatory requirements and the appropriate level of revenue needed to support these activities in an efficient and effective manner.

For recycled water schemes, we expect Hunter Water to set prices according to our guidelines<sup>3</sup>, and we will perform a price monitoring role.

## 1.1 IPART's role and core functions

In this review, we aim to set prices that will allow Hunter Water to recover an amount of revenue that is equal to the full efficient costs of providing its regulated water services. We will engage the services of consultants to assess Hunter Water's past and forecast operating and capital expenditure. These consultants will provide recommendations to us on the efficient costs incurred by Hunter Water that should be recovered from customers through prices. We will then consider these recommendations in setting prices that recover Hunter Water's efficient costs.

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<sup>1</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Determinations and Final Report*, July 2009.

<sup>2</sup> The date of gazettal of the determination.

<sup>3</sup> IPART, *Pricing arrangements for recycled water and sewer mining - Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council - Determinations and Report*, September 2006, Report Chapters 7 and 8.

Our process for determining prices is transparent and involves a considerable degree of consultation with stakeholders, including the regulated utilities, customers and other interested parties. We take into account the views of all stakeholders in making our decisions on pricing. Stakeholders are offered 3 opportunities to provide input into the review process. Stakeholders can:

- ▼ provide a submission in response to this Issues Paper (and in doing so they can address Hunter Water's submission which is due on 14 September 2012)
- ▼ attend a public hearing to express their views
- ▼ provide a submission in response to our Draft Report.

Much of our role is derived from the matters set out in Section 15 of the *Independent Pricing and Regulatory Tribunal Act 1992* (IPART Act), which we are required to take into account in making our price determinations. This includes the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services, as well as the need to promote competition in the supply of services concerned.

We aim to ensure that Hunter Water recovers the full efficient costs of its operations and will consider Hunter Water's financial viability and the returns to the shareholder (NSW Treasury). We will also consider the impact on customers resulting from our pricing decisions. The full list of Section 15 matters is provided in Appendix A of this Issues Paper.

## 1.2 Purpose of this Issues Paper

This Issues Paper has been released with the aim of obtaining Hunter Water's and stakeholders' views on the issues that are raised in it. To assist stakeholders in making submissions, the Issues Paper explains how the review is to be undertaken, provides background information, and outlines issues on which we particularly seek comments.

All submissions to the review will be considered in making our draft and final Determinations.

## 1.3 Scope of this review

This review will be conducted under section 11 of the *IPART Act*. As mentioned above, we are also to have regard to a range of matters under section 15 of the IPART Act (see Appendix A). Furthermore, we will take into account principles issued by the Council of Australian Governments (COAG) and contained in the National Water Initiative.<sup>4</sup>

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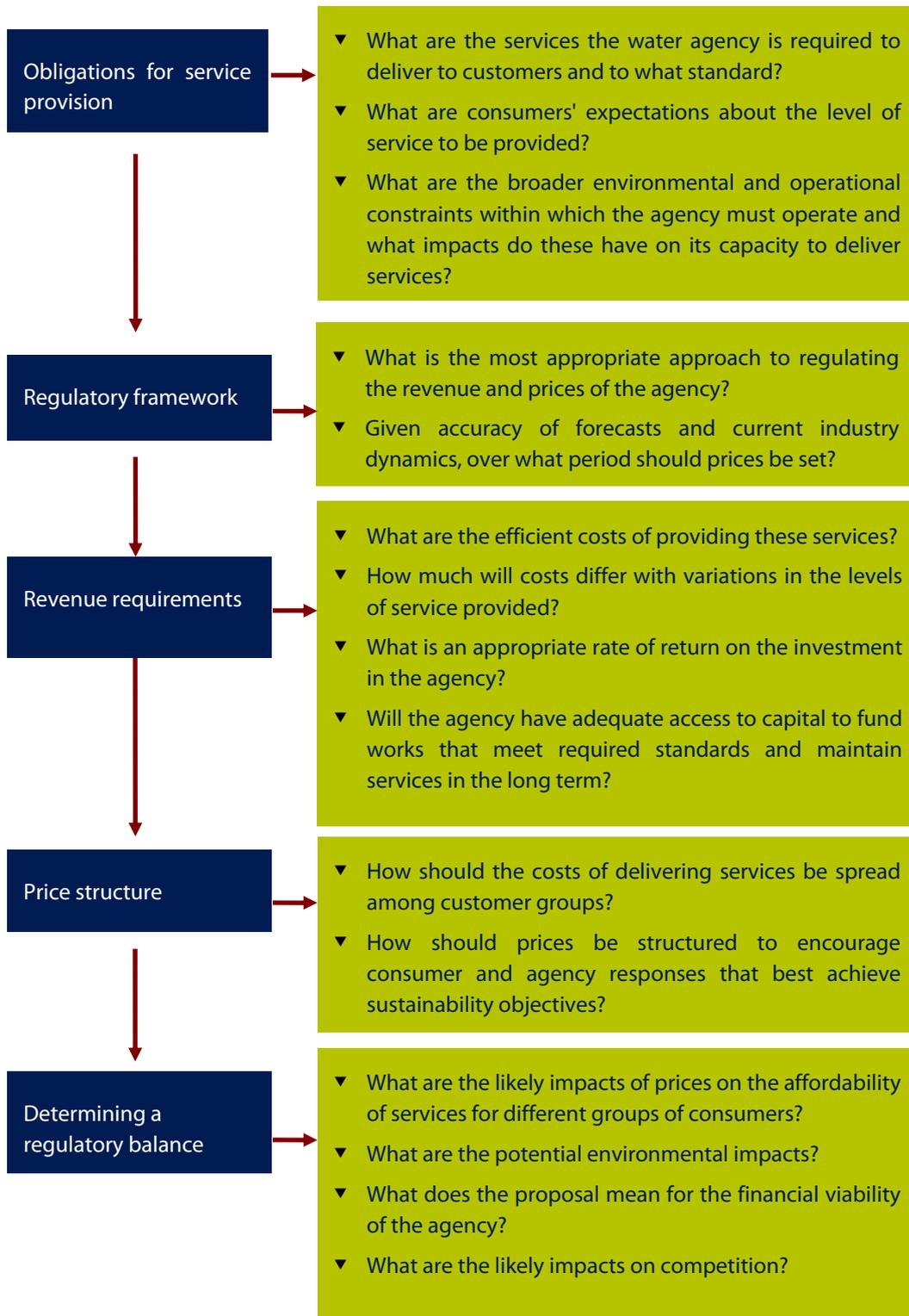
<sup>4</sup> The National Water Initiative has built on the principles established in the 1994 COAG Water Reform Framework.

Issues that we will investigate in this review include:

- ▼ the efficiency of Hunter Water's operating costs and the scope for further efficiency gains over the upcoming determination period
- ▼ Hunter Water's efficient capital expenditure requirements and the outcomes that will be achieved by its proposed capital expenditure program
- ▼ Hunter Water's regulatory requirements and any other government-imposed requirements
- ▼ the impacts of price increases on customer bills
- ▼ the appropriate rate of return for Hunter Water (ie, the weighted average cost of capital, or WACC)
- ▼ the appropriate tax allowance, as IPART has made the decision to move to a post-tax WACC
- ▼ forecast demand for Hunter Water's water and sewerage services and the methodology for forecasting water demand
- ▼ the structure and levels of Hunter Water's prices, taking into account potential impacts on Hunter Water and economic efficiency.

Our general approach to determining monopoly prices for water agencies is outlined in Figure 1.1.

**Figure 1.1 IPART’s determination process**



## 1.4 The review process

In undertaking this review, we will conduct our own research and analysis, using selected consultant investigations and public consultation. Throughout the paper we list issues on which we seek particular stakeholder comment. In Appendix B we list the information we require from Hunter Water, and in Appendix C we provide a consolidated list of the issues on which we seek comment from stakeholders.

Hunter Water and stakeholders may also raise and discuss any other issues they believe are of relevance to the review. Details on how stakeholders can make submissions are given at the start of this Issues Paper. Stakeholders will have a further opportunity to present their views at a public hearing.

We will release a Draft Report and Draft Determination following this consultation, and comments from stakeholders and Hunter Water will be invited. We will consider all comments received before making our Final Determination and publishing our Final Report.

An indicative review timetable is set out in Table 1.1.

**Table 1.1 Indicative review timetable**

<b>Task</b>	<b>Timeframe</b>
Release issues paper	Wednesday 20 June 2012
Receive submission from Hunter Water	Friday 14 September 2012
Receive public submissions	Friday 12 October 2012
Public hearing	Tuesday 13 November 2012
Release draft report	March 2013
Receive submissions to the draft report	April 2013
Release final report	June 2013

**Note:** These dates are indicative and are subject to change.

To allow us to better manage delays in the provision of information and supplementary information to this review, we have established mechanisms that allow us to ‘stop the clock’ if we do not receive necessary information from Hunter Water on time. Under ‘stop the clock’ arrangements, a delay in receiving information would mean that the timetable will automatically be extended by the length of the delay. If it were necessary for us to ‘stop the clock’ we would announce that this is taking place and publish a revised timetable on our website. If Hunter Water provides new information, we may need to ‘reset the clock’, reflecting the need to rework and reconsider matters to take this new information into account.

To ensure Hunter Water can provide all the information we require, we have been in close communication. In September 2011, we informed Hunter Water of the upcoming review and our information requirements.<sup>5</sup> We outlined the information we require in Hunter Water's submission to ensure that Hunter Water has ample time to prepare its submission.

In addition to the timely provision of information, Hunter Water will be required to justify its costs and forecast sales through the provision of sufficiently comprehensive information. Hunter Water's submission should also identify the potential customer impacts of its proposal, how these impacts are distributed, and options to mitigate or minimise these impacts.

We encourage Hunter Water to prepare a submission that is easily comprehensible and to provide a level of detail necessary to justify its proposals without exceeding it. We are aware that not all stakeholders have the technical understanding required to provide useful comment on all areas of Hunter Water's submission. Therefore we encourage Hunter Water to provide its views in simple terms, where possible, to assist stakeholders in providing useful submissions.

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<sup>5</sup> IPART, information provided to Hunter Water on 7 September 2011.

## 2 Hunter Water's role and regulatory framework

In this chapter we outline Hunter Water's role and functions, its broader regulatory framework and our regulatory approach.

### 2.1 Hunter Water's role

Hunter Water provides water and wastewater services to more than half a million people in the Lower Hunter region. Hunter Water was formed as a State Owned Corporation under the *Hunter Water Act 1991*. Under the Act, the principal functions of Hunter Water are to provide, construct, operate, manage and maintain systems and services for:

1. supplying water
2. providing sewerage and drainage services, and
3. disposing of waste water

subject to the terms of the operating licence.<sup>6</sup>

Hunter Water's area of operations covers approximately 5,400km<sup>2</sup>, serving a population of about 560,000 in the local government areas of Cessnock, Lake Macquarie, Maitland, Newcastle, Port Stephens, Dungog, and part of the Singleton Shire in the Lower Hunter.<sup>7</sup> Hunter Water has also supplied water to the Central Coast Councils in response to their drought conditions in those areas. The link between Hunter Water's system and the Central Coast has the capacity to transfer approximately 35 ML per day.<sup>8</sup> Hunter Water's area of operations is illustrated in Figure 2.1.

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<sup>6</sup> *Hunter Water Act 1991* sections 4A and 12.

<sup>7</sup> Hunter Water Corporation website, <http://www.hunterwater.com.au/About-Us/Our-Organisation/Our-Organisation.aspx>, accessed 8 June 2012.

<sup>8</sup> Hunter Water Corporation, *H<sub>2</sub>50 Plan – Securing Our Water Future*, December 2008, p 9.

**Figure 2.1 Hunter Water's area of operations**



**Data source:** Hunter Water Corporation website, <http://www.hunterwater.com.au/About-Us/Our-Organisation/Our-Organisation.aspx>, accessed 8 June 2012.

Hunter Water is also responsible for sourcing its own bulk water. Consequently, in addition to its water and sewerage distribution networks and treatment facilities, its system includes the raw water sources of Chichester Dam (21,500 ML capacity), Grahamstown Dam (190,000 ML), Tomago Sandbeds (60,000 ML) and Anna Bay Sandbeds (16,000 ML).<sup>9</sup>

To achieve its functions and to prevent abuses of Hunter Water's monopoly position, the Government granted Hunter Water an operating licence which sets minimum performance standards it must meet as well as obligations in relation to customer service, system performance and environmental performance. We conduct an annual audit of Hunter Water's compliance with its operating licence, and can impose financial and other penalties for breaches of this licence.

<sup>9</sup> Hunter Water Corporation website, <http://www.hunterwater.com.au/About-Us/Our-Organisation/Our-Organisation.aspx>, accessed 8 June 2012.

The operating licence also requires Hunter Water to have a Customer Contract setting out the rights and obligations of customers and of Hunter Water, including customer complaint handling procedures and rights of redress if there is a failure to provide the agreed level of service. We conduct a periodic review of this customer contract, with the last review having come into effect on 1 July 2011.<sup>10</sup> This review improved the definitions of the rights and obligations for Hunter Water and its customers, introduced new service rebates, and enhanced customer service and support provisions.

## 2.2 Regulatory framework

IPART is one of several regulators that oversee Hunter Water's water industry functions. There are a number of government regulators who have responsibility for all metropolitan water agencies. Hunter Water's primary regulators are:

- ▼ **IPART**, which is responsible for setting the maximum prices that can be charged by Hunter Water for its monopoly services. IPART is also responsible for monitoring and reporting compliance with Hunter Water's operating licence, which imposes obligations relating to customer service, water quality, system performance, water conservation and demand management, an environmental management plan and indicators, catchment management and complaint and dispute handling.
- ▼ **NSW Office of Water (NOW)**, which has primary responsibility for the management of water resources throughout NSW. NOW administers Hunter Water's Water Management Licences (WML) under the *Water Act 1912* and the *Water Management Act 2000*, which authorises Hunter Water to extract water from the natural environment and monitor groundwater bores. The WML imposes environmental flow requirements on Hunter Water, and requires it to provide a range of data, reports and information.
- ▼ **Office of Environment and Heritage (OEH)**, which is responsible for monitoring and regulating wastewater discharges from Hunter Water's sewerage system to the receiving waters. OEH issues environment protection licences under the *Protection of the Environment Operations Act 1997* for Hunter Water's sewage transportation and treatment systems. These licences stipulate quantity and quality conditions for discharge from each wastewater treatment works and specify reporting requirements and operational controls for the pipe network and pumping stations.

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<sup>10</sup> IPART, *Review of the Customer Contract for Hunter Water Corporation – Final Report to the Minister*, February 2011.

- ▼ **NSW Health**, which is responsible for regulating the quality and safety of Hunter Water's drinking water. Under its operating licence, Hunter Water is required to provide NSW Health with a comprehensive water quality management plan outlining its strategies for ensuring that the quality of water supplied to customers complies with appropriate guidelines (including those specified by NSW Health). Hunter Water is also required to provide an Annual Water Quality Report, monthly monitoring results and event-based results. The operating licence requires Hunter Water to maintain a Memorandum of Understanding with NSW Health recognising NSW Health as the drinking water quality regulator and facilitating effective interaction between the 2 organisations.
- ▼ The **Dams Safety Committee**, which is responsible for formulating measures to ensure the safety of dams, and maintaining surveillance of 'prescribed dams'. This function is conducted under the *Dams Safety Act 1978*. Under the *Mining Act 1992*, the Dams Safety Committee has statutory functions, through advice to the responsible Minister, in determining the type and extent of mining allowed near prescribed dams and their storages.<sup>11</sup>

In addition to these regulators, the Department of Finance and Services is currently developing the *Lower Hunter Water Plan* (LHWP)<sup>12</sup>, which will consider alternatives for securing water supply for the region. The Lower Hunter Water Plan is expected to be completed by the summer of 2013/14, and will therefore not be available to feed into the current review.

Hunter Water is also subject to planning approvals and requirements relating to its proposed developments.

### 2.3 IPART's regulatory approach

Hunter Water is regulated through our determination by the maximum prices it can charge for its monopoly services during a determination period. We then specify how these prices can rise or fall over that period to allow for movements in general price inflation, efficiency gains, and significant changes in the operating environment (such as new customer service or environmental standards).

The determination of Hunter Water's revenue requirement is a vital element of our price-setting process. The calculation of the revenue requirement is based on an analysis of the efficient operating and capital costs Hunter Water would incur in providing appropriate levels of service over the determination period.

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<sup>11</sup> Dams Safety Committee NSW website, [http://www.damsafety.nsw.gov.au/Dams/Education/dam\\_safety.shtm](http://www.damsafety.nsw.gov.au/Dams/Education/dam_safety.shtm), accessed 8 June 2012.

<sup>12</sup> NSW Department of Finance and Services website, <http://services.nsw.gov.au/metropolitan-water-directorate/lower-hunter-water-plan>, accessed 8 June 2012.

We use the 'building block' methodology to calculate Hunter Water's revenue requirement. The 'building block' costs of service provision comprise operating costs, depreciation (return of capital), rate of return (return on capital, ie, the WACC), and a tax-allowance.

Since the last price review for Hunter Water, we made the decision to set prices using a post-tax WACC. Therefore, a tax allowance is now one of the building blocks included to determine the revenue requirement. Chapter 4 provides a detailed overview of our approach to setting prices, including how we determine the revenue requirement. The implications of the decision to move to a post-tax WACC is also discussed in Chapter 4.

We have adopted incentive regulation to encourage Hunter Water to achieve the efficiency targets outlined in the 'building block' approach. Hunter Water has an incentive to achieve efficiencies because it is allowed to retain in full the benefits of any efficiency gains over the determination period (through higher profits).

## 3 Hunter Water's 2009 determination period

In this chapter we summarise the key decisions from Hunter Water's 2009 Determination and subsequent pricing adjustments following the NSW Government's decision not to proceed with Tillegra Dam (hereafter "the Tillegra Dam decision"). We also consider Hunter Water's performance to date against expenditure allowances provided in the 2009 determination and performance standards in Hunter Water's operating licence.

### 3.1 Overview of the 2009 Determination

The 2009 Determination applies for the period from 17 July 2009 to 30 June 2012, and sets Hunter Water's maximum prices to generate total revenue of \$920.9 million (\$2008/09)<sup>13</sup>. The required revenue reflected our assessment of Hunter Water's efficient costs of supplying water, sewerage, stormwater drainage and other services to its customers, including some costs associated with the construction of Tillegra Dam.

Under the 2009 Determination, average household bills (ie, households with consumption of about 200 kL per annum) were estimated to increase by \$220 (\$2008/09) or 31% in real terms from 2008/09 to 2012/13.<sup>14</sup> The increase was driven primarily by Hunter Water's significant capital expenditure program for improvements in water supply and drought security (including the Tillegra Dam), and for upgrades and renewals of sewerage transport and treatment asset. Rising cost pressures also added to bill increases. The largest bill increase occurred in 2009/10, with subsequent increases being smaller.

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<sup>13</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 11.

<sup>14</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 1.

Key decision in the 2009 Determination include:

- ▼ deferring recovery of about 60% of the Tillegra Dam's costs (return on and of capital) for inclusion in future prices to match population growth and increased use of the dam. Tillegra Dam accounted for \$32 (or 15%) of the \$220 increase in typical bills (\$2008/09)<sup>15</sup>
- ▼ an adjustment mechanism to automatically reduce prices in the last year of the Determination period if expenditure on Tillegra Dam was materially less than forecast<sup>16</sup>
- ▼ discontinuing the residential sewerage usage charge<sup>17</sup>
- ▼ accounting for the population growth projections contained in the *Lower Hunter Regional Strategy* through the metered water sales<sup>18</sup>
- ▼ setting usage prices with reference to long run marginal cost (LRMC)<sup>19</sup>
- ▼ establishing output measures<sup>20</sup>.

### **3.2 Refund and rebates resulting from the Government's decision not to proceed with the Tillegra Dam**

In November 2010, the Government decided not to proceed with the construction of Tillegra Dam. We were requested under Section 9 of the *IPART Act* to advise the Minister for Water by 24 January 2011 on:<sup>21</sup>

- ▼ A refund of money already collected from customers, by Hunter Water, for the Tillegra Dam Project. This was to be repaid to Hunter Water customers effective in their 2011 water bills.
- ▼ A price adjustment for Hunter Water customers to exclude Tillegra Dam from future water bills until such time as a new Determination takes effect.

The request by the Government for us to review prices under Section 9 of the *IPART Act* avoided the need for a new Determination in the life of the 2009 determination period.

<sup>15</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 177.

<sup>16</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 53.

<sup>17</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 143.

<sup>18</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, pp 112, 117-118, 120-121.

<sup>19</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, pp 125-127.

<sup>20</sup> IPART, *Review of prices for water, sewerage, storm water and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 32 and 195-197.

<sup>21</sup> The Hon. Phillip Costa MP, letter to IPART Chair Rod Sims, 21 December 2010. See: IPART, *Charges for Hunter Water Customers - Refund to customers and adjustment to charges resulting from the decision not to proceed with Tillegra Dam*, January 2011, Appendix A.

Our recommendations in the Section 9 review<sup>22</sup> were accepted by the Government:

- ▼ A rebate of \$36 (nominal) was to be credited to the bills of customers with a 20mm meter in the billing cycle commencing 1 March 2011. This rebate was to be provided only to customers who have a water service component in their bills. The rebate was to compensate customers for the amount they had already paid towards the cost of Tillegra Dam.
- ▼ The water service charge in the billing cycle commencing 1 March 2011 was to be reduced by \$7.47 (nominal) for a 20mm meter.
- ▼ The water service charges in the billing years 2011/12 and 2012/13 were to be reduced by \$22.54 and \$24.35 respectively (\$2009/10) for a 20mm meter.

In all cases, the rebate and charge reduction amounts were to increase proportionately with the customer's meter size.

### 3.3 Hunter Water's actual costs since the 2009 Determination

For this review, we will be seeking from Hunter Water a reconciliation of its actual costs over the 2009 Determination period against the efficient costs we allowed to be recovered through prices in the 2009 Determination (but adjusted for the Tillegra Dam decision), and an explanation of the variances and resulting outcomes.

We compare Hunter Water's capital expenditure from 2005/06 to 2012/13 against the allowances provided in the 2005 and 2009 Determinations in Figure 3.1.

For the 2005 determination period, Hunter Water's overspend was mainly due to additional work resulting from NSW Government policies announced within the period, including Tillegra Dam, the Kooragang Recycled Water Scheme, and the Gosford Wyong schemes main link. Expenditure for these projects was not included in IPART's decisions about capital expenditure for the period, but was reviewed at the 2009 Determination and deemed prudent.<sup>23</sup> We note that there was no allowed expenditure for Tillegra Dam in the 2005 Determination as Tillegra Dam was not Government policy at the time.

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<sup>22</sup> IPART, *Charges for Hunter Water Customers – Refund to customers and adjustment to charges resulting from the decision not to proceed with Tillegra Dam*, January 2011, p 1.

<sup>23</sup> IPART, *Review of prices for water, sewerage, storm water and other services for Hunter Water Corporation – From date of Gazettal – Determinations and Final Report*, July 2009, pp 83-87. We made slight adjustments to Hunter Water's capital expenditure over the 2005 Determination for the purpose of the opening RAB value for the 2009 Determination, relating to the prudence of head office costs and Hunter Water's ability to expend costs in 2008/09.

For the 2009 determination period, we allowed total capital expenditure of about \$918.3 million (\$2011/12)<sup>24</sup>, which included provisions for the efficient costs of:<sup>25</sup>

- ▼ constructing Tillegra Dam
- ▼ carrying out a number of significant water supply projects driven by forecast growth in customer connections and demand, such as the Tomaree/Tillgerry water supply and water treatment plant upgrade, the Grahamstown water treatment plant upgrade, and replacement of several major water mains
- ▼ undertaking work to cater for growth and to comply with then Department of Environment and Climate Change (DECC)<sup>26</sup> standards, including projects to upgrade sewage treatment plants, and other sewerage system reliability projects, such as the upgrade of Burwood Beach sewerage treatment plant (Stage 2), Newcastle sewerage transport system upgrade (Stage 1), Morpeth sewerage transport system upgrade (Stage 2), and the Windale/Gateshead system upgrade (Stages 1 and 2)
- ▼ implementing the Priority Sewerage Program/Country Towns Water Supply and Sewerage Program to provide sewerage services to the unsewered villages of Millfield and Ellalong, as well as to Clarence Town
- ▼ renewing and replacing sewerage transport and treatment assets
- ▼ assessing, rehabilitating and maintaining stormwater channels within the Hunter region
- ▼ undertaking major corporate capital works projects, including Information and Communication Technology projects, and high voltage electrical upgrade projects.

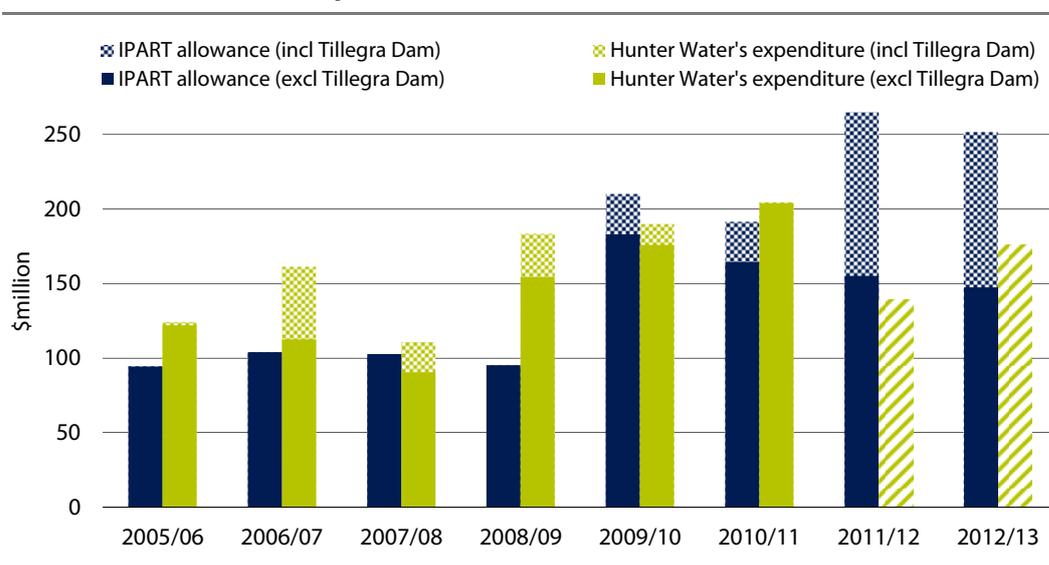
After adjusting for Tillegra Dam, we estimate Hunter Water's capital expenditure over the 2009 determination period to exceed our total allowance by about \$45.4 million (\$2011/12). We will assess the prudence and efficiency of Hunter Water's capital expenditure over the 2009 Determination, as well as examine its performance against the list of output measures.

<sup>24</sup> Total capital expenditure allowed for the 2009 Determination is \$839.1 million in \$2008/09. IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal – Final Report*, July 2009, p 102.

<sup>25</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal – Final Report*, July 2009, pp 7 and 92-93.

<sup>26</sup> As of 4 April 2011, this function falls within the Office of Environment and Heritage (OEH).

**Figure 3.1 Hunter Water's capital expenditure over the 2005 and 2009 determination periods (\$million, \$2011/12)**



**Note:** Capex allowed for 2005/06 to 2008/09 does not include any Tillegra Dam costs as this was not Government policy at the time. In 2010/11, approximately \$25.5 million (\$2011/12) of past Tillegra Dam capital expenditure was written off. This is not represented in this diagram.

**Note:** Hunter Water's figures for 2011/12 and 2012/13 are estimates.

**Data source:** IPART's 2009 Determination of Hunter Water's prices, Hunter Water, *Annual Information Return 2010/11*, and data from Hunter Water upon request.

Hunter Water's actual operating expenditure exceeds our allowances for both the 2005 and 2009 determination periods (see Figure 3.2).

For the 2005 Determination, Hunter Water's overspend related mainly to expenditure on corporate services. We found this expenditure to be on balance reasonable, following our consultants advice.<sup>27</sup>

For the 2009 Determination, we estimate an overspend in operating expenditure of about \$71.4 million (\$2011/12). Hunter Water's operating cost allowance for the 2009 Determination includes the efficient costs of:<sup>28</sup>

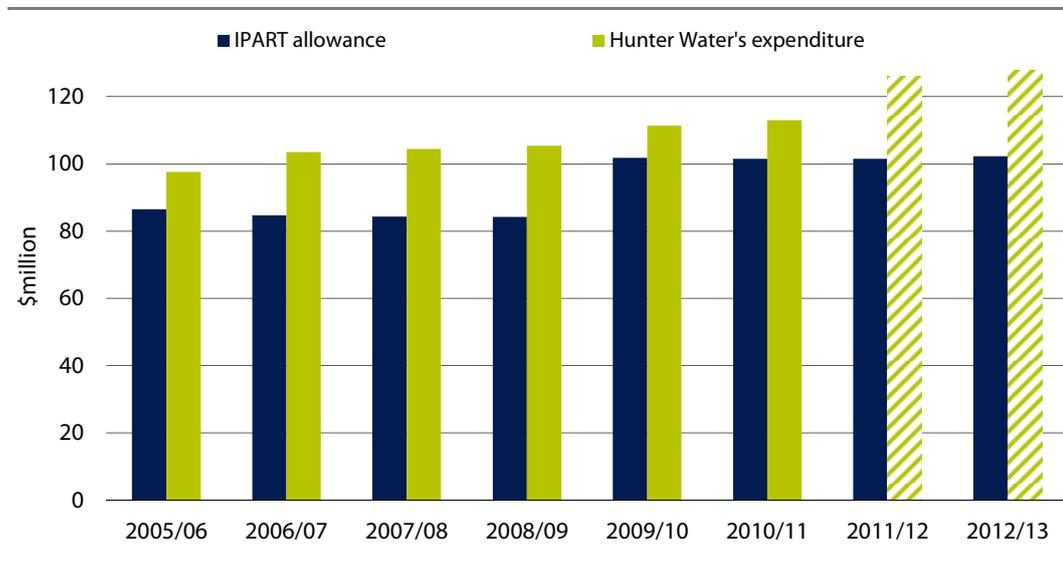
- ▼ carrying out major periodic maintenance (such as dredging the Throsby Creek stormwater catchment area)
- ▼ undertaking challenging business improvement initiatives
- ▼ continuing to deliver its demand management program.

We expect Hunter Water to report operating expenditure incurred over the 2009 determination period and provide explanations for any overspend.

<sup>27</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, p 76.

<sup>28</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, pp 71 and 77.

**Figure 3.2 Hunter Water's operating expenditure over the 2005 and 2009 determination periods (\$million, \$2011/12)**



**Note:** 'Hunter Water's operating expenditure reported for 2011/12 and 2012/13 are projections.

**Data source:** Hunter Water 2009 Determination and Hunter Water Annual Information Return 2010/11.

### 3.3.1 Reporting annual progress against capital projects and operating expenditure

For stakeholders and IPART to understand how Hunter Water has performed over the 2009 Determination period, Hunter Water needs to report on its annual progress against capital projects, and reconcile capital and operating expenditure and outcomes against our allowances.

Hunter Water's submission should include tables comparing allowed operating and capital expenditure with actual and forecast operating and capital expenditure for the 2009 Determination period. The tables should be accompanied by a comprehensive explanation of the reasons for any variations.

We seek comments from stakeholders on:

- 1 Hunter Water's actual and forecast operating expenditure over the 2009 determination period compared to that allowed in the 2009 Determination, and Hunter Water's justifications for any variances as outlined in its submission.
- 2 Hunter Water's actual and forecast capital expenditure over the 2009 determination period compared to that allowed in the 2009 Determination, and justifications for any variances as outlined in its submission.

### 3.4 Service quality standards for the 2009 Determination

Hunter Water's operating licence contains service-related standards and requirements that we review as part of the annual audit process. These standards are the minimum that Hunter Water is required to meet, and in setting the revenue requirement, we allow the efficient expenditure that will permit Hunter water to meet these standards.

In Table 3.1 we list Hunter Water's performance against water supply continuity, water supply pressure and sewage overflow standards from 2001/02 to 2009/10. The table shows that Hunter Water has consistently performed better than its licence standards for sewage overflow and pressure failures, by a good margin.

For unplanned interruptions, Hunter Water performed under but close to the licence standard from 2001/02 through 2005/06, except in 2003/04 where it breached the standard. The standard was breached again in 2006/07 due to a major storm event, but from 2007/08, performance improved dramatically and has been well within the standard.

In 2010, we undertook a review to decide on a new set of system performance standards and targets<sup>29</sup> to apply to Hunter Water from 1 July 2010. We amended all but one of the existing standards and targets. We have maintained the system performance measure and target of 4,800 properties experiencing a water pressure failure.

Hunter Water's performance against present performance standards (which include the new and amended performance standards) is presented in Table 3.2. We note that Hunter Water has maintained considerable headroom against the new standards. The level of performance may suggest that there is room for Hunter Water to lower its performance by reducing expenditure, thereby allowing lower prices to customers. In Chapter 5 we consider this issue further and seek stakeholder comments on what Hunter Water's appropriate level of expenditure should be for the 2013 Determination to meet its service standards.

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<sup>29</sup> IPART, *Hunter Water Corporation's System Performance Standards – Review Report*, February 2010.

**Table 3.1 Hunter Water's performance against sewer overflow, water supply continuity and water pressure standards from 2001/02 to 2009/10**

Indicator	Licence standard (pa)	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
No of uncontrolled sewage overflows - dry weather private property	6,500	2,775	2,966	3,190	3,763	3,359	3,895 <sup>a</sup>	3,435	2,740	3,388
No of properties which experience unplanned water interruptions exceeding 5 hours	14,000	10,410	13,966	15,248	13,696	13,133	9,835 <sup>b</sup>	5,488	9,036	7,163
No of properties that experience a pressure failure	4,800	2,461	2,461	1,655	1,656	1,663	1,655	1,658	1,677	1,657

<sup>a</sup> This figure excludes the effect of a major storm event. Including the effect of the storm event, this figure is 4,158.

<sup>b</sup> This figure excludes the effect of a major storm event. Including the effect of the storm event, this figure is 15,392.

**Source:** IPART, *Review of prices for water, sewerage, stormwater and recycled water services for Hunter Water Corporation – Issues Paper*, July 2008, p 18; and IPART, *Operating Licence Compliance Report*, Annual Report 2009-10, Appendix A.

**Table 3.2 Hunter Water's performance against present sewer overflow, water supply continuity and water pressure standards in 2010/11**

Indicator	Licence standard (pa)	2010/11
No of uncontrolled sewage overflows - dry weather private property	5,000	3,723
No experiencing 3 or more uncontrolled sewerage outflows –dry weather private property	45	26
No of properties which experience unplanned water interruptions exceeding 5 hours	10,000	5,845
No of properties which experience 3 or more unplanned water interruptions exceeding 1 hour	5,000	2,200
No of properties that experience a pressure failure	4,800	2,334

**Source:** Hunter Water, *Service Quality and System Performance Report*, Annual Operating Licence Report 2010-11, pp 1-6.

## 4 | IPART's price determination process

This chapter outlines our proposed approach to setting prices and poses a number of questions related to the price-setting approach for the 2013 review of Hunter Water's prices.

### 4.1 Length of the Determination period

We need to settle on the length of the upcoming pricing period early in the review, and can decide on pricing periods lasting between 1 to 5 years. In recent metropolitan water determinations, such as the 2012 Sydney Water review<sup>30</sup> and the 2012 Sydney Catchment Authority (SCA) review<sup>31</sup>, we have generally opted for a 4-year price path. We also opted for a 4-year price path in the 2009 Hunter Water Determination.<sup>32</sup>

We have generally considered that a 4-year price path strikes an appropriate balance between providing certainty to the regulated businesses and limiting delays in customers benefitting from efficiency gains. We will consider a number of factors when deciding on the length of the Determination period, including:

- ▼ the confidence we can place in Hunter Water's forecasts
- ▼ the risk of structural changes in the industry
- ▼ the need for price flexibility and incentives to increase efficiency
- ▼ the need for regulatory certainty and financial stability
- ▼ the benefits of aligning the determination with the term of the operating licence.

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<sup>30</sup> IPART, *Review of prices for Sydney Water Corporation's water, sewerage, stormwater and other services – From 1 July 2012 to 30 June 2016 – Final Determination and Final Report*, June 2012.

<sup>31</sup> IPART, *Review of prices for the Sydney Catchment Authority – From 1 July 2012 to 30 June 2012 – Final Determination and Final Report*, June 2012.

<sup>32</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation – Determinations and Final Report*, July 2009.

A longer Determination period provides greater stability and predictability (which may lower Hunter Water's business risk and assist investment decision making), stronger incentives for Hunter Water to increase efficiency, and reduced regulatory costs. Disadvantages include increased risk associated with inaccuracies in the data used to make the Determination, possible delays in customers benefitting from efficiency gains and the risk that changes in the industry will affect the appropriateness of the Determination.

An issue that was considered during the 2012 SCA review was whether the price Determination period should coincide with the period of the operating licence. During the course of that review, we found that for SCA, links between the operating licence and prices can be made without the need to align the terms of the operating licence and the price Determination. We also found that it was of more benefit to align the lengths of the Determination periods for SCA and Sydney Water. For Hunter Water, if we choose a 4-year determination period the next price review will align with the next review of Hunter Water's operating licence in 2017/18.

We are interested in obtaining Hunter Water's views and those of stakeholders in deciding on the appropriate length of the Determination period.

We seek comments from stakeholders on:

- 3 The appropriate length of the price path for the 2013 Determination period.

## **4.2 Determining revenue to meet efficient costs**

After having decided on the length of the Determination period, we need to determine Hunter Water's notional revenue requirement, which is the revenue needed to cover the efficient costs of providing services. This is calculated by analysing the efficient operating and capital costs of providing appropriate levels of service over the determination period. Setting prices to meet efficient costs encourages competition by new market entrants where they can provide services at a lower cost.

### **4.2.1 Operating expenditure and capital expenditure**

We will engage consultants to assist us in determining Hunter Water's efficient costs. Our consultancy will evaluate Hunter Water's asset management practices and decisions on the timing of renewals and maintenance capital expenditure. The consultants will also review the extent to which expenditure approved in the 2009 Determination has met service standards. In addition, performance over the 2009 determination period will influence our views on whether further expenditure is justified to meet current standards.

In calculating the notional revenue requirement, we will form a view on the efficiency gains that Hunter Water can reasonably achieve over the determination period. The purpose of incorporating efficiency gains into the notional revenue requirement is to provide Hunter Water with guidance about its potential to improve the efficiency of its operating and capital expenditure, without impacting Hunter Water's ability to meet agreed service or quality standards. The incentive to pursue efficiency gains arises from the fact that prices are set for the determination period and are not linked to costs actually incurred. If Hunter Water can achieve better than expected cost savings during the determination period, it can expect to earn a higher return than we forecast.

In deciding on an appropriate allowance for capital expenditure and applying the 'building block' approach, we will incorporate all renewals and maintenance capital expenditure that is based on sound asset management practices.

Hunter Water is expected to show the links between its asset management systems and its proposed capital expenditure over the 10 years from the start of the 2013 determination period. Hunter Water also needs to provide forecasts of operating and capital expenditure by year for the 2013 determination period. It should provide explanation of the drivers of operating and capital expenditure over the 2013 Determination and an outline of major upcoming capital projects. Where relevant Hunter Water should link proposed expenditures/projects with reference to levels of expenditure/projects over the 2009 determination period.

We seek stakeholder comment on:

- 4 Hunter Water's proposed operating expenditure over the 2013 determination period, including expenditure drivers, proposed service outcomes and scope for efficiency gains, as outlined in its submission.
- 5 Hunter Water's proposed capital expenditure program over the 2013 determination period, including expenditure drivers, proposed service outcomes and scope for efficiency gains, as outlined in its submission.
- 6 The scope for Hunter Water to achieve further efficiency gains over the 2013 determination period.

#### **4.2.2 Risk and Return Trade-off**

In setting a regulated rate of return, it is necessary to draw a distinction between systematic risks (ie, the risks related to general economy-wide influences) and non-systematic risk (ie, risks specific to a particular company).

Our approach to the risk-return trade-off reflects these different types of risk. We allow for the systematic risks in calculating a range for the cost of capital in accordance with commonly accepted financial principles and practice. Hunter Water is funded for these risks through the weighted average cost of capital.

Non-systematic factors are not reflected in the estimation of the WACC and cover a wide range of company and project specific risks. Non-systematic risks can be quite varied. One risk may be regulatory risk, such as a change in the regulatory rules or a change to the approach a regulator may take.

### The weighted average cost of capital (WACC)

An important step in our review is to determine the allowance for a return on assets. In December 2011, after consultation, we decided to move to a real post-tax WACC<sup>33</sup>. In previous reviews, we have used a pre-tax real WACC.

Instead of accounting for company tax through the rate of return, under a real post-tax WACC approach tax will be included as a separate building block within the notional revenue requirement (outlined below in section 4.2.3). We consider that the post-tax real WACC provides a superior estimate of the tax liability of a similar well-managed, privately owned business.

In determining the overall cost of capital for Hunter Water, we set a single WACC based on the capital structure of a similar, well-managed commercial entity. As with other businesses, the cost of capital is expected cost of its various classes of capital (debt and equity) over the determination period, weighted to take into account the relative share in its capital structure. We estimate each component on the basis of the notional or benchmark weighted average cost of capital parameters for firms operating in the same or similar industries and facing similar risks.

### *Cost of debt*

The cost of debt is based on the benchmark debt costs for a company with an investment grade credit rating. This is consistent with the principles generally adopted in Australia that:

- ▼ The cost of capital should be based on an industry benchmark rather than the utility specific costs. These are referred to as notional parameters.
- ▼ The cost of capital for a government-owned utility is set on the same basis as a privately owned utility to ensure competitive neutrality and the recognition of the underlying opportunity costs to society.

We note the recent debate on this issue in the context of the energy sector where it has been argued that the advantages that governments have in accessing cheaper finance should be factored into the cost of capital.<sup>34</sup> However, it is important to recognize that we are estimating a benchmark cost of debt for the **utility** rather than the actual costs faced by the **owner**.

<sup>33</sup> IPART, *The incorporation of company tax in pricing determinations*, December 2011.

<sup>34</sup> Australian Energy Market Commission, *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012, Directions Paper*, 2 March 2012, pp 96-120.

In our most recent Sydney Water and SCA determinations<sup>35</sup> we changed the way we express the debt margin from a point estimate to an interquartile range. We considered that an interquartile range better took into account current market uncertainties than a point estimate and was more appropriate with a larger sample.<sup>36</sup>

### *Cost of equity*

We propose to estimate the cost of equity as a fraction of the average market return above the risk-free rate (the equity beta). It is well accepted that owners of equity only get rewarded for non-diversifiable risks and that this depends on the underlying systematic risks for the sector (the asset beta) and the level of gearing. At the last Hunter Water review we used an equity beta range of 0.80 - 1.00.<sup>37</sup>

The equity beta is normally measured from data on relative market returns. This data is not available in Australia as the water businesses are all government-owned. However, data from other countries, such as the UK, indicates that the water sector has low systematic risk. A review for the Sydney Desalination Plant revealed that a portfolio of water utilities in the UK had an average equity beta of 0.65<sup>38</sup>. In our most recent Sydney Water and SCA determinations, we used the same equity beta range as for SDP of 0.6 to 0.8.<sup>39</sup> This is lower in both absolute terms and relative to the betas previously assumed for Hunter Water.

We seek stakeholder comment on:

- 7 The rate of return that Hunter Water is seeking and the justification for this rate of return.

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<sup>35</sup> IPART, *Review of prices for Sydney Water Corporation's water, sewerage, drainage and other services – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix D. IPART, *Review of prices for the Sydney Catchment Authority – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix D.

<sup>36</sup> The interquartile range approach defines the upper bound using the top quartile, or top 25% of values in a set of data. Similarly, the lower bound of the range is defined by the lower quartile, or the bottom 25%. We then used the median as the midpoint of the range.

<sup>37</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation – From date of Gazettal - Final Report*, July 2009, Table 7.16, p 106.

<sup>38</sup> IPART, *Cost of capital after the AER's WACC review – Discussion Paper*, November 2009, p 47.

<sup>39</sup> IPART, *Review of prices for Sydney Water Corporation's water, sewerage, drainage and other services – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix D. IPART, *Review of prices for the Sydney Catchment Authority – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix D.

### Taking non-systematic risks into account

A number of factors suggest that the non-systematic risks for the water sector may be relatively low.

Most of Hunter Water revenue comes from fixed charges, its customer base is highly diversified with stable demand and there is little threat of large scale competition from new products or new entrants. On the cost side, the sector's technology is relatively stable. While it is a capital intensive industry, it has a large number of assets and projects. This diversification reduces the impact of any specific project and asset risks.

Non-systematic risks can be dealt with in a number of ways, for example:

- ▼ adjusting the regulatory framework to impact upon these risks
- ▼ incorporating the risks into expected cash flows
- ▼ other factors such as affordability and cash flow analysis, in selecting a cost of capital, within a range that reflects appropriate economic conditions and other input parameters of a similar, well managed, commercial entity (known as notional or benchmark parameters).

We seek stakeholder comment on:

- 8 The non-systematic risks for Hunter Water and, to the extent necessary, how these should be reflected in the Determination.

#### 4.2.3 Treatment of company tax

In December 2011, after consultation, we decided to calculate a more accurate and commercially based tax allowance as a discrete building block, and to use a post-tax WACC.<sup>40</sup> The tax allowance is intended to more accurately reflect the tax liability for a comparable commercial business. Our previous approach used a pre-tax WACC with an assumed statutory tax rate. In most cases, this overstated the tax that would be paid by a comparable commercial business.

To estimate the tax allowance we use:

- ▼ the notional WACC parameters to estimate the quantity of debt and associated interest payments
- ▼ the business' modelled tax depreciation.

Where any of these parameters vary from the actual figures, the regulatory tax obligations we calculate will differ from the actual tax paid by an agency, all other things being equal.

<sup>40</sup> IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

The 2012 Determinations for Sydney Water's and the Sydney Catchment Authority's (SCA) prices is the first time we have implemented our changed approach to tax. The methodology and parameters we used to calculate Sydney Water's tax allowance were reviewed by NERA consulting in April 2012. NERA found that the methodology is appropriate and was correctly applied.<sup>41</sup> Our calculation of Sydney Water's and SCA's tax allowance is outlined in the Final Report to each review.<sup>42</sup>

We seek stakeholder comment on:

- 9 Hunter Water's proposed allowance for taxation, including the assumptions used.

#### **4.2.4 The return of capital – depreciation**

The return of capital building block (depreciation) reimburses the water utility for the cost of the wear and tear on its assets. In previous determinations for Hunter Water, we have calculated the depreciation requirement based on the total value of the RAB and using a straight line approach over the average life of the assets. This means that the total value of the RAB is recovered over that period.

In our recent review of Sydney Water prices, we decided to maintain Sydney Water's approach to applying different asset lives to different asset classes for new and existing assets. We agreed that this approach allows a more accurate assessment of the efficient recovery of the cost of an investment over the life of the asset. If requested by Hunter Water, we will consider using this approach for the calculation of depreciation allowances.

We may engage a consultant to review Hunter Water's asset lives but this will depend on the information presented in the submission.

### **4.3 Forecasting metered water sales and customer numbers**

Once we have established the notional revenue requirement, we will set maximum prices for Hunter Water's individual services to recover these efficient costs. Prices are set based on forecast water sales and customer numbers. If sales forecasts differ markedly from actual figures, the maximum prices we set will cause Hunter Water to over- or under-recover its required revenue.

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<sup>41</sup> Letter, *Expert Review of the Tribunal's Approach to Modelling the Return to Sydney Water*, NERA Consulting, 17 April 2012.

<sup>42</sup> IPART, *Review of prices for Sydney Water Corporation's water, sewerage, drainage and other services – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix C. IPART, *Review of prices for the Sydney Catchment Authority – From 1 July 2012 to 30 June 2016 – Final Report*, June 2012, Appendix E.

In the 2009 Hunter Water review, we engaged Sinclair Knight Merz (SKM) to review Hunter Water's forecasts. SKM found that Hunter Water's methodology was generally robust and had been applied appropriately and correctly. It also found that the main strength of Hunter Water's water consumption forecasting model was that it was simple and transparent. However, a weakness was that it relied heavily on the corporation's own quantitative estimates of future customer behaviour rather than statistical analysis.<sup>43</sup>

Hunter Water has advised that it has adopted a new forecasting methodology developed as part of the *Integrated Resource Planning for Urban Water*<sup>44</sup> project, commissioned by the National Water Commission (NWC) and led by the Institute for Sustainable Futures (ISF). Hunter Water has indicated that the new methodology and outputs are consistent with the model used previously.

On this basis we do not consider it necessary to engage a consultant to review Hunter Water's forecasts for this review. We will conduct our own analysis on the reasonableness of Hunter Water's forecasts. In addition to forecasts for water sales and customer numbers for the 2013 determination period, we expect Hunter Water to provide us with actual water sales and customer numbers for the 2009 determination period. A statement of reasons for any significant variation from forecast water sales and customer numbers used for the 2009 Determination should also be provided.

We seek stakeholder comment on:

- 10 Hunter Water's proposed forecasts of water sales and customer numbers, including the methodology and assumptions used.

#### 4.4 Price structures and price levels

The next step in our price review process is to identify the price structures and price levels aimed at recovering Hunter Water's notional revenue requirement over the determination period. In identifying the prices structures and price levels, we need to take into account the matters set out in section 15 of the IPART Act (see Appendix A), including Hunter Water's financial viability and the impact of its prices on customers. Balancing these competing interests may mean the target revenue<sup>45</sup> to be recovered through prices is respectively greater than or less than our determined notional revenue requirement.

When evaluating customer impacts, we will consider the magnitude of potential price increases in each year of the determination period and the effect of these increases on customer bills for varying consumption levels.

<sup>43</sup> Sinclair Knight Merz, *Review of Water Consumption Forecasts in Hunter Water Corporation's 2008 Submission to IPART on prices to apply from 1 July 2009 – Final Report*, March 2009, pp 1-2.

<sup>44</sup> See [www.waterplanning.org.au/news/integrated-resource-planning-for-urban-water](http://www.waterplanning.org.au/news/integrated-resource-planning-for-urban-water).

<sup>45</sup> The target revenue is the revenue that we allow Hunter Water to recover based on our determined price structures and levels, and the forecast sales volumes and customer numbers.

#### 4.4.1 Water and sewerage charges

Our general approach to pricing for metropolitan water utilities is to set a combination of periodic fixed and usage charges. The current price structure for Hunter Water has the following key features:

- ▼ Standard water usage charges are designed to encourage efficient water consumption and are set with reference to the long-run marginal cost (LRMC) of water supply (LRMC is discussed further in Chapter 5).<sup>46</sup>
- ▼ Large-volume water customers located close to Hunter Water's water sources are charged a cost-reflective location-based usage charge for consumption exceeding 50,000 kL per annum.
- ▼ Fixed charges for water services are calculated as the residual of the revenue requirement not recovered through usage charges or developer charges.
- ▼ Most costs associated with sewerage services are recovered through fixed charges. Sewerage usage charges only apply to non-residential customers.
- ▼ A higher water service charge for residents of Dungog Shire, and a special sewerage service levy (in addition to the standard sewerage charge) for residents of Clarence Town, reflecting higher costs of meeting standards for these customers when Hunter Water assumed responsibility for them in July 2009.
- ▼ Uniform or 'postage stamp' pricing applies for water and sewerage service charges across most of Hunter Water's area of operations (except Dungog Shire residents).
- ▼ Different fixed charges for water and sewerage services are paid by single dwellings, apartments and non-residential customers.
- ▼ Stormwater drainage service charges are fixed for residential customers, and land-area-based for non-residential customers.

We recently completed a review of price structures for residential and non-residential water and sewerage charges for all the metropolitan water utilities that we regulate, including Hunter Water.<sup>47</sup> We found that the water utilities had significant differences in charges between customer groups that impose similar costs on their utility.

In the review, we decided that prices should be set to reduce as far as practically possible any cross-subsidies, and to improve cost reflectivity for all customer groups. We identified a set of principles for price structures and price levels, which are set out in Box 4.1.

<sup>46</sup> The long run marginal cost represents the incremental cost of measures to bring supply and demand into balance over the longer term.

<sup>47</sup> IPART, *Review of metropolitan water utility price structures - Final Report*, March 2012.

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### **Box 4.1 IPART's principles for price structure for metropolitan water utilities**

#### **General principles**

- ▼ Changes to the structure of water and sewerage prices are to be phased in over a transition period where necessary to minimise customer impacts.
- ▼ The total revenue collected from residential customers is to reflect the costs incurred in serving those customers. The total revenue collected from non-residential customers is to reflect the costs incurred in serving those customers.
- ▼ Customers imposing similar costs on the system should pay similar charges.

#### **Residential and non-residential water usage charges**

- ▼ The water usage charge is to be a standard variable charge for all customers – residential and non-residential – and be set with reference to the utility's long run marginal cost of supply.

#### **Residential water and sewerage service charges**

- ▼ The residential water service charge is to be a standard annual charge<sup>48</sup> for all residential dwellings unless there is evidence that there are material differences in the costs of servicing different residential property types.
- ▼ The residential sewerage service charge is to be a standard annual charge<sup>49</sup> for all residential dwellings unless there is evidence that there are material differences in the costs of servicing different residential property types.

#### **Non-residential water service charges and sewerage usage and service charges**

- ▼ The non-residential sewerage usage charge is to be a standard variable charge for all customers set with reference to, but not necessarily equal to the utility's short run marginal cost of transporting, treating and disposing of domestic-strength effluent.
  - ▼ The total sewerage revenue (usage and service charges) collected from non-residential customers is to reflect the costs incurred in servicing those customers.
  - ▼ The total water revenue (usage and service charges) collected from non-residential customers is to reflect the costs incurred in servicing those customers.
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We will assess the appropriateness of continuing with Hunter Water's price structures against the principles set out in Box 4.1 and the requirements of Section 15 in the IPART Act, and we will consider any evidence provided by Hunter Water and stakeholder in the course of the review.

We seek stakeholder comment on:

- 12 Hunter Water's proposed water and sewerage charges for the 2013 Determination period.

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<sup>48</sup> It may be billed on a quarterly or 4-monthly pro-rata basis by the utility.

<sup>49</sup> It may be billed on a quarterly or 4-monthly pro-rata basis by the utility.

### 4.5.3 Environmental Improvement Charges

Hunter Water levies an Environmental Improvement Charge (EIC) on all its customers to recover the costs of providing sewerage services to currently unsewered townships in its operational area, under the NSW Government's *Priority Sewerage Program* and *Country Towns Water Supply and Sewer Program*.<sup>50</sup> These costs are also partly funded through NSW Government Community Service Obligation (CSO) payments.<sup>51</sup>

For the 2009 Determination we decided to accept Hunter Water's proposal reduce the EIC by approximately 42% in the first year of the period, and then hold it constant over the remaining years.<sup>52</sup> For the 2013 Determination, we will consider the appropriateness of the EIC charge to fund Hunter Water's backlog sewer works.

We seek stakeholder comment on:

- 13 Hunter Water's proposed Environmental Improvement Charge the 2013 Determination period.

### 4.5.4 Water service charge for Dungog Shire customers

Hunter Water assumed responsibility for Dungog Council's water and sewerage businesses on 1 July 2009.

For the 2009 Determination, we made a decision to set the water service charge for Dungog residents at a level significantly above that of Hunter Water's other customers. This decision was made so Hunter Water would be able to recover the additional capital expenditure needed to deliver the level of service to Dungog Shire residents that is required by Hunter Water's operating licence.

The water usage charge for all Dungog residents was set at the same level as that of Hunter Water's other customers (ie, based on the LRMC of water supply).

For the 2013 Determination, we will review the charges for Dungog Council water and sewerage services.

We seek stakeholder comment on:

- 14 Hunter Water's proposed approach for recovery of any ongoing infrastructure upgrade expenditure specific to Dungog Shire customers.

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<sup>50</sup> The NSW Government established the Priority Sewerage Program (PSP)/ Country Towns Water Supply and Sewerage Program for providing backlog sewerage services to unsewered townships in urban areas of country NSW – which include areas of operation Hunter Water, Gosford City Council and Wyong Shire Council.

<sup>51</sup> Hunter Water Corporation, *Statement of Corporate Intent 2011/12*, July 2011, pp 9-10.

<sup>52</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation – From date of Gazettal - Final Report*, July 2009, p 144.

- 15 Hunter Water's proposed water services charges for Dungog Shire customers the 2013 Determination period.

#### 4.5.5 Clarence Town Sewerage Scheme

When taking over Dungog Shire's water and sewerage businesses, Hunter Water also became responsible for providing sewerage services to the township of Clarence Town, which was unsewered at the time.

Part of the funding for providing Clarence Town with sewerage services comes from the NSW Government's Country Towns Water Supply and Sewerage Program. A further share comes from the EIC to all of Hunter Water's sewerage customers (about \$4.18 of the \$31.98 EIC set for the 2009 Determination (\$08/09))<sup>53</sup>. The remainder of the costs of providing Clarence Town with sewerage services is recovered through a special levy collected from those residents connected to the sewerage system.

Dungog Council had already been collecting a preconstruction levy since 1998/99 at a rate of \$260 (nominal). Hunter Water proposed to continue collecting this levy at a reduced rate of \$200 (nominal) in 2009/10, and then further reduce the levy to \$100 (\$2007/08) for every subsequent year until 2018/19. This special levy would be in addition to the standard sewerage charges.<sup>54</sup> We accepted Hunter Water's proposal for the 2009 determination period.<sup>55</sup>

Hunter Water completed construction of the Clarence Town reticulated sewerage system in March 2012.<sup>56</sup> For the 2013 Determination, we will review the Clarence Town special sewerage levy.

We seek stakeholder comment on:

- 16 Hunter Water's proposed approach for recovery of any ongoing infrastructure upgrade expenditure specific to Clarence Town for the 2013 determination period.
- 17 Hunter Water's proposed sewerage levy for Clarence Town for the 2013 determination period.

<sup>53</sup> Hunter Water Corporation, *Submission to IPART on prices to apply from 1 July 2012 - Updated January 2009*, January 2009, p 105. We note that we accepted Hunter Water's proposed EIC for the 2009 determination.

<sup>54</sup> Hunter Water Corporation, *Submission to IPART on prices to apply from 1 July 2012 - Updated January 2009*, January 2009, p 103.

<sup>55</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation - From date of Gazettal - Final Report*, July 2009, pp 144-145.

<sup>56</sup> <http://www.hunterwater.com.au/Major-Projects/Project-Pages/Clarence-Town-Sewerage-Scheme.aspx>

#### 4.5.6 Stormwater drainage charge

Stormwater drainage services are largely the responsibility of local councils in the Hunter Water's area of operations. Hunter Water levies stormwater drainage charge where it owns and operates stormwater drains.

In the 2009 Determination, we made the decision to retain the fixed stormwater drainage charge for residential customers and a land-area-based stormwater drainage charge for non-residential customers. We also decided to increase both the residential and the non-residential stormwater drainage charges by about 25% over the 2009 Determination period.

We seek stakeholder comment on:

- 18 Hunter Water's proposed stormwater drainage charges for the 2013 determination period.

#### 4.5.7 Trade waste charges

Hunter Water levies a range of trade waste charges, including agreement and inspection fees, a high-strength charge, a heavy metals charge, a phosphorous charge, a sulphate charge, and tankering service charges. These charges are intended to reflect the higher costs and risks associated with trade waste discharge compared to domestic sewerage.

For the 2009 review, we engaged Deloitte and Halcrow to review the trade waste charges.<sup>57</sup> The consultants found that Hunter Water's approach to calculating trade waste charges reflected IPART's trade waste pricing principles<sup>58</sup>.

We understand that Hunter Water intends to use the same approach in its submission to this review. If this remains the case, we consider it unnecessary to review these charges, except where Hunter Water's proposed charges increase by more than the change in the CPI less an efficiency factor. If Hunter Water proposes such increases, we would require justification including evidence of the costs on which the proposed charges were based.

We seek stakeholder comment on:

- 19 Hunter Water's proposed trade waste charges for the 2013 determination period.

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<sup>57</sup> Deloitte/Halcrow, *Review of Hunter Water's miscellaneous and trade waste charges – Final report*, December 2008.

<sup>58</sup> These principles can be found in: IPART, *Hunter Water Corporation – Prices of water supply, wastewater and stormwater services – From 1 July 2003 to 30 June 2005, Final Report*, May 2003, Appendix 11. Deloitte/Halcrow, *Review of Hunter Water's miscellaneous and trade waste charges – Final report*, December 2008, p 87.

#### 4.5.8 Ancillary and miscellaneous charges

Hunter Water offers a number of non-contestable one-off services to customers for which it levies various miscellaneous charges. These charges tend to be incurred by small number of customers and do not account for a large proportion of the total revenue (approximately 2.5%) earned by Hunter Water, but they can be significant for those customers paying them.

In 2009, we engaged Deloitte/Halcrow to review these charges. The consultants found that in general Hunter Water's approach to calculating miscellaneous services was sound<sup>59</sup>. It is our expectation that Hunter Water will not propose any changes to its pricing approach for ancillary and miscellaneous charges. If so, we consider it unnecessary to review these charges, except where Hunter Water's proposed charges increase by more than the change in the CPI less an efficiency factor. If Hunter Water proposes such increases, we would require justification including evidence of the costs on which the proposed charges were based.

We seek stakeholder comment on:

- 20 Hunter Water's proposed ancillary and miscellaneous charges for the 2013 determination period.

#### 4.6 Financeability

The prices that we set are based on Hunter Water's building block revenue requirements. We determine the appropriate return to capital by including market-based returns to debt for an investment grade company, and market-based returns to equity. Hunter Water's returns should therefore be sufficient to ensure it is financially viable and enable it to meet its returns to the providers of funds.

We will consider a number of key metrics consistent with those used by credit rating agencies to evaluate Hunter Water's financial viability. We will use the dividend payout ratio set by NSW Treasury<sup>60</sup> in our assessment. In the event that the key metrics indicate a possible financeability issue we will consider measures to ensure Hunter Water's financial health.

We are currently reviewing our approach to testing the impact of our price decisions on the financial viability of regulated business. We will be seeking comments from stakeholders on this review, including Hunter Water.

<sup>59</sup> Deloitte/Halcrow, *Review of Hunter Water's miscellaneous and trade waste charges – Final report*, December 2008, p 62.

<sup>60</sup> NSW Treasury, *Financial Distribution Policy for Government Business – applies from 1 July 2010*, November 2009, p 2.

## 5 Further issues for this review

This chapter provides comment and requests information from Hunter Water on issues specific to the 2013 price review.

### 5.1 Discretionary expenditure and customer engagement

Some levels of performance are not regulated by us or other authorities but are left to the water utilities to determine. Some levels of performance by water utilities exceed regulatory requirements.

In determining Hunter Water's prices, we will consider expenditure (actual and proposed) on service quality outcomes where there are no prescribed standards or that exceed minimum standards – ie, we will consider 'discretionary' expenditure.

In its submission to the review, Hunter Water should clearly explain its standards of service including the quantity, quality and scope of activities and services. It also should describe how it has decided on the appropriateness of the service levels that it plans to provide or undertake. In particular, Hunter Water should provide any evidence of customer engagement for proposed service levels that exceed regulatory requirements or where there are no prescribed requirements (such as odour control).

Our assessment of Hunter Water's discretionary expenditure and decision on the efficient amount to be recovered through prices will be based on Hunter Water's views and evidence, stakeholder views, and recommendations from our consultancy on Hunter Water's operating and capital expenditure.

We seek stakeholder comment on:

- 21 Support for Hunter Water incurring discretionary expenditure, and evidence provided by Hunter Water to justify funding discretionary expenditure.

## 5.2 Environmental standards and efficient expenditure

We include the value of environmental compliance into prices, to the extent that these have been valued either as the ongoing cost of mitigating environmental damage through such means as increased treatment and waste disposal options, and/or licence fees imposed by environmental regulators.

In the case of drinking water and environmental standards, we allow the full efficient costs of meeting these standards into the annual revenue requirement of the water utilities. To determine the efficient cost, we consider whether the standard has been subject to cost-benefit analysis and whether the utility is adopting strategies to achieve that standard at least cost.

In 2009, Hunter Water identified that the one of the drivers of increased operating expenditure over the 2005 Determination was increasing customer expectations regarding service and environmental standards.<sup>61</sup> For this review we will consider the efficiency of historical expenditure and whether that expenditure met environmental objectives at least cost and whether discretionary expenditure was supported by customers.

We seek stakeholder comment on:

- 22 Hunter Water's approach to meeting environmental standards placed on it, and the means of achieving these standards at least cost.

## 5.3 Operating Licence

Hunter Water has been granted a new 5-year Operating Licence which takes effect from 1 July 2012 through to 30 June 2017. The new licence contains the following changes:<sup>62</sup>

- ▼ The use of systems standards for the management of drinking and recycled water quality, assets, the environment and (administrative) quality.
- ▼ The introduction of a reporting manual, which includes new reporting requirements related to the management systems.
- ▼ The removal of obligations relating to the Hunter Water integrated water resource (H<sub>2</sub>50) plan.
- ▼ The introduction of a requirement to agree, develop, maintain and comply with a roles and responsibilities protocol with the Metropolitan Water Directorate for the development of the Lower Hunter Water Plan (LHWP).

<sup>61</sup> Hunter Water Corporation revised submission, 9 January 2009, p 32.

<sup>62</sup> IPART, *Hunter Water Corporation Operating Licence - End of Term Review, - Report to the Minister*, April 2012, p 1.

- ▼ Minor amendments to the licence to make it clearer and a more effective regulatory instrument, including:
  - the removal and consolidation of duplicative licence requirements
  - the removal of obligations which duplicate other legislative requirements
  - a review of the system performance standards to ensure the definitions and the standards are consistent
  - the removal of obligations on IPART and parties other than Hunter Water.

In accordance with good regulatory practice, we conducted a cost benefit analysis of these changes<sup>63</sup> and alternative options. The costs and benefits were assessed relative to the 'base case' of the current Operating Licence and current 'business as usual' practices (ie, no change to requirements and practices under the regime of the current Operating Licence). This included all costs and benefits to Hunter Water, the environment, its consumers and society in general (ie, all economic costs and benefits).

Our analysis indicated that the changes are justified on the grounds that their expected benefits would likely exceed their costs.

We seek stakeholder comment on:

- 23 The efficient costs arising from Hunter Water's Operating Licence obligations that Hunter Water is seeking to pass through to customers in prices.

#### 5.4 Costs arising from Section 16A Directions

In the course of our 2009 review of Hunter Water's prices, we received a standing section 16A (IPART Act) direction to be applied whenever we determine prices for Hunter Water. An extract of the direction is below:

...pursuant to section 16A of the *Independent Pricing and Regulatory Tribunal Act 1992*, direct the Independent Pricing and Regulatory Tribunal, when it determines the maximum price for government monopoly services provided by Hunter Water, to include in the maximum price an amount representing the efficient cost of complying with the requirements imposed on Hunter Water to:

1. Immediately bring forward the construction of a 450 billion litre dam at Tillegra, and
2. Provide a subsidy of up to \$10 million for the Kooragang Island recycling project...

Tillegra Dam did not receive environmental planning approval and this part of the direction will not affect Hunter Water's prices for the 2013 Determination period.

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<sup>63</sup> IPART, *Hunter Water Corporation Operating Licence – End of Term Review – Report to the Minister*, April 2012, Appendix C.

In regards to part 2, Hunter Water did not seek a subsidy for the Kooragang Island recycling scheme for the 2009 determination period, hence no subsidy was included in the prices set in the 2009 Determination. However, the direction is a standing direction and it applies to the forthcoming and any subsequent determination periods. Hunter Water has indicated that it will be seeking a subsidy for the Kooragang Island recycling scheme for the 2013 determination period.<sup>64</sup>

## 5.5 Tillegra Dam land holdings

Hunter Water holds a large amount of land near Williams River, which was purchased for the purpose of building the Tillegra Dam. As already noted, in 2010 the NSW Government decided not to proceed with the construction of the dam leaving Hunter Water with surplus land holdings at the Tillegra Dam site.

For the 2013 review, Hunter Water will need to provide us with information on land holdings and disposals relating to the Tillegra Dam site. We will consider the appropriate treatment of land holdings in Hunter Water's regulatory asset base.

We seek stakeholder comment on:

- 24 Hunter Water's intentions in regards to the land holdings at the Tillegra Dam site over the 2013 determination period.

## 5.6 Costs avoided by recycled water schemes

In 2006, we conducted an investigation into charging arrangements for recycled water schemes<sup>65</sup>, which resulted in guidelines being issued on how recycled water charges should be calculated.<sup>66</sup> The guidelines includes provisions for any water and sewerage costs avoided as a result of a recycled water scheme to be charged to water and sewerage customers and used to offset the cost and price of recycled water where certain preconditions are met. Amongst other things, these preconditions include adequate ring-fencing of the recycled water scheme.

In 2009, we allowed Hunter Water to recover the avoided costs associated with the proposed Kooragang Island recycling project through water and sewerage prices. This approach was consistent with our recycled water pricing guidelines which aim to ensure that the costs of recycled water are recovered from recycled water customers, while also providing for sharing of costs with other customers where the recycled water scheme leads to community benefits in the form of avoided or deferred costs elsewhere in the system.

<sup>64</sup> Meeting with Hunter Water Corporation, 18 May 2012.

<sup>65</sup> IPART, *Pricing arrangements for recycled water and sewer mining – Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council – Determinations and Report*, September 2006.

<sup>66</sup> IPART, *Pricing arrangements for recycled water and sewer mining – Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council – Determinations and Report*, September 2006, Chapters 7 and 8.

We expect Hunter Water to set prices for both its mandated and its voluntary recycled water schemes in accordance with our recycled water pricing guidelines<sup>67</sup>, which includes ring-fencing scheme costs and revenues. In making its claim, Hunter Water should also note our recently published guidelines for the *Assessment Process for Recycled Water Scheme Avoided Costs*<sup>68</sup>. If sufficiently justified, Hunter Water can seek to recover avoided or deferred costs from the broader customer base, reducing the costs required to be recovered through recycled water prices.

We seek stakeholder comment on:

- 25 The avoided costs of recycled water schemes that Hunter Water is seeking to recover through water and sewerage prices for the 2013 Determination period, and the impact that the proposals will have on prices.

## 5.7 Estimating the marginal cost of water

Our approach to setting the water usage charge in recent metropolitan water determinations has been to set the charge equal to the long-run marginal cost (LRMC) of supplying water. This is to ensure the usage charge encourages an efficient level of water consumption. It also encourages competition – if new entrants can deliver services at less than the water usage charge, consumers do not pay the water usage charge<sup>69</sup>.

Where supply is approaching a capacity constraint, regulators such as IPART have set the usage price equal to the LRMC of the next increment of supply. This is to signal to customers the costs of the next capacity expansion if consumption remains unchanged. If demand still exceeds supply when the usage charge is set to the LRMC, then augmentation of supply is a superior choice to further restricting supply either by price or restrictions on use. It indicates that consumers desire the augmentation and are willing to pay for it.

Our approach to calculating the LRMC is to divide the present value of the life-cycle costs, including capital and operating expenditure, by the present value of the benefits, measured in kilolitres. Once supply has been augmented, there may be a significant period of time to the next capacity constraint and the long run marginal cost will fall (to a level consistent with short-run marginal cost) giving rise to a saw tooth effect.

<sup>67</sup> IPART, *Pricing arrangements for recycled water and sewer mining – Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council – Determinations and Report*, September 2006, Report Chapter 7 for mandatory schemes and Chapter 8 for voluntary schemes.

<sup>68</sup> IPART, *Assessment Process for Recycled Water Scheme Avoided Costs – Guidelines*, January 2011.

<sup>69</sup> IPART is to set prices for new entrants based on the efficient cost of supply, under the *Water Industry Competition Act 2006*.

In the 2009 Determination, we estimated that the LRMC of water ranged from \$1.81 per kL to \$1.86 per kL (\$2008/09).<sup>70</sup> We used the estimated cost of Tillegra Dam as the basis for calculating the LRMC because it was the next water supply augmentation under NSW Government policy at the time.

Going forward into this review, construction of Tillegra Dam has been discontinued and at this stage there is no agreed system augmentation. The next augmentation project is dependent on the Lower Hunter Water Plan (LWHP), which is expected to be completed by the summer of 2013/14.<sup>71</sup> The LHWP will identify options to secure long term water supply for the Hunter Region.

For this reason, for the 2013 Determination, we will have to identify either an alternative basis for the LRMC, or find an alternative approach to setting the water usage charge.

We seek stakeholder comment on:

- 26 The approach that should be used to set usage charges for Hunter Water.
- 27 Any estimates for the long-run and short-run marginal cost of water and the assumptions used in developing these estimates.

## 5.8 Price for sales of bulk water to the Central Coast councils

Hunter Water has water trading arrangements with the Central Coast councils (Gosford and Wyong councils) under which either party can supply potable drinking water to the other under a water supply contract. The water agreement between Hunter Water and the councils will remain in place until 2026, however the original price for water sales that was set under this agreement expired on 1 July 2009.

For the 2009 review both Hunter Water and the councils requested that IPART sets the price for the transfer between the 2 supply schemes from 1 July 2009. Due to the delayed release of the 2009 Determination, the interchange charge of \$1.22/kL (\$2008/09) set by IPART did not come into effect until 17 July 2009.

In the 2009 Determination, we set the interchange charge to reflect the average cost of supply based on expected costs and transfers, plus a 10% premium to reflect that the councils were likely to be an irregular and intermittent user of water from the Hunter Water network.<sup>72</sup> In this review we will consider whether this pricing approach remains appropriate for achieving optimal use of the transfer assets.

<sup>70</sup> IPART, *Review of prices for Hunter Water Corporation's Water, Sewerage, Stormwater and other Water Services*, July 2009, p 126.

<sup>71</sup> <http://www.hunterwater.com.au/Water-and-Sewer/Water-Supply/Lower-Hunter-Water-Plan/Lower-Hunter-Water-Plan.aspx>.

<sup>72</sup> IPART, *Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation – From date of Gazettal – Final Report*, July 2009, pp 135-137.

We seek stakeholder comment on:

The appropriate approach to setting the price of water transferred between Hunter Water and the Central Coast Councils.



## **Appendices**



## A Matters to be considered by IPART under Section 15 or the IPART Act

In making determinations IPART is required, under Section 15 (1) of the IPART Act, to have regard to the following matters (in addition to any other matters IPART considers relevant):

- a) the cost of providing the services concerned
- b) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services
- c) the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales
- d) the effect on general price inflation over the medium term
- e) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers
- f) the need to maintain ecologically sustainable development (within the meaning of Section 6 of the *Protection of the Environment Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment
- g) the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets
- h) the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body
- i) the need to promote competition in the supply of the services concerned
- j) considerations of demand management (including levels of demand) and least cost planning
- k) the social impact of the determinations and recommendations
- l) standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).

## B Information required from Hunter Water

- 1 The monopoly services Hunter Water delivered over the 2009 Determination period, including service levels; that is the quantity, quality and scope of the services provided by Hunter Water.
- 2 The variations between the service levels forecast in the 2009 Determination and the actual service levels delivered, and a detailed explanation of the reasons for variations.
- 3 The monopoly services and service levels that Hunter Water proposes to deliver over the 2013 determination period. How Hunter Water has determined the appropriateness of these service levels, and how these service levels relate to forecast costs. Where service levels are determined by Government policy, specific references to that policy or decision should be provided.
- 4 The uncertainties/risks in Hunter Water's operating environment over the 2013 determination period and beyond, including the nature of these uncertainties/risks and the likelihood of them affecting specific costs and service levels (for example, electricity charges).
- 5 The appropriate length of the price path for the 2013 Determination period and the reasons for this view.
- 6 Hunter Water's actual and forecast operating expenditure by year over the 2009 Determination period, drivers of this operating expenditure and service outcomes achieved.
- 7 Comparison of Hunter Water's actual and forecast operating expenditure by year over the 2009 determination period with that allowed in the 2009 Determination, and justifications for any differences.
- 8 Hunter Water's projected operating expenditure by year over the 2013 Determination period, drivers of this expenditure, the potential for efficiency gains, specific efficiency programs, service outcomes to be achieved, and stakeholders' willingness to pay for service levels.
- 9 The methodology and major assumptions used to develop Hunter Water's forecast operating expenditures.
- 10 Clear separation between Hunter Water Corporation and its subsidiary Hunter Water Australia, and the underlying rationale and assumptions.
- 11 Hunter Water's actual and forecast unregulated income for the 2009 and 2013 determination periods, and any yearly deductions proposed from the notional

- revenue requirement - ie, noting that deductions for unregulated income should not be made from actual and proposed operating or capital expenditures.
- 12 Hunter Water's actual and forecast capital expenditure by year over the 2009 Determination period, drivers of this expenditure and service outcomes achieved.
  - 13 Comparison of Hunter Water's actual capital expenditure by year over the 2009 determination period with that allowed in the 2009 Determination, and justifications for any differences.
  - 14 Hunter Water's annual expenditures by year for each capital project proposed for the 2009 Determination (as set out in the confidential Appendix D of Hunter Water's January 2009 submission).
  - 15 Hunter Water's performance against the requirements of the 2009 Determination, including the output measures listed in Appendix E in the 2009 Final Report.
  - 16 Hunter Water's projected capital expenditure over the 2013 Determination period; drivers of this expenditure; expected service outcomes; the robustness of the business case for these expenditures; the practicality of the projects being delivered within the proposed timeframe; the reasonableness of cost estimates; stakeholder willingness to pay for service levels; and the major capital projects driving these levels of expenditure.
  - 17 Hunter Water's annual expenditures by year for each capital project proposed over the 2013 Determination.
  - 18 The value, timing and description of any contributions (including contributed assets) to Hunter Water from government and/or other sources by year.
  - 19 The extent to which Hunter Water has carried out options analysis for proposed service delivery expenditures (eg, testing contestability of tasks and services provided, conducting cost benefit analysis and business case analysis).
  - 20 Proposals for the 2013 determination period to undertake expenditure above regulatory requirements, or where there are no standards - ie, 'discretionary' expenditure. Hunter Water will need to provide evidence of customer support for this expenditure if it wishes to pass these costs through to customers.
  - 21 Hunter Water's approach to meeting the environmental standards placed on it over the 2009 determination period. Also, Hunter Water's approach to assessing options available for meeting these environmental standards, and how it chose the options that met the standards at least cost.
  - 22 Hunter Water's approach to assessing options available for meeting environmental standards placed on it over the 2013 determination in order to choose the least cost option.
  - 23 Costs and benefits arising from the changes to the Operating Licence that differ from those provided for the Cost Benefit Analysis (if any).
  - 24 An explanation of the costs arising from Hunter Water's Operating Licence obligations that Hunter Water seeks to pass through to customers in prices.

- 25 Hunter Water's approach to the allocation of shared or common costs to activities and customers and the rationale for this allocation.
- 26 Hunter Water's proposed approach to the treatment of depreciation of assets for the 2013 Determination.
- 27 Hunter Water's intentions in regards to the land holdings at the Tillegra Dam site over the 2013 determination period.
- 28 Hunter Water's proposed allowance for taxation, including the assumptions used.
- 29 The range for input parameters and underlying assumptions for the weighted average cost of capital (debt and equity).
- 30 The proposed rate of return and the justification for this rate of return.
- 31 The non-systematic risks for Hunter Water and, to the extent necessary, how these should be reflected in the Determination.
- 32 Actual metered water sales and customer numbers over the 2009 Determination period; and forecast metered water sales and customer numbers for the 2013 Determination period (a minimum of 5 years data should be provided). A description of the reasons for any significant variation should be provided.
- 33 Hunter Water's proposed price structures and levels for the 2013 Determination for each tariff included in the 2009 Determination, as well as price structures and levels for recycled water schemes. If Hunter Water proposes that a tariff is no longer required, Hunter Water should give reasons.
- 34 The reasoning or justification for each of Hunter Water's proposed tariffs that address the following factors:
  - The relationship between the proposed tariff and the forecast costs of service provision.
  - The impact of the proposal on customers (eg, actual and annual percentage change to bills).
  - Analysis of any customer 'willingness to pay' information available to Hunter Water, and/or a discussion of any customer consultation engaged in its pricing proposals.
  - The methodology for calculating the tariff, including major assumptions.
- 35 Any estimates Hunter Water has developed for the long-run and short-run marginal cost of water and the assumptions used in developing these estimates. Hunter Water's assessment of whether it is nearing a capacity constraint, the future options for supply augmentation and the cost and timing of these augmentations.
- 36 The avoided costs of recycled water schemes that Hunter Water is seeking to recover through water and sewerage prices for the 2013 Determination period, and the impact that the proposals will have on prices.
- 37 Evidence for Hunter Water's recycled water avoided cost proposals, including evidence of the implementation of the guidelines for calculating recycled water avoided costs (including ring-fencing of costs and revenues).

- 38 Progress on Dungog Shire infrastructure projects.
- 39 Dungog Shire specific infrastructure upgrade expenditure (excluding ordinary maintenance expenditure and excluding Clarence Town sewerage scheme expenditure) which:
  - has been recovered from Dungog Shire residents from the higher than standard water service charge
  - is outstanding and has yet to be recovered
  - is forecast for 2013 determination period.
- 40 Incurred Clarence Town sewerage scheme costs over the 2009 determination period which have been recovered from:
  - State Government Community Service Obligation payments
  - Environmental Improvement Charges
  - the Clarence Town Sewerage Levy.
- 41 Clarence Town sewerage scheme costs that have been incurred but are yet to be recovered.
- 42 Forecast annual Clarence Town sewerage scheme expenditures until scheme completion.
- 43 Outstanding and forecast Clarence Town sewerage scheme costs that are expected to be recovered over the 2013 determination period from:
  - State Government Community Service Obligation payments
  - Environmental Improvement Charges
  - the Clarence Town Sewerage Levy.
- 44 Hunter Water's proposed prices (including level and structure) for its transfers of water to the Central Coast over the 2013 determination period, and justification for its proposal.

## C Comment sought from stakeholders

1	Hunter Water's actual and forecast operating expenditure over the 2009 determination period compared to that allowed in the 2009 Determination, and Hunter Water's justifications for any variances as outlined in its submission.	17
2	Hunter Water's actual and forecast capital expenditure over the 2009 determination period compared to that allowed in the 2009 Determination, and justifications for any variances as outlined in its submission.	17
3	The appropriate length of the price path for the 2013 Determination period.	21
4	Hunter Water's proposed operating expenditure over the 2013 determination period, including expenditure drivers, proposed service outcomes and scope for efficiency gains, as outlined in its submission.	22
5	Hunter Water's proposed capital expenditure program over the 2013 determination period, including expenditure drivers, proposed service outcomes and scope for efficiency gains, as outlined in its submission.	22
6	The scope for Hunter Water to achieve further efficiency gains over the 2013 determination period.	22
7	The rate of return that Hunter Water is seeking and the justification for this rate of return.	24
8	The non-systematic risks for Hunter Water and, to the extent necessary, how these should be reflected in the Determination.	25
9	Hunter Water's proposed allowance for taxation, including the assumptions used.	26
10	Hunter Water's proposed forecasts of water sales and customer numbers, including the methodology and assumptions used.	27
11	Hunter Water's proposed approach for recovery of infrastructure upgrade expenditure specific to Dungog Shire.	29
12	Hunter Water's proposed water and sewerage charges for the 2013 Determination period.	29

13	Hunter Water’s proposed Environmental Improvement Charge the 2013 Determination period.	30
14	Hunter Water’s proposed approach for recovery of any ongoing infrastructure upgrade expenditure specific to Dungog Shire customers.	30
15	Hunter Water’s proposed water services charges for Dungog Shire customers the 2013 Determination period.	31
16	Hunter Water’s proposed approach for recovery of any ongoing infrastructure upgrade expenditure specific to Clarence Town for the 2013 determination period.	31
17	Hunter Water’s proposed sewerage levy for Clarence Town for the 2013 determination period.	31
18	Hunter Water’s proposed stormwater drainage charges for the 2013 determination period.	32
19	Hunter Water’s proposed trade waste charges for the 2013 determination period.	32
20	Hunter Water’s proposed ancillary and miscellaneous charges for the 2013 determination period.	33
21	Support for Hunter Water’s discretionary expenditure, and evidence provided to justify funding discretionary expenditure.	34
22	Hunter Water’s approach to meeting environmental standards placed on it, and the means of achieving these standards at least cost.	35
23	The efficient costs arising from Hunter Water’s Operating Licence obligations that Hunter Water is seeking to pass through to customers in prices.	36
24	Hunter Water’s intentions in regards to the land holdings at the Tillegra Dam site over the 2013 determination period.	37
25	The avoided costs of recycled water schemes that Hunter Water is seeking to recover through water and sewerage prices for the 2013 Determination period, and the impact that the proposals will have on prices.	38
26	The approach that should be used to set usage charges for Hunter Water.	39
27	Any estimates for the long-run and short-run marginal cost of water and the assumptions used in developing these estimates.	39
28	The appropriate approach to setting the price of water transferred between Hunter Water and the Central Coast Councils.	40

