



Independent Pricing and Regulatory Tribunal  
New South Wales

# Review of the Hunter Water Corporation Operating Licence 2017-2022

## Final Report



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# 1 Executive Summary

The Independent Pricing and Regulatory Tribunal (IPART) has completed an end-of-term review (the review) of the current Hunter Water Corporation (Hunter Water) operating licence (the licence). The current Hunter Water licence expires on 30 June 2017.

The licence is the main regulatory instrument that authorises and requires Hunter Water, within a defined area of operations, to provide, construct, operate, manage and maintain systems and services for:

- ▼ supplying water
- ▼ providing sewerage and drainage services, and
- ▼ disposing of wastewater.

It also sets out the terms and conditions to ensure Hunter Water operates in a way that protects public health, consumers and the environment, and meets other policy objectives of the NSW Government.

As part of our end-of-term review, we investigated whether the current licence had been fulfilling its objectives, and whether any issues had arisen during the current term that had impacted on its effectiveness. We have recommended to the Minister for Energy and Utilities (the Minister) that the current licence terms and conditions be changed to improve the effectiveness of the licence in meeting its objectives. These changes are one part of the licence package we have provided to the Minister. The licence package consists of the final report (this report), final licence, final Customer Contract and final Reporting Manual, supported by a cost-benefit analysis (CBA).

This report sets out our final recommended changes and explains the analysis that supports them.

## 1.1 Overview of our major recommended changes

We have recommended a total of 26 material changes to the current licence to address issues identified by us and stakeholders. The most significant of these changes are to:

- ▼ extend Hunter Water's obligation to provide services so it includes licensees under the *Water Industry Competition Act (2006)* (WIC Act),<sup>1</sup>
- ▼ adopt a two component approach to water conservation, including a Water Conservation Strategy upstream of water treatment plants, and an Economic Level of Water Conservation Methodology to replace the current prescriptive water conservation target,

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<sup>1</sup> Organisations that hold a network operators licence or a retail suppliers licence under section 6 of the *Water Industry Competition Act (2006)*.

- ▼ amend the Customer Contract to make it easier to understand and more consistent with Sydney Water’s customer contract,
- ▼ modify the existing rebate structure and increase the value of rebates, to reflect the level of inconvenience caused to customers by repeated unplanned water interruptions and wastewater overflows, and
- ▼ calculate system yield in accordance with Hunter Water’s Memorandum of Understanding (MoU) with Department of Primary Industries – Water (DPI Water).

### **1.1.1 Extend obligation to provide services to WIC Act licensees**

Under the current licence, Hunter Water’s obligation to provide services is limited to property owners. We recommend this obligation be extended so that Hunter Water also has an obligation to provide services to WIC Act licensees, subject to conditions.

If adopted, our recommended change would require Hunter Water to provide water and sewerage services to these customers, even if they do not own property within the area of operations. Hunter Water would be allowed to impose conditions on these customers to ensure the provision of services is safe, reliable and financially viable.

We consider that these changes would facilitate competition in the provision of water and sewerage services, while minimising the risk to Hunter Water and protecting end-use customers.

### **1.1.2 Adopt a water conservation strategy upstream of water treatment plants**

A part of Hunter Water’s operations that will require a different approach is the storage and transmission elements of its water network, ie, those areas upstream of its water treatment plants incorporating its supply areas, storages and transmission infrastructure. We recommend that Hunter Water’s water conservation strategy for the upstream elements be reported distinctly to the Economic Level of Water Conservation (ELWC) Methodology developed for the downstream elements.

In our draft licence we proposed that the water storage and transmission elements be part of the ELWC approach. Our intention of including water storage and transmission in the ELWC was to reflect the ‘catchment to tap’ operating model of Hunter Water. However, during the consultation on the draft licence package, stakeholders queried the application of the ELWC concept to the water storage and transmission elements. Hunter Water requested clarifications on what we meant by ‘water storage and transmission’ under the concept of ELWC.<sup>2</sup> On the same matter, WaterNSW challenged the application of ELWC to ‘water storage and transmission’ at their separate licence review public workshop, citing the lack of available cost and benefit data on natural assets, and the complex nature of the natural transmission system.<sup>3</sup> Its view was that this would make the economic analysis of water conservation options associated with ‘water storage and transmission’ difficult.

In light of the comments from the water utilities, we modified the water conservation requirements to address the specific issues relevant to Hunter Water’s system upstream of

<sup>2</sup> IPART, *Hunter Water operating licence public workshop – Transcript*, 21 February 2017, p 32

<sup>3</sup> IPART, *WaterNSW operating licence public workshop – Transcript*, 21 March 2017, p 24

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its water treatment plants. Subsequently we developed a new concept of a Water Conservation Strategy (WCS). The WCS adds a separate requirement for Hunter Water to report on the water conservation components of the existing system's operating arrangements for 'water storage and transmission'.

We recommend including a new requirement to document and report on the WCS in relation to water storage and transmission upstream of Hunter Water's water treatment plants.

### **1.1.3 Adopt an Economic Level of Water Conservation approach within and downstream of water treatment plants**

Under its current licence, Hunter Water must ensure that residential water consumption is equal to or less than the water conservation target, and that it develops and receives IPART's approval of a methodology to determine the economic level of leakage from its drinking water network. We have recommended changes to update the requirements related to water conservation.

If adopted, our recommended change would require Hunter Water to develop and implement a methodology for determining its ELWC for elements such as water leakage, water recycling and water efficiency, within and downstream of its water treatment plants. It would also be required to report annually on its implementation of the water conservation program.

Our recommended changes are consistent with those made to the Sydney Water operating licence in 2015. We consider these changes would remove the arbitrary and prescriptive water consumption target and allow Hunter Water to have the operational flexibility to adapt its water conservation activities as circumstances change, thus promoting innovation and efficiency.

### **1.1.4 Amend the Customer Contract**

Hunter Water's current Customer Contract was last approved by the Governor of NSW in 2012. We have recommended changing the Customer Contract in the licence to make it easier to understand and more consistent with Sydney Water's Customer Contract.

If adopted, our recommended changes would include adopting a revised set of rebates for customers (or their tenants) who are inconvenienced by planned water interruptions, low water pressure and wastewater overflows. The recommended changes also include updated descriptions and diagrams for maintenance responsibility that provide greater clarity to customers. Hunter Water would also be required to make the recommended changes to its Customer Contract and provide a brief explanation of the changes to its customers via their bills and on its website.

We consider these changes would improve the Customer Contract's readability, clarify maintenance responsibilities, improve the rebate scheme and remove duplicate or obsolete references.

### 1.1.5 Changes to the rebate structure

Analysis of the structure and the amount of rebates showed that there are different approaches to rebates across jurisdictions. Large water utilities in Queensland, South Australia and Western Australia do not generally provide rebates. Utilities in Victoria provide rebates but under a different structure and different amounts are provided when compared with those in NSW. Notwithstanding a lack of a standard water industry approach, the Energy and Water Ombudsman of NSW (EWON) raised concerns about the differences in the rebates between Hunter Water and Sydney Water.

For properties that experience three or more unplanned drinking water service interruptions, or three or more dry weather wastewater overflows, increasing the amount of rebates could be a more meaningful reflection of the increasing inconvenience experienced by those consumers.

The recommended increase in the amount of rebates would result in an amount more comparable with Sydney Water's rebates. However, we consider that it is not necessary to match the rebates provided by these two utilities.

We now have a good understanding of costs associated with rebates, but can't accurately quantify the benefits to the customers or society. We consider that a customer survey on rebates, to be undertaken by Hunter Water by 30 June 2020, is required to further analyse the appropriate level of rebates in conjunction with the appropriate service standards. (Refer to the new licence clause. 3.3.4).

### 1.1.6 Calculate system yield in accordance with the MOU with DPI Water

Calculation of system yield is a critical input to the long term management of water supply in the region. Hunter Water has not previously had a requirement to calculate system yield as part of its licence. Nevertheless, they had done so for the Lower Hunter Water Plan (LHWP) and have been reporting 'yield' annually. Hunter Water defines 'yield' as the maximum amount of water that can be supplied each year without exceeding its level-of-service standards. The level-of-service standards, and the associated yield, are reviewed with every major update of the LHWP.<sup>4</sup>

We consider Hunter Water's licence is the appropriate place to include a requirement to continue to calculate system yield for the region. However, the calculation detail and reporting associated with this process should be a matter for the natural resource regulator and should therefore be negotiated with DPI Water, under the authority of its MoU with Hunter Water.

### 1.1.7 Broader Government policy review into provider-user relationship

During the consultation of the draft licence package, the Property Owners' Association of NSW<sup>5</sup> expressed concern with the disparity between the Customer Contract requirement for water and sewerage services and other user-pays services such as electricity, gas and telecommunication services. Most service contracts are not linked to ownership of land, and

<sup>4</sup> Hunter Water Corporation, *Compliance and Performance Report 2015-16*, September 2016, p 35.

<sup>5</sup> Property Owners' Association of NSW submission to IPART draft operating licence package, 3 March 2017.



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users pay for the full services. We note that this issue was raised previously through a submission to our pricing reviews, without resolution.

Changes to legislation would be required to introduce a provider-user relationship as an initial step. A review of the relevant legislation is a major task, requiring a quantitative and qualitative assessment of both economic and regulatory impacts.

The Victorian experience<sup>6</sup> indicates that a change towards a provider-user relationship in the water sector is workable, although there are undoubtedly cost implications for the utilities and consequently for all water users and customers.

Given that a provider-user relationship is in place for the water sector in Victoria, we consider that there may be merit in reviewing the current system, the necessary legislative changes, the cost impacts and the safeguards necessary to protect tenants. We recommend a review to the Government to consider the policy implications of establishing a provider-customer type relationship between Hunter Water and its other types of users (consumers).

## 1.2 Our review process

The process we have followed in conducting this review has included public consultation and analysis. We have:

- ▼ Released an Issues Paper<sup>7</sup> in May 2016 that explained the review and sought submissions from Hunter Water and other stakeholders on the issues and options for change we should consider. We received 10 submissions to our Issues Paper. The submissions, and our responses, are summarised in Appendix B to this report.
- ▼ Considered these submissions to develop a set of options for change to the current licence and associated documents (the Customer Contract and Reporting Manual).
- ▼ Conducted a cost-benefit analysis (CBA) of the options and undertaken further consultation. The costs and benefits of the various options were assessed relative to the 'base case' of the current licence requirements.
- ▼ Considered the draft results of the CBA, including qualitative and quantitative net benefits, and stakeholder comments to develop our draft recommended changes, and to develop drafts of the new licence, Customer Contract and Reporting Manual.
- ▼ Released our draft licence package. This included a Draft Report and the draft licence, draft Customer Contract, draft Reporting Manual and the draft CBA, and invited stakeholders to make submissions in response to the draft package and stakeholder workshop held in February 2017.
- ▼ We received seven submissions on our draft package. We considered these submissions and completed our recommendations for changes to the licence, Reporting Manual and Customer Contract, with reasons for such changes documented in this report. The submissions, and our responses, are summarised in Appendix B to this report.

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<sup>6</sup> *Water Amendment (Governance and Other Reforms) Act 2012 (Vic)*, section 41.

<sup>7</sup> IPART, *Review of the Hunter Water Corporation Operating Licence - Issues Paper*, May 2016.

## 1.3 Structure of this report

This report explains our recommended changes to the licence, and discusses the reasons for these changes and the associated costs and benefits. The structure of the report reflects our recommended structure for the new licence and is as follows:

- ▼ Chapter 2 explains the context of the review
- ▼ Chapter 3 explains this recommended structure of the new licence
- ▼ Chapter 4 discusses our recommended changes to the licence term, objective statement, authorisation, and obligation to provide services
- ▼ Chapter 5 discusses our recommended changes to the conditions related to water conservation
- ▼ Chapter 6 explains our recommended changes to the conditions dealing with water quality and system performance standards
- ▼ Chapter 7 focuses on our recommended changes to the requirements for organisational systems management, including Hunter Water's asset, environmental and quality management systems
- ▼ Chapter 8 discusses our recommended changes to conditions related to customer and stakeholder relations
- ▼ Chapter 9 discusses our recommended changes to performance monitoring and reporting requirements
- ▼ Chapter 10 outlines our recommended changes to the schedules.

## 1.4 List of recommended changes

Our recommended changes are set out in greater detail in Chapters 3 to 10. For convenience, a complete list of these changes, including page numbers, is provided below.

### Licence structure

- |   |   |    |
|---|---|----|
| 1 | Adopt the recommended licence structure (shown in Table 3.1) to better align the licence terms and conditions with Hunter Water's operational activities. | 12 |
|---|---|----|

### Licence context and authorisation

- |   |  |    |
|---|--|----|
| 2 | Add an objective statement to the licence.   | 18 |
| 3 | Amend the licence obligations to explicitly allow Hunter Water to construct and augment the stormwater drainage systems under its control. | 21 |
| 4 | Extend the obligation to provide services to include WIC Act licensees.  | 27 |
| 5 | No change to licence review period at this point in time.  | 30 |

### Water Conservation

- |   |  |    |
|---|--|----|
| 6 | Add a requirement to calculate system yield and include a requirement to calculate and report in accordance with the MoU with DPI Water. | 33 |
|---|--|----|

- |   |   |    |
|---|---|----|
| 7 | Include a new requirement to document and report on Hunter Water's water conservation strategy in relation to the water storage and transmission (ie, upstream) elements of its operations. | 35 |
| 8 | Adopt the concept of Economic Level of Water Conservation to replace the prescriptive limit on water consumption and the Economic Level of Leakage.   | 38 |

### Supply services and performance standards

- |    |   |    |
|----|---|----|
| 9  | Amend the note to the Drinking Water Quality Management System licence clause 3.1.1 to make it clear that unfiltered water is restricted to non-potable uses.                   | 43 |
| 10 | Clarify NSW Health's role in relation to water quality management.  | 45 |
| 11 | Include a new licence condition to ensure information is gathered within the term of the new licence to inform a future review of the system performance standards and rebates. | 49 |

### Organisational systems management

- |    |  |    |
|----|--|----|
| 12 | Introduce in the licence a requirement for an asset management system to be consistent with AS ISO 55001 by 31 December 2017.  | 55 |
| 13 | Remove the requirement for State of the Assets reporting in the Reporting Manual.  | 57 |
| 14 | Include a one-off reporting requirement to provide a copy of the Strategic Asset Management Plan to IPART.   | 57 |
| 15 | Amend the environmental management system and the quality management system licence conditions to require Hunter Water to maintain systems to the most up-to-date standards. | 60 |

### Customer and stakeholder relations

- |    |  |    |
|----|--|----|
| 16 | Amend the Customer Contract to make it easier to understand.   | 64 |
| 17 | Revise rebate clauses in the Customer Contract for planned and unplanned water interruptions, low water pressure and wastewater overflows.                                       | 72 |
| 18 | Conduct customer survey to address customer expectations regarding rebates for service interruptions and to inform the value of 'inconvenience'.                                 | 72 |
| 19 | Change the membership of the customer advisory group to require inclusion of certain types of customers only.  | 74 |
| 20 | Add a requirement to negotiate with any WIC Act licensee that seeks to establish a Code of Conduct.  | 76 |
| 21 | Amend the licence to require an MoU or a roles and responsibilities protocol with DPI Water.   | 78 |
| 22 | Amend the current licence condition relating to the MoU with DPI Water so that it forms the basis of a co-operative relationship between the parties, and recognises the role of |    |

	DPI Water in assessing options to address water supply security in the lower Hunter region.	78
23	Add a requirement to establish an MoU with Fire and Rescue NSW to form the basis for a co-operative relationship.	81
24	Do not add a new licence clause requiring collaboration between Hunter Water and relevant Commonwealth agencies on matters of national security at this stage.	88
 <b>Performance monitoring and reporting</b>		
25	Amend licence conditions to require Hunter Water to report to IPART against NWI performance indicators as per the Reporting Manual.	95
 <b>Schedules</b>		
26	Include the current map of Hunter Water's Area of Operations.	98

## 2 Review context

The sections below explain what an operating licence is, and outline our objectives and approach for the review.

### 2.1 What is an operating licence?

Hunter Water is a state-owned corporation with voting shareholders consisting of Ministers in the NSW Government. The *Hunter Water Act 1991 (NSW)* (the Act) establishes the water utility as a state owned corporation and sets out its functions. However, Hunter Water can only carry out certain of its functions under the authority of, and in accordance with, an operating licence (licence).<sup>8</sup>

A licence is an enforceable regulatory instrument that authorises and requires a water utility to carry out its functions. The objectives of the licence are to:

- ▼ provide transparent and auditable terms and conditions for Hunter Water to lawfully undertake its activities in accordance with industry good-practice
- ▼ consider the interests of stakeholders within its Area of Operations
- ▼ impose the minimum regulatory burden on Hunter Water by avoiding duplication or conflict with other regulatory instruments.

To this end, Hunter Water's current licence contains:

- ▼ terms and conditions that specify the way in which it is to carry out its functions
- ▼ quality and performance standards that it must achieve
- ▼ requirements for monitoring and reporting on its performance against these standards
- ▼ a Customer Contract that sets out charges, terms and conditions for the provision of its services to its customers.

The terms, conditions and standards in the licence should reflect customer expectations and willingness to pay, and set the priorities for the utility's operations within the licence term.

The licence is supported by a Reporting Manual, which is issued by IPART, and contains the details, deadlines and definitions of its reporting requirements.

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<sup>8</sup> Information on the requirements of the Act in relation to the contents of the operating licence can be found in Chapter 3 of our Issues Paper. See IPART, *Review of the Hunter Water Corporation Operating Licence, Water Licensing - Issues Paper*, May 2016.

## 2.2 Our objectives for this review

The licence is regularly reviewed to ensure that it maintains currency and reflects changes in public expectations, good practice and changing circumstances. We review Hunter Water's licence every five years.

For this review, our main objective is to identify and recommend changes to the current licence that will improve the way we regulate Hunter Water and the effectiveness of its operations. We also aim to:

- ▼ increase the consistency in the licensing approach of the major public water utilities in NSW
- ▼ further enhance a system-based approach to licensing, and
- ▼ consider the potential issues associated with the alignment of price determination and licence periods.

Any changes we recommend should ensure that the new licence meets the objectives outlined in section 2.1 without imposing unnecessary compliance and administration costs, and should provide a net benefit to society.

## 2.3 Our approach to the review

Our approach for this review reflects Stages 2 to 4 of the Licensing Framework<sup>9</sup> that we developed as part of our review of licensing schemes in NSW, and applied to the Hunter Water licence.<sup>10</sup>


Broadly speaking, this approach includes the following main steps:

1. Developing a set of options for change to the current licence after considering:
  - a) the regulatory framework that applies to Hunter Water, including the requirements in the Act and other regulatory instruments
  - b) the performance of Hunter Water under its current licence
  - c) developments in best-practice operation and regulation, including issues raised and changes that we made in the recent review of Sydney Water's licence, and
  - d) the issues raised by stakeholders in our review consultation process.
2. Conducting a cost benefit analysis (CBA) on the options for change to the licence. This analysis compares the costs and benefits of each potential change to the 'base case' of the current licence requirements (ie, no change to requirements and practices under the current licence regime).
3. Deciding on our recommended changes, based on the results of our CBA and further consultation.
4. Drafting a new licence, Customer Contract and Reporting Manual that incorporate our recommended changes.

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<sup>9</sup> Pricewaterhouse Coopers (PwC), *A best practice approach to designing and reviewing licensing schemes*, March 2013.

<sup>10</sup> IPART, *Case Study – Assessment of Hunter Water Corporation Operating Licence – Application of the Licensing Framework*, August 2014.



We have now finalised our recommended changes to the licence and the Customer Contract. These documents are provided to the Minister for endorsement. Our recommendations are supported by the CBA and the licence is supported by the Reporting Manual. The Minister may accept or reject our recommendations before endorsing a new licence for approval by the Governor of NSW.

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## 3 Licence structure

We did not discuss the licence structure in our Issues Paper and no concerns were raised by stakeholders in their submissions about the current licence structure. However, Hunter Water's licence has been amended significantly over the last 25 years. During our review, we noted that its current structure does not provide the general public or relevant stakeholders with a clear understanding of the scope of Hunter Water's operations, or logically group and sequence related clauses. Therefore, we have considered options for change to the structure.

### 3.1 Summary of recommended change

We recommend changes to the structure of the licence to better align the licence terms and conditions with Hunter Water's operational activities. There is little cost associated with this change, and its benefits include making the licence clearer, more logical and more accessible to stakeholders.

#### Recommendation

- 1 Adopt the recommended licence structure (shown in Table 3.1) to better align the licence terms and conditions with Hunter Water's operational activities.

### 3.2 Modify licence structure to better align with operational activities

In drafting the terms and conditions of the new licence, we considered the role of other regulators, to avoid duplication with other regulatory instruments. The summary of governance arrangements is summarised in Appendix A. We considered whether a new licence structure would help to provide stakeholders with a clearer understanding of the scope of Hunter Water's operational activities. The new licence chapters are presented in section 3.2.3 (noting the linkages with the existing licence).

#### 3.2.1 Issue raised

Stakeholders did not raise any issues related to the current licence structure of the licence. However, we identified a range of potential improvements to this structure when developing the draft licence. We therefore recommend modifying the structure of the licence, for the following reasons:

- ▼ to provide a better grouping of licence requirements into similar activity areas, and base these around the general water supply chain of 'catchment to tap' where applicable



- ▼ to allow stakeholders to better understand Hunter Water's operations, easily identify any area of interest, and to locate the relevant licence clauses
- ▼ to better align with the responsibility areas within Hunter Water, thus making compliance more efficient and effective
- ▼ to create a licence structure that can (as a general rule) be applied to all public water utility licences.

The restructured licence should allow stakeholders to better align the licence conditions to each component of Hunter Water's activities.

### 3.2.2 Options assessed

Options	Description
Option A (Base Case)	No change to licence structure.
Option B	Modify licence structure as recommended in Table 1.


The costs relating to Option B were assessed as small, as structural change in the document presentation should not have wider impacts.

The benefits of the recommended structure are that it may improve accessibility to customers, the community and other stakeholders. We consider our recommended structure may improve understanding of the licence requirements and the regulatory context in which Hunter Water operates.

### 3.2.3 Preferred option

We prefer Option B, and recommend that the licence be restructured as follows:

- ▼ **Part 1: Licence context and authorisation**, to include all of the conditions from Part 1, Part 10 and Part 11 of the 2012-2017 licence.
- ▼ **Part 2: Water conservation**, to include conditions 3.1 and 3.2 of the 2012-2017 licence.
- ▼ **Part 3: Supply services and performance standards**, to include all of Part 2 and condition 4.2 of the 2012-2017 licence.
- ▼ **Part 4: Organisational systems management**, to include condition 4.1 and all of Parts 6 and 7 of the 2012-2017 licence.
- ▼ **Part 5: Customer and stakeholder relations**, to include condition 3.3 and all of Parts 5 and 9 of the 2012-2017 licence.
- ▼ **Part 6: Performance monitoring and reporting**, to include all of Part 8 of the 2012-2017 licence.
- ▼ **Schedules A and B**, to include a map of the area of operations (schedule A), and the Customer Contract (schedule B) of the 2012-2017 licence.



We recommend no additional auditable licence clauses in relation to these recommended structural changes. We consider they are consistent with the principles of the licensing framework, and will have qualitative benefits.

**Table 3.1 Recommended new licence (2017-2022) structure and corresponding existing licence (2012-2017) clauses**

Licence context and authorisation	Water conservation	Supply services and performance standards	Organisational systems management	Customer and stakeholder relations	Performance monitoring and reporting	Schedules
<ul style="list-style-type: none"> <li>▼ Objectives</li> <li>▼ Licence authorisation</li> <li>▼ Term</li> <li>▼ Licence amendment</li> <li>▼ Obligation to make services available</li> <li>▼ Non-exclusive licence</li> <li>▼ Pricing</li> <li>▼ End of term review</li> <li>▼ Notices</li> </ul>	<ul style="list-style-type: none"> <li>▼ Catchment to water treatment plants</li> <li>▼ Water treatment plants to tap</li> </ul>	<ul style="list-style-type: none"> <li>▼ Drinking Water</li> <li>▼ Recycled Water</li> <li>▼ System performance standards</li> </ul>	<ul style="list-style-type: none"> <li>▼ Asset management system</li> <li>▼ Quality management system</li> <li>▼ Environmental management system</li> </ul>	<ul style="list-style-type: none"> <li>▼ Customer Contract</li> <li>▼ Consumers</li> <li>▼ Payment difficulties</li> <li>▼ Customer advisory group</li> <li>▼ Internal complaints</li> <li>▼ External dispute</li> <li>▼ Provision of information</li> <li>▼ Code of Conduct</li> <li>▼ MoUs</li> </ul>	<ul style="list-style-type: none"> <li>▼ Operational audits</li> <li>▼ Reporting manual</li> <li>▼ Provision of information</li> </ul>	<p>A. Area of Operation</p> <p>B. Customer Contract</p>
<b>Corresponding existing licence (2012-2017) clauses:</b>						
All of Part 1	Clauses 3.1 & 3.2	All of Part 2	Clauses 4.1	Clauses 3.3	All of Part 8	Schedules B and C
All of Part 10		Clauses 4.2	All of Parts 6 and 7	All of Part 5		
All of Part 11				All of Part 9		



## 4 Licence context and authorisation

Part 1 of the recommended licence includes the clauses that relate to the licence as a whole, rather than particular operational activities. In relation to this part of the licence, we consider changes to the term of the licence, to the licence objectives, the licence authorisation, and the obligation to provide services.

### 4.1 Summary of recommended changes

**Table 4.1** Changes to Part 1 of Licence

Issue	Recommendations	Reason
Licence objective	Add an objective statement to the licence (new licence clause 1.1).	Clarify what the licence is intended to achieve.
Stormwater augmentation	Amend the licence obligations to explicitly allow Hunter Water to construct and augment the stormwater drainage systems under its control (new licence clauses 1.2.3 and 1.2.4).	Clarify Hunter Water's responsibilities, and provide drivers to mitigate operational and asset management risks.
Obligation to service WIC Act licensees	Extend the obligation to provide services to include WIC Act licensees (new licence clause 1.5).	Promotes competition and removes risk to Hunter Water in dealing with WIC Act licensees
Change the licence review period	No change to the licence review period at this point in time	Unclear whether it's more beneficial to reduce licence term or extend pricing review period.

### 4.2 Add an objective statement

#### 4.2.1 Issue raised

While this issue was not directly raised by stakeholders, we considered whether an objective and/or purpose statement would help to clarify what the licence is intended to achieve, and/or why the licence is necessary.

Subsequently, Sydney Water noted in its submission to the draft licence package that it supported the inclusion of an objective statement in principle, but found the recommended wording confusing. Sydney Water argues that the interests of stakeholders and minimising regulatory burden are not objectives of the licence itself, but rather describe the licence review process. Sydney Water prefers the wording remains unchanged from clause 1.1 of

the current licence, or is modified to match the wording in the current Sydney Water licence.<sup>11</sup>

#### 4.2.2 Options assessed

Options	Description
Option A (Base Case)	No objective statement or purpose statement
Option B	Add a new objective statement
Option C	Add a new objective statement and a new purpose statement

We did not conduct a CBA on these options.

We consider that the benefit of including a statement of the overall objective of the licence would be an improved stakeholder understanding of why we have a licence and what it is intended to achieve. We consider that the purpose of the licence is adequately articulated in the Act, so we have decided to establish only an objective statement in the licence.

#### 4.2.3 Preferred option

We acknowledged that the operating licence does not ‘consider’ but rather it ‘recognises’ the interests of stakeholders. Therefore, we have amended the objective relative to the draft licence to reflect this. However, we consider the other parts suggested by Sydney Water are more akin to the licence’s ‘purpose’, not its objective. To this end, we have framed what we consider to be the primary objectives of the licence into a concise and easily understood clause.

Therefore, we prefer to retain Option B, and have included an objective statement as clause 1.1 of the new licence. The recommended licence clause is shown in Box 4.1.

##### **Box 4.1 Recommended Licence Objective**

1.1.1 This Licence aims to:

- a) provide transparent and auditable terms and conditions for Hunter Water to lawfully undertake its activities at industry good-practice;
- b) recognise the interests of stakeholders within its Area of Operations; and
- c) impose the minimum regulatory burden on Hunter Water by avoiding duplication or conflict with other regulatory instruments.

#### Recommendation

2 Add an objective statement to the licence.

<sup>11</sup> Sydney Water submission to IPART's Draft operating licence package, 3 March 2017, p 3.

### **4.3 Amend licence authorisation to allow but not require construction and augmentation of stormwater drainage infrastructure**

Hunter Water's obligations in the licence have been to "provide, operate, manage and maintain a drainage service as described in section 13(1)(b) of the Act." This appears to have been interpreted by Hunter Water as a requirement to maintain only the stormwater/drainage assets that existed when the Act was gazetted, and only to the extent of maintaining the status quo.

Both the licence and the Act contain references to Hunter Water's obligations regarding drainage services. The clauses, as written, may be (and have been) interpreted to limit Hunter Water's responsibilities to maintaining the existing capacity of stormwater drainage systems, and not allowing additional investment in amplification or modification of the current assets. The absence of any specific reference in the licence to 'construct' or 'augment' stormwater infrastructure causes uncertainty about Hunter Water's ability to amplify or modify its stormwater assets generally.

#### **4.3.1 Issues raised**

Although this issue was not included in our Issues Paper, two submissions provided comments on Hunter Water's obligations in relation to stormwater drainage activities that suggest there is a need for greater clarity on these obligations. In its submission, Newcastle City Council (NCC) questioned whether Hunter Water should have additional responsibilities for stormwater drainage in the region, and whether the utility could do better than its current practice.<sup>12</sup>

NCC expressed concern that Hunter Water has not been using all the funding generated by its stormwater service charge on its existing stormwater assets. It also noted that Sydney Water has identified additional activities regarding management of its stormwater system, including flood risk mitigation and waterway health, and is committed to maintaining and increasing the hydraulic capacity of the stormwater network, and is collaborating with local councils to address flooding risks to the community.

NCC submitted that Hunter Water's lack of similar action and engagement affects future development in the Hunter region due to capacity constraints in the existing stormwater system (eg, Newcastle West). It requested that Hunter Water undertakes similar activities for stormwater/drainage as Sydney Water, including:

- ▼ asset renewal, waterway health and flooding risk, including maintenance, renewal and augmentation of its assets
- ▼ preparation and implementation of floodplain risk management plans.

In addition, in relation to water quality, NCC stated that Hunter Water needs to treat stormwater, not only for environmental health but also for protecting Hunter Water's assets from degradation. NCC is seeking to collaborate with Hunter Water and other stakeholders to improve stormwater quality in Hunter Water's open channels, through the development of Water Cycle Management Plans. NCC suggests that Hunter Water should embrace the tenets of Water Sensitive Urban Design when renewing its assets, as a cost-effective means

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<sup>12</sup> Newcastle City Council submission to IPART Issues Paper, 29 July 2016.

of renewing existing assets by, for example, ‘naturalising’ stormwater channels rather than replacing them with concrete.<sup>13</sup>

The Public Interest Advocacy Centre (PIAC) raised a similar issue, with regard to ‘liveable cities’ and sustainable development. PIAC noted that the role that water plays in liveable cities and how the associated issues can be addressed through the licence and consequently in price determinations should be a topic for discussion.<sup>14</sup>

In response to these stakeholder comments, we had further discussions with Hunter Water. It agreed that the inclusion of the terms ‘construct’ and ‘augment’ in the licence would clarify their responsibilities, and could provide the drivers to mitigate operational risks through asset augmentation. It also indicated it would discuss the issue further with NCC to determine an optimal way forward regarding the issues raised in its submission.

We investigated NCC’s concern that Hunter Water has not been spending all the revenue raised by its stormwater service charge on its existing stormwater assets, and found that this is not the case. The annual operating expenditure of approximately \$1.4 million quoted in NCC’s submission is only part of the total stormwater expenditure. The other costs that stormwater charges cover are the share of corporate overheads, funding costs for stormwater capital expenditure, and a tax allowance.<sup>15</sup> In addition to the operating expenditure, the capital expenditure on stormwater services over the 4-year period to 2019-20 is approximately \$0.9 million per year. The stormwater service charge will also fund this capital work.

Submissions to the draft licence package agreed with the recommended changes. Newcastle Council requested that Hunter Water:

1. be *required* to augment its stormwater infrastructure, rather than *authorised but not required* to augment
2. participate in collaborative works for flood mitigation management and development of water cycle management plans (WCMPs), and
3. improve stormwater quality.<sup>16</sup>

#### 4.3.2 Options assessed

Options	Description
Option A (Base Case)	No change to the licence.
Option B	Amend licence condition to explicitly allow construction and augmentation of stormwater drainage systems.

We considered if Hunter Water’s interpretation of its responsibilities under the Act was correct. Our analysis confirmed that Hunter Water is not prevented from augmenting or constructing its stormwater/drainage assets, but is not required to do so.

<sup>13</sup> NCC submission to IPART Issues Paper, 29 July 2016, p 5.

<sup>14</sup> PIAC submission to IPART Issues Paper, 29 July 2016.

<sup>15</sup> IPART, *Review of prices for Hunter Water Corporation, Water – Final Report*, June 2016, p 36.

<sup>16</sup> NCC submission to IPART Issues Paper, 29 July 2016.



Option B would explicitly allow Hunter Water to construct and augment the existing stormwater drainage systems. Option B makes it clear that Hunter Water is allowed to go beyond maintaining the status quo, provided each project is considered on its merits.

This option does not preclude third party funding of augmentation projects. Hunter Water would be in a position to consider possible amplification works where funding is provided by an external party (eg, a local council or developer). Councils and developers could approach Hunter Water to consider stormwater amplification works as an alternative to higher cost projects.

Depending on the project, it could result in a lower overall cost from a community perspective.

### 4.3.3 Preferred option

We prefer Option B, which would explicitly allow Hunter Water to construct and augment its existing stormwater drainage assets, and would clarify that Hunter Water is allowed to go beyond maintaining the status quo, provided each project is considered on its merits.

NCC's concerns regarding stormwater quality are outside the scope of the licence and the Act. Stormwater quality is governed by other environmental legislation. NCC should discuss these issues separately with Hunter Water, and collaborate on any necessary action independently of the licence.

We consider the issue of stormwater drainage asset augmentation should be addressed through collaboration between Hunter Water and Newcastle and other regional councils. The Act does not authorise us to require consultation or agreement between Hunter Water and other interested parties on the issue of stormwater/drainage assets, nor does it authorise us to require Hunter Water to augment its stormwater assets.

**Box 4.2** lists the existing licence clause 1.2.3, as well as the recommended new clause 1.2.4, enabling Hunter Water to augment its existing stormwater assets.

#### **Box 4.2 Recommended stormwater licence clauses (cl 1.2.3 and 1.2.4)**

- |       |   |
|-------|---|
| 1.2.3 | This Licence authorises and requires Hunter Water to provide, operate, manage and maintain a drainage service as described in section 13(1)(b) of the Act.  |
| 1.2.4 | This Licence authorises (but does not require) Hunter Water to provide, construct, operate, manage and maintain a drainage service within the Area of Operations in excess of the drainage service it is required to provide, operate, manage and maintain under clause 1.2.3. For the avoidance of any doubt, this clause authorises (but does not require) Hunter Water to enhance, expand and add capacity to the drainage service described in section 13(1)(b) of the Act. |

### Recommendation

- 3 Amend the licence obligations to explicitly allow Hunter Water to construct and augment the stormwater drainage systems under its control.

## 4.4 Extend the obligation to provide services to WIC Act licensees

The current licence conditions, related to Hunter Water's obligations to provide services to customers, were developed before there was competition from alternative suppliers of water and wastewater services in the Hunter area. These conditions include four components:

1. Hunter Water is only required to provide services to property owners within the area of operations.
2. Hunter Water must provide water supply services (including drinking water and non-potable water) and wastewater services (including sewerage and trade waste services) to properties connected to, or for which connection is available to, the relevant water supply or sewerage network.
3. Hunter Water must also provide drainage services to any property within an area of land declared by an order of the Governor to be a drainage area for the purpose of section 46 of the Act.
4. Connection to services is subject to any conditions Hunter Water may lawfully impose to ensure the safe, reliable and financially viable supply of the services to properties in the area of operations in accordance with the licence.

We considered whether Hunter Water should be obliged to provide services to customers in general, including WIC Act licensees, and the conditions that Hunter Water should be able to place on this supply of services.

### 4.4.1 Issue raised

Hunter Water's submission indicated that it was not convinced that there was a reasonable basis to require it to service anyone other than property owners for the following reasons:<sup>17</sup>

- ▼ The provisions covering the licence in the Act specifically relate to the owners of land.
- ▼ The licensing framework for good practice in licensing sets out that licensing requirements should complement, rather than duplicate, other legislative requirements. Hunter Water queries whether IPART has made a case that there are any shortcomings or gaps in the current regulatory framework, or inadequate protections under existing consumer law.
- ▼ IPART determine prices for other monopoly services for which there is no corresponding obligation to supply services.
- ▼ The wholesale pricing review is currently underway, and limits Hunter Water's ability to make a thorough reply until definitions, financial implications and timing of implementation are published.
- ▼ There may be unintended consequences of an obligation to service all WIC Act licensees, including those who are not land or property owners.

To date, Hunter Water has agreed to supply WIC Act licensees, and has negotiated agreements, in the form of Utility Services Agreements, for the provision of services.

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<sup>17</sup> Hunter Water submission to IPART Issues Paper, July 2016, pp 58-60.

Sydney Water considered that there are sufficient provisions in general competition law to ensure that Hunter Water's and Sydney Water's dealings with WIC Act licensees (and wholesale customers in general) comply with competition principles.<sup>18</sup> Duplicating such requirements in a licence is therefore neither optimal nor regulatory good practice.

Following consultation on the draft package, both utilities were concerned that the definitions in the package for wholesale services and wholesale customers did not match the definitions underpinning the wholesale pricing review.<sup>19</sup> Sydney Water preferred that we delay inclusion of this clause until the determination has been published to allow the agencies additional time to review the definitions, along with the outcomes of the pricing determination.<sup>20</sup>

#### 4.4.2 Options assessed

Hunter Water is a monopoly supplier of water supply and sewerage services - that is, services for which they are the only supplier in that part of the market, and for which there is no contestable market by potential suppliers in the short term in that part of the market.<sup>21</sup> We considered to whom Hunter Water should be obligated to provide services as a monopoly supplier, and the implications due to the introduction of alternative service providers since the commencement of the WIC Act.

In principle, we consider that Hunter Water should be obliged to provide services where any competitors have been effectively 'foreclosed'<sup>22</sup> from providing that same service to end-use customers. However, the obligation arising from this foreclosure principle should be qualified. Hunter Water should be able to recover its efficient costs of providing that service. For this reason, we consider that components 2 and 4 outlined above should remain in place for the following reasons:

- ▼ **Component 2:** We consider that Hunter Water has effectively foreclosed other suppliers from providing services where they have a water supply (including non-potable water) or sewerage network. We therefore consider that an obligation to supply should be limited to customers connected to, or who can be connected to, an existing water supply or sewerage network (the same as the existing provision).
- ▼ **Component 4:** We consider that Hunter Water should be able to make the provision of services subject to conditions. Where the supply of services is not covered by a deemed Customer Contract (as outlined in the licence), Hunter Water would be able to negotiate these conditions with the customer.

We consider that Component 3 should be removed to better align with section 13(1)(b) of the Hunter Water Act.

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<sup>18</sup> Sydney Water submission to IPART's Issues Paper, 29 July 2016, p4.

<sup>19</sup> Sydney Water submission to IPART's Draft operating licence package, 3 March 2017, p 5, and Hunter Water submission to IPART's Draft operating licence package, 3 March 2017, p 2

<sup>20</sup> Sydney Water submission to IPART's Draft operating licence package, 3 March 2017, p 5

<sup>21</sup> The Premier has declared certain services provided by Hunter Water to be "government monopoly services" under section 4 of the IPART Act: see *Independent Pricing and Regulatory Tribunal (Water, Sewerage and Drainage Services) Order 1997*.

<sup>22</sup> This is where the utility is the only supplier that can practically supply services to customers (ie similar to a monopoly supplier principle).

We assessed three options in relation to Component 1 for water and wastewater services only, as outlined in the table below.

Options	Descriptions
Option A (Base Case)	Make no change to licence. (Retain the current arrangement whereby Hunter Water is only obliged to service property owners within the area of operations.)
Option B	Require Hunter Water to service any person within the area of operations.
Option C	Require Hunter Water to service property owners and certain wholesale customers (ie, WIC Act licensees) within the area of operations.

We carried out a qualitative and quantitative analysis of the costs and benefits of each option.

### Option A

Under this option, Hunter Water would only be obliged to service customers that have a deemed Customer Contract (as outlined in the licence) with Hunter Water.<sup>23</sup>

The benefit of this option is that Hunter Water would not be obliged to negotiate supply with any other customers.

The cost of this option is that there is a risk Hunter Water would refuse to service WIC Act licensees that do not own property, given they are potential competitors. This would stifle competition by preventing WIC Act licensees from entering into the market.

### Option B

Under this option, Hunter Water would have to service any person within the area of operations.

The benefit of this option is that it aligns with our foreclosure principle, in that Hunter Water has foreclosed other suppliers from providing services to any person. Option B will provide greater certainty of supply for WIC Act licensees, which may lead to efficiencies arising from increased competition. We note however that, to date, Hunter Water has successfully negotiated supply contracts with WIC Act licensees.

Incremental costs are detailed in the CBA, and include:<sup>24</sup>

- ▼ labour and direct expenses relating to modifications to the existing customer information (billing) system,
- ▼ increased workload in call and service centres and additional administrative processes involved in creating new customer accounts, performing credit checks and a greater number of contracts with customers,
- ▼ increased costs of retrofitting separate metering for required multi-customer premises,

<sup>23</sup> Operating Licence, Schedule B –Customer Contract, clause 2.2.

<sup>24</sup> Refer CBA for more details: IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, pp 14-17

- ▼ additional cost relating to a likely increase in debt recovery activities, as recovery of debt will not be enforced by being attached to a property title (ie, ultimately an outstanding amount is tied to a property and is generally fully settled when a property changes hands),<sup>25</sup>
- ▼ cost of increased debt write off as essential services cannot be withdrawn without public health implications in the case of account arrears, and
- ▼ option may result in an inconsistency between governing legislation (eg, Hunter Water Act 1991, s36, s40) and subordinate instruments (e.g. licence) giving rise to costs from changing of legislation and related instruments.

There are however two key costs for this option:

- ▼ extending the obligation to ‘any person’ is a significant change from the existing provisions that relate only to property owners, and
- ▼ the potential for unintended consequences. For example, it may introduce risk to Hunter Water as it would be required to negotiate supply to ‘non-property owners’, which could be problematic, as there are no standard terms and conditions for this purpose.

## Option C

Under this option, Hunter Water would be obliged to service both property owners (that have a deemed Customer Contract) and WIC Act licensees. The Supplementary draft report into wholesale prices, outlines the framework for pricing wholesale services. The key differences between the pricing report and the licence review are that:<sup>26</sup>

- ▼ We have included ‘existing services’ and ‘negotiated services agreements’, which are excluded from the Draft Determination.<sup>27</sup>
- ▼ We have included non-potable water supply, which was excluded from the Draft Determination.
- ▼ We have focussed on services for WIC Act licensees, not services for wholesale customers (as defined in the wholesale pricing review).

The benefits of this option are:

- ▼ It requires Hunter Water to provide services to WIC Act licensees, where they have foreclosed other suppliers from doing so. This will promote competition.
- ▼ It means Hunter Water does not have a reason to refuse to deal with WIC Act licensees.
- ▼ It removes the risk of Hunter Water having to negotiate with a potentially large number of ‘non-property owners’ (when compared to Option B – ‘any person’), while ensuring WIC Act licensees are serviced.

<sup>25</sup> Section 40 of the Hunter Water Act grants Hunter Water the right to recover unpaid contract charges from successors in property title.

<sup>26</sup> IPART, *Prices for Wholesale water and sewerage services – Sydney Water Corporation and Hunter Water Corporation, Water- Draft Supplementary Report*, March 2017, pp 30-38

<sup>27</sup> Ibid p 41.

- ▼ Hunter Water is only obliged to service WIC Act licensees where the end-user is within Hunter Water's area of operations. This means Hunter Water is only obliged to plan for the efficient provision of services within its area of operation.

The costs of this option are:

- ▼ It is not a pure application of the foreclosure principle, as Hunter Water has effectively foreclosed the provision of services to 'any person', not just property owners and WIC Act licensees.
- ▼ The Draft Determination for wholesale prices gives a narrower definition of 'wholesale services' than those which Hunter Water could provide.<sup>28</sup>
- ▼ Costs may arise for Hunter Water as the obligation to provide services will likely have an effect when negotiating the terms and conditions for supply with wholesale customers, however this can be considered in the nature of transfer which will have no net effect on the whole community of NSW.
- ▼ There may be an additional cost relating to a likely increase in debt recovery activities, as recovery of debt will not be enforced by being attached to a property title.
- ▼ Hunter Water is able to currently negotiate appropriate security and liability conditions in Utility Services Agreements. However a WIC Act licensee may not be willing to negotiate such terms if it perceives Hunter Water to be obligated to provide services. Whilst the financial viability tests in the WIC Act licensing process provide some mitigation of bad debt risk, the introduction of legislation covering last resort arrangements means that financial viability remains a risk.

#### 4.4.3 Preferred option

We prefer Option C because it removes risk to Hunter Water in that it can refuse to deal with certain WIC Act licensee, without introducing unintended consequences of extending the obligation to 'any person' (Option B). Under this option, Hunter Water would retain the power to negotiate the terms and conditions of supply of services to WIC Act licensee, where this is not covered by a deemed Customer Contract (Section 8.7 discusses the use of non-standard contracts).

We do not favour Option A (do nothing) because in principle we consider that Hunter Water should have to provide services to more than just property owners where they have foreclosed other suppliers.

The obligation to service property owners and WIC Act licensees within Hunter Water's area of operations (option C) is sufficiently broad to support competition but provides Hunter Water with enough scope to limit risks by imposing lawful conditions to ensure the safe and reliable supply of Services.

Box 4.3 shows the recommended new licence clauses obliging Hunter Water to make its Services available to property owners and WIC Act licensees within the area of operations.

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<sup>28</sup> IPART, *Prices for Wholesale water and sewerage services – Sydney Water Corporation and Hunter Water Corporation, Water- Draft Supplementary Report*, March 2017.



#### **Box 4.3 Recommended clauses for obligation to make services available**

1.5.1 Subject to Hunter Water continuing to comply with any applicable law, Hunter Water must provide the Services on request to any Property situated in the Area of Operations which is connected to, or for which a connection is available to:

- (a) in the case of supplying water, the Water Supply System; and
- (b) in the case of providing sewerage services and/or disposing of Wastewater, the Sewerage System.

1.5.2 Subject to Hunter Water continuing to comply with any applicable law, Hunter Water must provide the Services on request to any WIC Act licensee for ultimate end-use within the Area of Operations, where that WIC Act licensee is connected to, or where a connection is available in respect of that WIC Act licensee to:

- (a) in the case of supplying water, the Water Supply System; and
- (b) in the case of providing sewerage services and/or disposing of Wastewater, the Sewerage System.

1.5.3 Hunter Water may impose any lawful conditions it sees fit on the making available of Services under clause 1.5.1 or clause 1.5.2, to ensure the safe, reliable and financially viable supply of the Services in accordance with this Licence.

#### **Recommendation**

- 4 Extend the obligation to provide services to include WIC Act licensees.

### **4.5 Consider the licence review period from 2022 onwards**

In the Issues Paper, we recognised that our price regulation and licensing roles have an impact on Hunter Water's operations. The paper noted the relationship (and trade-off) between performance standards (set by the licence) and prices (set to reflect efficient costs, including the costs of complying with the licence) as one example of where the approved capital expenditure program can affect potential changes to the licence.<sup>29</sup> We are now proposing to consider the alignment of the licence and pricing reviews as part of the next review.

#### **4.5.1 Issue raised**

Hunter Water submitted that there would be advantages in a licence review finishing two years prior to a price review. Knowledge of new or amended licence obligations one year prior to the lodgement date for a price submission would enable the water utility to incorporate any revised performance standards or additional compliance costs into operating and capital expenditure proposals.<sup>30</sup>

<sup>29</sup> IPART, *Review of the Hunter Water Corporation Operating Licence, Water Licensing – Issues Paper*, May 2016, p 40.

<sup>30</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 10.

PIAC agreed with Hunter Water that there is merit in better aligning the timing of pricing and licence reviews to ensure the licence reviews are able to inform the price determination.<sup>31</sup>

Sydney Water expressed the view that there may be merit in aligning the price and licence reviews, but we need to ensure no adverse financial or system performance impacts will eventuate from the recommended changes.<sup>32</sup>

#### 4.5.2 Options assessed

Options	Description
Option A (Base Case)	No change to licence review period (ie, price review every 4 years; licence review every 5 years).
Option B	No change in licence review period in the next 5 years (same as Base Case). From 2022, reduce licence review period from every 5 to every 4 years, with the aim of keeping a 2-year gap between the licence review and price review completion dates.

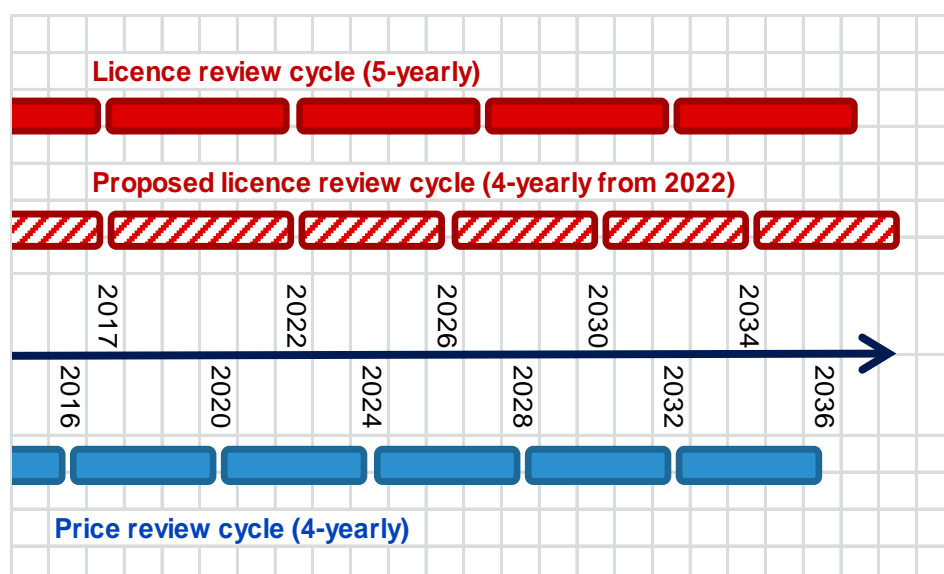
Option B considers aligning the timing of the licence reviews and the price reviews such that any changes to the licence can be considered immediately in the subsequent price review. We note that to achieve 4-yearly alignment, an adjustment to the period of the licence review could be made from 2022 (when such an alignment is already scheduled to occur). The review cycles are demonstrated in Figure 1.

<sup>31</sup> PIAC submission to IPART Issues Paper, 29 July 2016.

<sup>32</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 17.



**Figure 1 Existing and possible licence review cycles**



The benefits are qualitative as they are difficult to quantify. However, the CBA noted that there would be additional administrative costs incurred by bringing the licence review forward by one year. It also noted that this will not occur until 2025-26, which is outside of the time period covered by this cost-benefit analysis.

Each five yearly licence review costs Hunter Water and IPART around \$0.7 million in total, the majority of which is for labour and consultancy expenses.<sup>33</sup>

The cost increase is estimated to be approximately 25% more over 20 years,<sup>34</sup> which equals to one additional review in each 20-year period.

Potential changes in expenditure caused by changes in licence requirements including system performance standards (SPS) or stormwater infrastructure amplification could be more efficiently assessed if the licence review identified them initially, and the price review then allowed the efficient cost as approved expenditure.

#### 4.5.3 Preferred option

We consider that there is merit in licence requirements being established such that they can subsequently inform the pricing implications of those requirements. A 2-year gap from the finalisation of the licence to the finalisation of a price determination allows for such an interaction.

However, at this point in time there remains the question of whether it is more appropriate to shorten the licence term to 4 years or extend the pricing period to 5 years. This question contains a number of complexities and therefore our recommendation is to reconsider **Option B** as a future matter that will be subject to further analysis in the next licence review.

<sup>33</sup> Hunter Water reply to IPART request for information, 22 March 2017, and IPART estimates.

<sup>34</sup> Calculated as (5 years / 4 years) - 1 x cost of review.

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## Recommendation

- 5 No change to licence review period at this point in time.

## 5 Water conservation

The current licence includes two main conditions related to water conservation. These require Hunter Water to meet a water conservation target and to determine the Economic Level of Leakage (ELL). In reviewing the licence, we considered whether these should be replaced with requirements to adopt an Economic Level of Water Conservation (ELWC) approach, in line with current good practice for NSW's public water utilities, for the 'demand' side of the water supply chain. We also considered other potential water conservation provisions for the 'supply' side of the water supply chain from catchment to water treatment plants, and considered adding a requirement to calculate system yield.

### 5.1 Summary of recommended changes

**Table 5.1** Changes to Part 2 of Licence

Issue	Recommendation	Reason
System yield.	Include a requirement for Hunter Water to calculate system yield in a manner agreed with DPI Water (new licence clause 2.1.1).	Calculation of system yield is a critical input to the long term management of water supply in the region.
Prepare a water conservation strategy for water storage and transmission.	Include a requirement for Hunter Water to prepare a water conservation strategy in relation to the system operating arrangements for water storage and transmission, and develop a program of work using the strategy (new licence clause 2.1.2).	The strategy for water storage and transmission differs from the requirements for ELWC and applies to system elements upstream of Hunter Water's water treatment plants.
Develop and implement an ELWC principles and methodology to determine water conservation activities from water treatment plants to tap.	Adopt the concept of ELWC to replace the prescriptive limit on water consumption and the ELL methodology, and develop a program of work using the new methodology (new licence clauses 2.2.2, 2.2.3 and 2.2.4).	A more holistic approach than ELL that applies to the relevant functional areas and replaces arbitrary limits. Matches the requirement for Sydney Water.

## **5.2 System yield**

We considered an option of including a licence requirement for Hunter Water to calculate its system yield.

### **5.2.1 Issues raised**

Calculation of System Yield is a critical input to the long term management of water supply in the region. Hunter Water has not been previously required to calculate System Yield as part of its licence. Nevertheless, it had done so for the Lower Hunter Water Plan (LHWP) and has been reporting system yield annually. The calculation of system yield was not raised in the Issues Paper or by stakeholders during consultation. However, discussions with DPI Water indicated that there was a risk that without a licence requirement to calculate system yield, Hunter Water may refuse to do so in the future.

Hunter Water did not have any concerns with reporting on the maximum reliable quantity of water that it can derive from one year to the next from its existing water storages.

Hunter Water is required to report on yield in its annual compliance and performance report in accordance with its Reporting Manual in its current licence.

### **5.2.2 Options assessed**

The options assessed were based on the method of requiring Hunter Water to continue collecting information and calculating the yield for the region. We considered making it a reportable item to IPART, or whether the information should be provided to DPI Water as part of the information shared under the LHWP or the MoU.

The system yield conditions in the current Sydney Catchment Authority licence are prescriptive. Hunter Water's only customer for bulk water supply is itself, with ultimate responsibility for management of regional supply resting with DPI Water. On this basis we do not support implementation of prescriptive requirements for calculating and reporting system yield on Hunter Water. We also note that Hunter Water does collect data and maintain system yield information which it reports annually.

### **5.2.3 Preferred option**

We consider that the licence is the appropriate place to include a requirement for Hunter Water to continue to calculate yield. The yield calculation is considered essential to the forecasting of water availability and informing the planning for meeting demands into the future.

We further consider that DPI Water is the preferred agency to interpret and use this information, with the MoU with DPI Water (see section 8.6 of this report) as the vehicle for detailing calculation methodology, calculation and review frequency and reporting requirements for system yield.

The new and amended licence clauses are shown below in Box 5.1.

## **Box 5.1 Recommended clauses for calculating System Yield**

2.1.1 Hunter Water must calculate the System Yield either:

- a) in accordance with the memorandum of understanding with the Department of Primary Industries Water referred to in clause 5.10.1(a); or
- b) if no such memorandum of understanding is in effect, in accordance with a reasonable methodology that Hunter Water considers suitable.

5.10.1 Hunter Water must use its best endeavours to:

- a) maintain a memorandum of understanding (which may be referred to as a roles and responsibilities protocol) with the Department of Primary Industries Water in relation to:
  - i) the roles and responsibilities for the Department of Primary Industries Water and Hunter Water in respect of the review and implementation of the Lower Hunter Water Plan; and
  - ii) calculation and reporting of System Yield; and
- b) comply with the memorandum of understanding maintained under clause 5.10.1(a).

*[Note: Clause 5.10.1 does not limit the persons with whom Hunter Water may enter into a memorandum of understanding or a roles and responsibilities protocol.]*

### **Recommendation**

- 6 Add a requirement to calculate system yield and include a requirement to calculate and report in accordance with the MoU with DPI Water.

## **5.3 Prepare a Water Conservation Strategy in relation to water storage and transmission**

We considered an option of including a licence requirement for Hunter Water to prepare a water conservation strategy in relation to the system operating arrangements for water storage and transmission, which are those system components upstream of the water treatment plants.

### **5.3.1 Issue raised**

During the development of the draft licence, 'water storage and transmission' was listed as one of the four elements of the ELWC. This is a new element when compared to the three elements in the original concept of ELWC when it was first introduced in 2015 in the Sydney Water licence. The three elements in that licence were water leakage, water recycling and water efficiency. Hunter Water is a vertically integrated utility which also looks after its water catchments. The 'water storage and transmission' element in the ELWC was intended to reflect the 'catchment to tap' operating model of Hunter Water.

Stakeholder's concerns include difficulty in applying the ELWC concept to the water storage and transmission component, lack of available cost and benefit data on natural assets and the complex nature of the natural transmission system (refer section 5.3.2).

### 5.3.2 Options assessed

No alternate options were identified. We analysed the concerns identified by Hunter Water<sup>35</sup> and WaterNSW<sup>36</sup> and modified the water conservation requirements to address the specific issues relevant to Hunter Water's system upstream of its water treatment plants.

Subsequently, we developed a new concept of a 'Water Conservation Strategy' (WCS). The WCS adds a separate requirement for Hunter Water to report on the water conservation components of the existing system operating arrangements for 'water storage and transmission'.

Qualitatively the costs and benefits of meeting the new WCS requirements would include documenting of water conservation components of existing operational procedures, developing processes for identifying additional options for conserving water, comparing these options and selecting these options for implementation. From an efficiency perspective, it is necessary to address water conservation across all of Hunter Water's supply chain.

In terms of benefits, we consider it important that Hunter Water transparently and objectively documents and reports on its current water conservation strategies upstream of the water treatment plants. The other significant benefit of this approach is that it acknowledges that there are limitations on available data to undertake a detailed CBA of water lost in natural systems.

### 5.3.3 Preferred option

Our preferred option is to separate the 'water storage and transmission' component from the draft ELWC provision. We concluded that a modified reporting process was required for the upstream components separate from the requirements for an ELWC. This process, ie the WCS, includes specific licence conditions to address this component.

The strategy must include identification and documentation of the water conservation components of existing operational procedures, a process for identifying additional options for conserving water within system operating arrangements, a process for comparing these options and a process for selecting options for implementation.

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<sup>35</sup> IPART, Hunter Water operating licence public workshop – Transcript, 21 February 2017, p 32

<sup>36</sup> IPART, WaterNSW operating licence public workshop – Transcript, 21 March 2017, p 24

## **Box 5.2 Recommended 'Catchment to water treatment plants' water conservation clauses**

2.1.2 By 1 November 2018, or by a later date as approved by IPART, Hunter Water must submit to IPART a report outlining Hunter Water's water conservation strategy in relation to its system operating arrangements for Water Storage and Transmission (**Water Conservation Strategy**).

2.1.3 The Water Conservation Strategy must include:

- a) identification and documentation of the existing water conservation activities;
- b) a process for identifying additional options for conserving water;
- c) a process for comparing these options; and
- d) a process for selecting options for implementation.

2.1.4 By 1 September 2019, or by a later date as approved by IPART, Hunter Water must develop and submit to IPART a water conservation work program using the process set out in the Water Conservation Strategy.

### **Recommendation**

- 7 Include a new requirement to document and report on Hunter Water's water conservation strategy in relation to the water storage and transmission (ie, upstream) elements of its operations.

## **5.4 Develop and implement an ELWC approach**

The current licence requires Hunter Water to meet a water conservation target and develop a methodology for determining the ELL. In general, the ELL is the point where the value of water lost from leakage is equal to the value of the resources committed to reducing these losses.

We consider the recently developed ELWC concept is a more holistic approach that incorporates other elements of water conservation, including water leakage, water recycling and water efficiency activities (including demand management) in its definition.

### **5.4.1 Issue raised**

Hunter Water has developed and applied an ELL methodology in its current licence term. Hunter Water submitted that it has an understanding of how it could extend this approach more generally to cover a wider range of water conservation initiatives such as in an ELWC methodology. Hunter Water has observed Sydney Water's progress in developing the methodology through the work of the ELWC Interagency Reference Group. In addition, Hunter Water and Sydney Water have discussed the process and necessary timelines to complete key tasks and will co-operate to develop a robust methodology that suits its business and operating environment.<sup>37</sup>

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<sup>37</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016 – p 9.

Hunter Water supports a licence requirement to develop and implement an ELWC methodology. However, it suggested that the principles and approach would need to be tailored to Hunter Water's operating environment, taking into account the size of the business, the scope of potential water conservation activities, available data on costs and benefits, existing stakeholder engagement processes, and the resourcing costs of preparing the methodology.<sup>38</sup>

Hunter Water considered that a six month period for establishing the approach and principles and a further 12 months to finalise the ELWC methodology was reasonable and achievable. We support the suggested timeframe, which is consistent with the timeframe provided to Sydney Water.

DPI Water noted in its submission that if an ELWC approach is adopted, it should be framed with reference to the current LHWP.<sup>39</sup> DPI Water's position is that the LHWP is the primary mechanism for developing an optimal portfolio of demand and supply measures to secure the region's water needs. It noted that a new process may be inefficient, being separate from the modelling and analysis that underpins the LHWP.

DPI Water argued that the LHWP reflects the economic level of investment in supply and demand measures. It further argued that a standard cost-benefit analysis may not fully price non-financial benefits to water conservation measures, providing little financial incentive to invest in water conservation. The submission implied that the ELWC approach may limit societal benefits from potential water conservation measures that are included in the LHWP's portfolio of measures.<sup>40</sup>

Hunter Water expressed reservations on how to apply the ELWC concept to components upstream of the water treatment plants for the water storage and transmission system.<sup>41</sup> Hunter Water would need to allow for variances occurring in natural systems (eg, evaporation and seepage from rivers and dams). This is in contrast to the downstream system components which can calculate an ELWC based mainly on man-made systems (eg, infrastructure such as pipes). Natural systems are inherently more variable than man-made systems. Man-made systems are more easily able to be monitored for losses

## 5.4.2 Options assessed

Options	Description
Option A (Base Case)	No change to licence conditions.
Option B	Replace the ELL and water conservation target with a requirement in the licence to adopt an ELWC (this would not occur until the ELWC methodology is fully implemented).
Option C	Tie the ELWC provisions to the demand side measures identified in the LHWP.

Our CBA shows there is a significant quantifiable cost (our mid-range forecast is \$191,598 over five years) associated with replacing the current licence requirements with a requirement to adopt an ELWC. However this is a relatively modest amount compared

<sup>38</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016 pp 21-22.

<sup>39</sup> DPI Water submission to IPART Issues Paper, 29 July 2016.

<sup>40</sup> DPI Water submission to IPART Issues Paper, 29 July 2016.

<sup>41</sup> IPART, Hunter Water operating licence public workshop – Transcript, 21 February 2017, p 32



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with the cost of water conservation activities undertaken by Hunter Water overall. Hunter Water's actual expenditure on water conservation programs in 2015-16 was approximately \$5 million.<sup>42</sup>

In addition, there are equally important qualitative benefits to be realised from the adoption of an ELWC. The most significant of these benefits are increased efficiency from considering a wider set of influences on water conservation decisions and increased flexibility for the business to optimise water conservation expenditure on various projects, rather than just focussing on water usage and water leakage. The impact of efficiency gains could be large given the amount of cost associated with water conservation activities.

Option C was analysed qualitatively in conjunction with Hunter Water. Hunter Water reported that the LHWP contains predominantly drought-related responses, and confirms a series of schemes that Hunter Water is already committed to implementing when necessary. In addition Hunter Water noted that there is nothing in the current LHWP that requires IPART-mandated expenditure. However, linking the ELWC to the LHWP could inadvertently require Hunter Water to undertake works that it cannot fund or does not consider economical.

We further note that the LHWP is not a statutory requirement. Linking the LHWP to the requirements of the licence would have the effect of turning the plan into a statutory one. We believe that this is not the intent of the licence. We further believe that the degree of flexibility inherent in the ELWC approach is preferable when assessing project implementation options.

### **5.4.3 Preferred option**

Our preferred option is Option B for ELWC. We consider it good practice to include new economic water conservation obligations in public water utilities' licences, which are designed to:

- ▼ apply to the relevant functional responsibility areas for that public water utility,
- ▼ replace arbitrary and prescriptive limits, and
- ▼ allow the utility to exercise its judgement, and have the operational flexibility to adapt its water conservation activities to changes in circumstances, promoting innovation and efficiency.

We consider that the ELWC methodology could form a component of an overall supply/demand balancing exercise and is therefore consistent with the framework created by the LHWP. We note this requirement will apply to the system components within and downstream of the water treatment plants. Upstream components will require the development of separate water conservation measures through a water conservation strategy specific to water storage and transmission activities, as outlined in section 5.3.

We envisage that DPI Water would be consulted in the development of the ELWC methodology as it has been on the development of Sydney Water's methodology. This

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<sup>42</sup> Email to IPART, Hunter Water Corporation, 18 October 2016.

would help to ensure consistency between the ELWC methodology and the over-arching strategy of the LHWP. However, we consider it unnecessary to tie the licence conditions to the LHWP provisions. The LHWP is a non-statutory plan, and any agreements with Hunter Water regarding implementation can and should be made separately.

Therefore, we have recommended the inclusion of new ELWC provisions in the licence. A well-designed ELWC methodology will allow Hunter Water to take a business-wide approach to assessing ongoing and new investment in water conservation measures (including those in the LHWP), and to better determine an appropriate level of that investment.

#### **Box 5.3 Recommended 'Water treatment plants to tap' water conservation clauses**

2.2.2 By 1 November 2017, Hunter Water must submit to IPART for IPART's approval a report outlining Hunter Water's proposed approach to, and principles for, developing a methodology for determining its economic level of water conservation in relation to (at a minimum) the following elements:

- a) water leakage (within and downstream of its water treatment plants);
- b) water recycling; and
- c) water efficiency (including demand management).

2.2.3 By 1 November 2018, or by a later date as approved by IPART, Hunter Water must submit to IPART (for IPART's approval) the proposed methodology for determining its economic level of water conservation in accordance with the approved approach and principles approved by IPART (**Economic Level of Water Conservation Methodology**). IPART may refuse approval of the methodology and require Hunter Water to resubmit it by a specified date after making changes requested by IPART, or approve the methodology unconditionally, or approve the methodology subject to conditions. Hunter Water must comply with any such conditions.

2.2.4 By 1 September 2019, or by a later date as approved by IPART, Hunter Water must develop and submit a water conservation work program using the Economic Level of Water Conservation Methodology.

2.2.5 Hunter Water must obtain IPART's written consent to make any changes to the Economic Level of Water Conservation Methodology (other than changes to correct minor grammatical or typographical errors).

#### **Recommendation**

- 8 Adopt the concept of Economic Level of Water Conservation to replace the prescriptive limit on water consumption and the Economic Level of Leakage.

## 6 Supply services and performance standards

The current licence includes a range of conditions related to water quality and system performance standards. We considered options to clarify water quality management system requirements, and to move the drinking water quality compliance responsibility (ie, the auditing role) from the licence to NSW Health. We also considered options to strengthen the system performance standards.

### 6.1 Summary of recommended changes

**Table 6.1** Changes to Part 3 of Licence

Issue	Recommendation	Reason
Unfiltered water – Hunter Water's obligations	Amend the note to the Drinking Water Quality Management System licence clause to make it clear that unfiltered water is restricted to non-potable uses (new licence clause 3.1.1).	The existing licence and regulatory requirements are generally sufficient and Hunter Water can continue to meet the requirements of ADWG by providing the appropriate information to its customers, ie, that unfiltered water is not suitable for drinking. The existing drinking licence clause is appropriate, and we have decided to expand the existing explanatory note under the clause.
NSW Health's role in relation to water quality	Clarify NSW Health's role in relation to water quality management. (Note: this recommended change is shown by the absence of current licence clauses 2.1.4 and 2.2.4 from the licence, ie, removal of the 'approval' role.)	NSW Health's position is that it is not an "approval body". To remove any doubt from the licence and clarify stakeholders' understanding, we recommend removing the relevant clauses. We consider the management of changes in the DWQMS and RWQMS, whether the changes are significant or not, is part of the implementation of both management systems. The implementation of the management systems 'to the satisfaction of NSW Health' is already specified in the existing licence clauses 2.1.2 and 2.2.2.
Review System Performance Standards (SPS).	Include a new licence condition to ensure information is gathered within the term of the new licence to inform a future review of the system performance standards and rebates (new licence clause 3.3.4).	There is insufficient data to recommend changes to SPS thresholds. To inform any future consideration of adjustment of these SPS and

		the effect on rebates, additional work through customer surveys and data acquisition is required.
Water quality compliance undertaken by NSW Health	Retain the current drinking water quality provisions in the existing licence.	NSW Health does not have the resources and expertise to audit and support a licensing regime for public water utilities.

## 6.2 Amend the note to the Drinking Water Quality Management System

Customers situated between Chichester Dam and Dungog Water Treatment Plant do not have direct access to potable water. Hunter Water supplies these customers with ‘unfiltered water’ (ie, raw water (with added chlorine) that has not been treated to a potable water standard), via the transfer pipeline from Chichester Dam to Grahamstown Dam. Hunter Water has developed non-standard customer contracts to provide the terms and conditions of supply and to note the (non-potable) quality of the water being supplied to these customers.<sup>43</sup>

We will clarify Hunter Water obligations to both its potable and non-potable water customers.

### 6.2.1 Issue raised

Hunter Water noted that there are less than 100 customers served by this pipeline, most of which are residential customers.<sup>44</sup> The water supplied to these customers is dosed with chlorine but is not filtered or otherwise treated. This water can vary in quality (particularly turbidity) after heavy rain and runoff into Chichester Dam. The microbiological quality of the unfiltered water cannot be guaranteed. It should also be noted that, as the unfiltered water customers are serviced by a single trunk main, the water continuity standards in the licence cannot be reliably met. These unfiltered water customers have historically had non-standard water service agreements that contain qualifying clauses regarding water quality and the end uses for which the water is safe.

Hunter Water considered that its current licence already includes some coverage of the supply of unfiltered water through the requirement to maintain and implement a management system that is consistent with the Australian Drinking Water Guidelines (ADWG).<sup>45</sup> The unfiltered water from the Chichester Trunk Gravity Main does undergo some disinfection, however this single barrier is insufficient to reliably produce water suitable for drinking.

<sup>43</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, pp 47-48.

<sup>44</sup> Ibid, p 47.

<sup>45</sup> Ibid, p 48.

Recently our annual operational audits have considered the supply of unfiltered water within the scope of compliance with drinking water quality licence clauses. In 2014, our annual audit report recommended that:

Hunter Water should develop a process to inform customers who receive unfiltered water from the Chichester Trunk Gravity Main about the quality and use of that water.<sup>46</sup>

Hunter Water noted that the process of updating non-standard agreements with unfiltered water customers revealed a difference of opinion on the quality of the unfiltered water and suitable end uses. The difference of opinion raised two issues:

1. Whether existing licence terms have sufficient coverage of unfiltered water, as a non-drinking grade of water.
2. Whether the relationship between Hunter Water and its unfiltered water customers should continue to be formalised in non-standard agreements or be incorporated into the Customer Contract instead.

Hunter Water's preference is to continue to maintain non-standard contracts with unfiltered water customers, rather than incorporate the service into its Customer Contract, due to the small number of customers affected (less than 0.1 % of its customer base). Hunter Water contends that this approach results in a clearer, more concise Customer Contract for standard customers and services.<sup>47</sup>

The submission from NSW Health noted that this issue "...is probably best managed through clear and concise individual customer agreements which are reflective of the management framework of the ADWG."<sup>48</sup> The advice concurred with Hunter Water's submission that noted that it is currently negotiating with the affected landowners to ensure the new agreements are understood, including the qualifying clauses regarding water quality, system performance and appropriate end uses for which the water is safe.

### 6.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	No change to the licence (ie, licence does not explicitly cover the management of unfiltered water).
Option B	Introduce licence conditions to cover unfiltered water with standards similar to the Australian Drinking Water Guidelines.
Option C	Require Hunter Water and NSW Health to agree on the terms and conditions for the supply of unfiltered water in the MoU.
Option D	Make minor amendments to the drinking water conditions in the licence to include management of unfiltered water for non-potable purposes.

These unfiltered water customers do not currently have reticulated potable water supply. The cost of providing reticulated potable water services to these customers is in the order of

<sup>46</sup> IPART, *Hunter Water Corporation Operational Audit 2013/14, Report to the Minister, Water - Compliance Report*, December 2014, p 4.

<sup>47</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 48.

<sup>48</sup> NSW Health submission to IPART Issue Paper, 29 July 2016, p 3.

\$7.5 million, which is approximately \$110,000 per affected customers.<sup>49</sup> This option is considered too expensive and is therefore not included in our list of options.

Option B would allow Hunter Water to disconnect customers who may be using unfiltered water for potable water purposes. The new licence condition would specifically target this small group of customers<sup>50</sup> and could be used to provide a basis for Hunter Water to take action against those customers who do not comply.

While disconnection of customers from the unfiltered water supply could mitigate the negative health risks of consuming water not intended for drinking purposes, it would impose a cost on those customers who need an alternative supply. Disconnection of the unfiltered water supply may result in some customers, who may not already have water tanks, or large enough tanks, being required to install water tanks and pay for water carters to fill up their tanks regularly.

Under Option B, Hunter Water would be able to fulfil its commitment to maintaining a management system which is compliant with the ADWG and only supply potable water if it is safe and reliable. NSW Health noted that this option could reduce health risks to consumers, and provide better understanding of health risks by those who supply this water to the public.<sup>51</sup> Hunter Water would lose revenue from the reduced sale of unfiltered water due to the disconnections. However, the loss could be partially offset by the increased sale of potable water through water carters to these customers.

Option C requires Hunter Water and NSW Health to agree on the terms and conditions for the supply of unfiltered water through the existing Memorandum of Understanding (MoU) between them. Hunter Water would be required to continue to supply unfiltered water to customers. However, it would not provide the benefit of reducing the risk of consuming water that is not intended for drinking. It may also introduce inflexibility and discourage collaboration.<sup>52</sup>

Option D acknowledged that preventing the use of unfiltered water for potable water purposes should be managed as part of the drinking water management framework, which is the current management approach. We consider the existing drinking water licence conditions appropriate.

Under Option D, Hunter Water is required to continue to administer new non-standard agreements with the unfiltered water customers, and provide educational material and information to these customers regarding the safe use of unfiltered water. There would be a minor cost to Hunter Water for providing targeted community education. The health benefits are qualitative as better education should lower the risk of consuming non-potable water unintentionally.

### 6.2.3 Preferred option

We prefer Option D. We consider that Hunter Water should continue to meet the requirements of ADWG by providing the appropriate information to its customers. The

<sup>49</sup> Hunter Water's reply to IPART request for information, 7 September 2016.

<sup>50</sup> Approximately 55 customers.

<sup>51</sup> NSW Health's reply to IPART request for information, 13 September 2016.

<sup>52</sup> Ibid.



information should reinforce that unfiltered water is not suitable for drinking. Disconnecting customers from the unfiltered water supply, as in Option B, could cause inconvenience and disruption to customers, result in net costs to the broader community and should only be considered as a last resort.

We conclude that:

- ▼ Making minor amendments to the licence to include unfiltered water for non-potable purposes would provide more transparency in managing the risk of customers consuming unfiltered (non-potable) water.
- ▼ The existing drinking licence clause is appropriate, and we have decided to expand the existing explanatory note under the clause.
- ▼ The potential misuse of unfiltered water can be effectively dealt with through the compliance audit and the implementation of a Drinking Water Quality Management System (within the framework of the ADWG).
- ▼ The protections within the framework of ADWG are sufficient to manage this issue, along with clear and concise individual agreements with these unfiltered water customers.

We have therefore added a note to licence clause 3.1.1 to clarify that the potential misuse of unfiltered water for drinking purposes is to be addressed under the drinking water management framework, as shown in Box 6.1.

**Box 6.1 Recommended unfiltered water note (under clause 3.1.1)**

*[Note: It is expected that the Drinking Water Quality Management System will be consistent with the Framework for Management of Drinking Water Quality. However, where NSW Health considers it appropriate, the application of Australian Drinking Water Guidelines may be amended or added to, to take account of Hunter Water's circumstances and/or Drinking Water quality policy and practices within New South Wales.*

*The Australian Drinking Water Guidelines has provisions relating to the prevention of use of non-potable water for potable purposes.]*

Given the variable nature of unfiltered water from Chichester Dam, we do not believe a meaningful set of standard conditions can be applied. We prefer that the customers in question sign the agreements provided, and that the ADWG framework is the basis for managing this service.

**Recommendation**

- 9 Amend the note to the Drinking Water Quality Management System licence clause 3.1.1 to make it clear that unfiltered water is restricted to non-potable uses.

## 6.3 Clarify NSW Health's role in relation to water quality management

We sought input from stakeholders on three issues relating to NSW Health's role in relation to water quality management:

- ▼ NSW Health's role as an 'approval' body (existing licence conditions 2.1.4 and 2.2.4)
- ▼ Whether to define 'significant changes' (existing licence conditions 2.1.3 and 2.2.3)
- ▼ Whether to define 'to the satisfaction of NSW Health' (existing licence conditions 2.1.2 and 2.2.2).

### 6.3.1 Issue raised

Both Hunter Water<sup>53</sup> and NSW Health<sup>54</sup> indicated that the current arrangements appear to be working well for both parties and should be retained. Sydney Water also supported this view.<sup>55</sup>

NSW Health submitted that it is not an 'approval' authority. There is a degree of contention around whether NSW Health is required to approve changes in Hunter Water's Drinking Water Quality Management System (DWQMS) and Recycled Water Quality Management System (RWQMS). Hunter Water has indicated that it expects to continue its current approach of involving NSW Health when developing and implementing significant changes to its management systems to ensure that outcomes are mutually acceptable.

Hunter Water expressed concerns about defining 'to the satisfaction of...'<sup>56</sup> including determining how broad or narrow the definition and scope would be. Both Hunter Water and NSW Health argued that the existing system works well, each party understands its role and the MoU between the two organisations results in a good understanding and level of communication between the parties. This is underscored by the audit role that we undertake, with input from NSW Health.

### 6.3.2 Options assessed

#### Issue 1: NSW Health's role as an 'approval' body

Options	Descriptions
Option A (Base Case)	Maintain wording of Licence conditions 2.1.4 and 2.2.4 which requires NSW Health's "approval" for any significant changes to the DWQMS.
Option B	Change Licence conditions 2.1.4 and 2.2.4 to require any significant changes to the DWQMS to be "to the satisfaction of" NSW Health.
Option C	Remove Licence conditions 2.1.4 and 2.2.4.

#### Issue 2: Defining 'significant changes'

Options	Descriptions
Option A (Base Case)	Do not define the meaning of 'significant changes'.
Option B	Define the meaning of 'significant changes' in the licence

<sup>53</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 13.

<sup>54</sup> NSW Health submission to IPART Issues Paper, 29 July 2016, p 2.

<sup>55</sup> Sydney Water submission to IPART Issues Paper, 15 July 2016, pp 6-7

<sup>56</sup> Email, Hunter Water's reply to IPART request for information, 7 September 2016.



Option C	Require the meaning of 'significant changes' to be defined in the MoU with NSW Health.
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### Issue 3: Defining 'to the satisfaction of NSW Health'

Options	Descriptions
Option A (Base Case)	Do not define the meaning of 'to the satisfaction of NSW Health'.
Option B	Define the meaning of 'to the satisfaction of NSW Health' in the licence.
Option C	Require the meaning of 'to the satisfaction of NSW Health' to be defined in the MoU with NSW Health.

The CBA demonstrates that changes to these clauses would result in no net benefit.<sup>57</sup> In addition, the two agencies have indicated that the system works well in its current format, regardless of a degree of uncertainty over definitions. Changes to definitions (eg 'significant changes') present a risk that those changes may result in increased requirements and therefore compliance costs. The existing regime works well and no changes are considered necessary.

However, we have noted NSW Health's position that it is not an "approval body". To remove any doubt from the licence and clarify stakeholders' understanding, we propose to remove the relevant clauses.

Significant changes to Hunter Water's drinking water and recycled water management plans will need to be 'to the satisfaction of NSW Health'.

#### 6.3.3 Preferred option

In relation to the role of NSW Health as an approval body, we prefer Option C, removing the existing licence clauses 2.1.4 and 2.2.4. In relation to defining 'significant changes' and 'to the satisfaction of NSW Health', our preferred options are to not define these terms. These terms could be defined in the MoU between the two parties, should they consider it necessary.

We consider the management of changes in the DWQMS and RWQMS, whether the changes are significant or not, is part of the implementation of both management systems. The implementation of the management systems 'to the satisfaction of NSW Health' is already specified in the existing licence clauses 2.1.2 and 2.2.2. We considered inserting 'significant changes' into existing clauses 2.1.1 and 2.2.2, but decided that it is not required as the implementation of the management system to the satisfaction of NSW Health implicitly includes managing changes. Clause 2.1.3 requires NSW Health to be notified of any significant changes.

#### Recommendation

10 Clarify NSW Health's role in relation to water quality management.

<sup>57</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, pp 27-28.

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*(Note: this recommended change is shown by the absence of current licence clauses 2.1.4 and 2.2.4 from the recommended licence, ie, removal of the 'approval' role.)*

## **6.4 Include new licence condition to enable review of System Performance Standards as part of a future licence review**

The Issues Paper raised the question of whether the existing system performance standards (SPS) are too generous, given that Hunter Water routinely meets the standards by a considerable margin. SPS are included in the current licence to reflect the fact that Hunter Water is a monopoly provider of essential services. These standards are aimed at ensuring that customers receive a suitable level of service.<sup>58</sup> There are trade-offs between the standard of service provided by Hunter Water and the costs of providing that service. The challenge is to meet customers' expectations and minimum requirements whilst not exceeding their willingness to pay.

The current SPS thresholds were agreed following the 2008 Pricing Determination, and were subsequently included in the 2007-2012 licence.<sup>59</sup> The thresholds were designed to also incorporate major weather events since there is no mechanism to exclude major weather events from the calculations. In the years since the changes were promulgated, Hunter Water has continued to remain significantly (in most cases) below the SPS thresholds. A cursory assessment for the results from 2010-11 to 2015-16 shows that Hunter Water is between 15-50% below its thresholds. This signifies that there is scope to undertake an evaluation of these SPS.

### **6.4.1 Issue raised**

Stakeholders did not raise any significant concerns with the current SPS. Hunter Water's submission considered the following factors:<sup>60</sup>

- ▼ Hunter Water's 2015 price submission assumed there would be no substantive changes to the SPS.
- ▼ Forecast growth in new connections and water consumption over the next five years means there will be a natural tightening of the SPS each year.
- ▼ Further engineering investigations are required to understand the investment needed to achieve different performance levels.
- ▼ Further engagement with customers is required to understand their preferences and values.

Sydney Water's submission<sup>61</sup> noted that the SPS do not necessarily represent customer advocated service levels or reflect efficient life cycle costs of assets. However it further noted that simply tightening the current standards without exploring customer preferences or efficient costs is unlikely to bring service benefits, but could limit the scope for cost

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<sup>58</sup> *Hunter Water Act 1991*, s 13(1)(c).

<sup>59</sup> An amendment was made to the SPS contained in Hunter Water's operating licence on 16 July 2010, as published in the NSW Government Gazette, No 92, 16 July 2010.

<sup>60</sup> Submission from Hunter Water to IPART Issues Paper, 15 July 2016, p 31.

<sup>61</sup> Submission from Sydney Water to IPART Issues Paper, 29 July 2016, p 3.

efficiencies. Sydney Water did not support changes to the current SPS thresholds, but noted that these thresholds could be reviewed in the future.

#### 6.4.2 Options assessed

Options	Descriptions
Option A (Base Case)	Keep existing standard in the licence.
Option B	Use a proportional basis (i.e., a percentage basis) for the standards so that standards remain constant relative to an increasing customer base.
Option C	Use a proportional basis (i.e., a percentage basis) for the standards and define excluded events (i.e., event outside Hunter Water's control such as major weather events).
Option D	Additional reporting requirement at the end of each financial year in SAIDI, SAIFI and Major Day Event thresholds for exclusions. The definitions are based on IEEE Standard 1366-2012.

The major factor influencing the options analysis relates to how much it will cost Hunter Water to improve standards of service, and Hunter Water's customers' willingness to pay for the improved service standards.

Hunter Water does not expect to breach existing performance standards and thresholds over the next five years, except in circumstances of extreme or major weather events. Hunter Water also stated that increasing the performance standard thresholds would not have a measurable impact on likely capital expenditure.<sup>62</sup>

Hunter Water stated that while there is merit in excluding major weather events (ie, major storms, earthquakes, floods) in Options C and D, it is difficult to define an independent and objective measure for 'excluded events'.<sup>63</sup>

With regard to changing to a standard that excludes major weather events, similar to the electricity industry performance reporting requirements, Hunter Water notes the following:<sup>64</sup>

- ▼ The input data required for the indicator is currently recorded, however, it is not readily extractable in the required form.
- ▼ ICT costs of approx. \$3,500 (35 hours for 1 employee) would be incurred to extract the six years of data required for use in informing further discussion and development of the indicators.
- ▼ Other internal labour costs of approx. \$35,000 required to adapt and develop the indicators for use in the water industry.
- ▼ A robust process would involve discussions between Hunter Water, Sydney Water, Central Coast and IPART.
- ▼ The cost in information system changes are \$20,000 in both 2017-18 and 2018-19.

<sup>62</sup> Hunter Water's reply to IPART request for information, 7 September 2016.

<sup>63</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report, May 2017*, p 37.

<sup>64</sup> Ibid.

For Option B, there may be savings in lower capital and operating expenditure for Hunter Water and customers, as increasing the performance standard thresholds would reduce the risk of licence breaches and would defer expenditure targeted at particular performance standards. Hunter Water stated however it was not possible to quantify the magnitude of these savings.<sup>65</sup>

For Option C, Hunter Water noted that the current SPS are designed for 1-in-20 year storm events, which therefore includes major weather events. As major weather events are already considered in the current standards, there is no incremental benefit relating to this option.<sup>66</sup>

For Option D, if a robust process leads to an appropriate new indicator, then the benefits could include:

- ▼ improved indication of Hunter Water's day-to-day performance in normal operating conditions and impact on customers
- ▼ improved comparability across utilities
- ▼ potential improvements in performance or cost savings to meet more relevant targets
- ▼ potential for future development of incentive schemes
- ▼ improved understanding of the practical application of these indicators in the water industry
- ▼ development of robust, well-designed, meaningful measures that could potentially replace existing performance standards
- ▼ avoided cost of reporting against non-robust measures.<sup>67</sup>

### 6.4.3 Preferred option

We prefer Option A. We recommend that the SPS thresholds in the new licence remain at the current levels. Option D, or a similar approach, requires further investigation and analysis before the potential benefits can be assessed and appropriate new SPS can be developed.

To inform any future consideration of adjustment of these SPS, Hunter Water proposes to survey its customers before the next pricing review (in 2020), to determine the levels of service for which customers are willing to pay. In addition, Hunter Water proposes to investigate the underlying performance standards that should apply if major weather events are removed from the SPS measurement, and collect relevant data to inform the next pricing review and licence review with regard to re-evaluating these SPS.

We recommend a new licence condition be added to ensure the completion of these information gathering tasks within the term of the new licence to inform a future review of the performance standards. The recommended licence clause is shown in Box 6.2.

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<sup>65</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 37.

<sup>66</sup> Ibid.

<sup>67</sup> Ibid, p38

## Box 6.2 Recommended customer survey clause

3.3.4 Hunter Water must survey its Customers by 30 June 2020 for the purpose of informing a review of system performance standards and rebates.

*[Note: Clause 3.3.4 is not intended to prevent Hunter Water:*

*a) surveying its Customers and Consumers for any lawful purpose at such times as it sees fit; or*

*b) using the survey required by that clause to survey its Customers and Consumers on topics additional to the topic referred to in that clause.]*

### Recommendation

- 11 Include a new licence condition to ensure information is gathered within the term of the new licence to inform a future review of the system performance standards and rebates.

## 6.5 Maintain drinking water quality compliance regime in licence

Currently the licence contains conditions that govern the quality of drinking water supplied to Hunter Water's customers.<sup>68</sup> Specifically, these conditions relate to water quality objectives for the provision of drinking water and recycled water that meet the required public health standards.

In the Issues Paper, we raised the possibility of moving the drinking water compliance responsibility, including Water Quality Management Plan compliance, from the licence to NSW Health.

### 6.5.1 Issue raised

Both Hunter Water and NSW Health are satisfied with current arrangements regarding the compliance regime. NSW Health does not see itself as an approval authority, and generally has no approval processes.<sup>69</sup> Hunter Water has noted that it is satisfied with the current arrangements.

### 6.5.2 Options assessed

Options	Descriptions
Option A (Base Case)	Retain the current drinking water quality provisions in the existing licence.
Option B	NSW Health establishes a compliance regime under the Public Health Act, and IPART removes audit requirements for drinking water from the licence.
Option C	NSW Health establishes a compliance regime under the Public Health Act, and IPART removes audit requirements for drinking water from the licence (same as Option B above) <b>and</b> NSW Health audits and reports (publicly and to IPART) on Hunter Water's compliance with its drinking water Quality Management Plan.

<sup>68</sup> Refer current operating licence clause 2.1.

<sup>69</sup> NSW Health submission to IPART Issues Paper, 29 July 2016, p 2.

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Our quantitative analysis suggests that Option B and C both result in an initial net cost for NSW Health in developing its own internal processes to support the audit regime. Option C results in an initial net cost for NSW Health in developing its own internal processes and an additional recurring net cost relating to additional reporting requirements compared with the base case (Option A).

Our qualitative analysis shows that there is no incremental benefit arising from Option B but a qualitative benefit arising from Option C, which we consider does not offset the quantitative net costs of this Option.

A benefit for Hunter Water would arise as the cost of operational audits would be borne by NSW Health. We note that Section 18D of the *Hunter Water Act 1991*, in relation to the licence auditing functions of the Tribunal, requires Hunter Water to pay NSW Treasury "*the cost (as certified by the Tribunal) involved in and in connection with carrying out the operational audit of the Corporation*". A regulatory mechanism does not currently exist for NSW Health's costs to be passed through to Hunter Water, resulting in a cost saving to Hunter Water that is offset by an equal cost increase for NSW Health.

### **6.5.3 Preferred option**

Our preferred option is Option A, that no change is made. NSW Health does not have resources nor expertise available to audit and support a licensing regime for the public water utilities. Both NSW Health and Hunter Water have indicated that the current arrangements are appropriate and effective. The overall costs and benefits do not favour either of the options over the base case. Therefore the preferred option is to maintain the current arrangements in the licence.

## 7 Organisational systems management

The current licence requires Hunter Water to develop and/or maintain an Asset Management System (AMS) (cl 4.1), an Environmental Management System (EMS) (cl 6.1), and a Quality Management System (QMS) (cl 7.1) that provide effective planning, operation and control of processes. We considered options for changes to the licence conditions on these organisational systems, and related requirements in the Reporting Manual.

### 7.1 Summary of recommended changes

**Table 7.1 Changes to Part 4 of Licence**

Issue	Recommendation	Reason
Hunter Water to maintain an AMS consistent with AS ISO 55001.	Introduce a licence requirement for Hunter Water to maintain an AMS that is consistent with AS ISO 55001 by 31 December 2017 (refer new licence clause 4.1).	This option is supported by the pricing review's independent expenditure assessment consultant, by the CBA, and by both Hunter Water and Sydney Water as good practice.
Remove the requirement to provide a periodic State of the Assets Report.	Remove the requirement for State of the Assets reporting in the Reporting Manual.  Include a one-off reporting requirement to provide a copy of the Strategic Asset Management Plan to IPART once its asset management is implemented in accordance with AS ISO 55001. (Note: this recommended change is shown in section 4.2.1 of the Reporting Manual.)	The information that is required to be included in the State of the Assets Report is sufficiently covered in the AS ISO 55001 standard requirements.  Detailed requests for information during pricing determinations and licence audits effectively make the report redundant.
Maintain EMS and QMS to the most current standards.	Amend the EMS and QMS licence conditions to require Hunter Water to maintain systems consistent with the most up-to-date standards (refer new licence clauses 4.2 and 4.3).	Potential benefits outweigh costs to the organisation as a whole. This preferred option is supported by Hunter Water, Sydney Water and the EPA as good practice. This enables Hunter Water to determine the most effective way to ensure consistency with the standard.

### 7.2 Require AS ISO 55001 asset management system

The current licence requires Hunter Water to maintain an AMS that is consistent with the PAS 55 Asset Management Standard, or the Water Services Association of Australia's



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Aquamark benchmarking tool, or another asset management standard agreed to by IPART. The International Standard ISO 55000 series of Asset Management standards was launched in January 2014 after the current licence had commenced. ISO 55001 represents the application of good practice principles in asset management, which is appropriate for Hunter Water given the critical nature of the assets it manages. In November 2014, the Australian Standard AS ISO 55001 was released and is identical to ISO 55001.

### 7.2.1 Issue raised

Hunter Water had previously advised us of its intention to transition to an asset management system consistent with ISO 55001.<sup>70</sup> We have accepted this proposal. Hunter Water is significantly advanced towards its stated aim of implementing an asset management system consistent with ISO 55001 by 1 July 2017. This would complete the transition to a fully systems-based licence and will be consistent with Hunter Water's stated intentions.

The asset management system would be one of four certified management systems within the organisation's overall integrated management system. The environmental, safety and quality management systems have already been certified as consistent with international standards by an appropriately qualified third party.

Hunter Water considered that the scope of the annual operational audits would reduce significantly for those parts of the licence that require certified management systems.<sup>71</sup> For example, we could observe certification and surveillance audits. Alternatively, our independent auditors could review the reports of these audits rather than conduct a separate review with similar scope.

Hunter Water has reviewed the benefits and impacts of consistency versus the certification of the asset management system relative to the international standard. Hunter Water intends to obtain certification due to the broad business benefits attainable through embedding systems into Hunter Water's work practices and the additional reassurance certification provides to external stakeholders.<sup>72</sup>

Hunter Water maintains that it is appropriate to pursue certification. Several components of its integrated quality management are already certified and periodic surveillance audits (to maintain certification) are conducted in an integrated manner. Hunter Water estimates that the incremental cost of maintaining certification of an additional management system would be relatively modest.

Sydney Water supported the position that ISO 55001 is the appropriate standard for asset management for a major public water utility.<sup>73</sup>

We note the utilities' preference for the International version of the standard. Our position is that the Australian version of relevant standards is preferred, unless there is a substantial reason to use an alternative.

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<sup>70</sup> IPART, *Compliance Report – Hunter Water Corporation Operational Audit 2014-15, Report to the Minister*, March 2016, Appendix C, p 18.

<sup>71</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p28.

<sup>72</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 27.

<sup>73</sup> Sydney Water submission to IPART Issues Paper, July 2016, p 3.



## 7.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Continue the current requirement to maintain an asset management system.
Option B	Change the requirement for an AMS to be consistent with ISO 55001 (but without a requirement for certification) by 31 December 2017.
Option C	Change the requirement for an AMS to be consistent with ISO 55001 in the licence by 31 December 2017 and certified by 31 December 2018.

The CBA analysed Hunter Water's transition to ISO 55001. The costs and benefits are considered to be identical whether the AMS implemented is consistent with the International (ISO) standard or the Australian (AS) version. The analysis below can be read to apply to both versions, as they are currently identical.

The CBA indicated that:

- ▼ There are no incremental costs associated with the transition to ISO 55001 as Hunter Water is committed to the change and significantly advanced in transitioning its existing systems. To date, the estimated capital cost required to refine the Asset Management System such that it is consistent with ISO 55001 and integrated with Hunter Water's Business Management Systems<sup>74</sup> is \$1 million. This does not include certification costs.
- ▼ Option C would require an initial certification audit of the AMS in 2017-18 which is forecast to cost \$15,000. Annual surveillance and re-certification audit activities are forecast to be \$5,000 in 2018-19, 2019-20 and 2021-22, and 15,000 in 2020-21 (re-certification audits occur every three years).
- ▼ There is a net unquantifiable benefit to the community arising from the assurance that Hunter Water's assets are managed to 'good practice' guidelines.
- ▼ There is a net benefit arising from the avoided costs to Hunter Water regarding auditing of the AMS clauses in the licence.<sup>75</sup>

We commissioned an independent report<sup>76</sup> into auditing the asset management clauses in the licences of public water utilities. The report's recommendations included that we:

- ▼ Monitor the results of the ISO 55001 audit process and implements a lighter handed approach if it is satisfied that it provides sufficient rigour and assurance.
- ▼ Consider forming a panel of asset management auditors that are certified by a Conformity Assessment Body for auditing to ISO 55001.

The report notes that, in the first few years following certification (ie a 'transition' period), we should continue undertaking audits of high risk components. Assurance of low risk components would be addressed through reporting (ie certification/ surveillance/ desktop audits).

<sup>74</sup> E.g. IMS, QMS etc as described in chapter 7 of Hunter Water's Compliance and Performance Report 2015-16.

<sup>75</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, pp 43-44.

<sup>76</sup> Cardno, *Asset Management Systems Audit Approach – Report on Workshop*, May 2014, Executive Summary p iv.

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If we conclude after the transition period that the ISO 55001 audit process has sufficient rigour then we could accept the certification as sufficient evidence of effective asset management implementation. However, auditing of higher risk components would continue to be undertaken every year or as deemed necessary.

It was recommended in the report that we have input into audit scopes. It also recommended that certified auditors have appropriate (ie water sector) experience, and that we set up a panel of approved auditors.

During the recent price review, our expenditure consultants reviewed the need for certification, noting that alignment with the international standard may be sufficient to obtain most of the benefits. However, the consultant also concluded that certification was justified and in keeping with its recommended output targets for the coming pricing period.<sup>77</sup>

### 7.2.3 Preferred option

The CBA assessment indicated that for Option B, there is a benefit to the community from the assurance that Hunter Water's AMS is consistent with the quality standards of ISO 55001, or an equivalent standard.

For Option C our analysis forecasts a net cost relating to certification of the AMS to ISO 55001, or an equivalent standard, but that after the licence period there would be an ongoing net benefit of around \$5,000 per year. The CBA assessment indicated therefore, on the basis of CBA alone, that Option B is preferred.<sup>78</sup>

We note that the pricing review's independent expenditure assessment consultant, as well as Hunter Water and Sydney Water, supported certification as good business practice. Although the CBA analysis identifies a small net cost relative to Option B and the Base Case, we consider that Hunter Water's identification of qualitative business benefits, the unquantified saving in our audit costs and integration with its existing certified systems justifies its' decision to work towards certification. However, we do not intend to include a requirement to achieve and maintain certification in the licence. We consider the issue of whether or not certification is the most effective way to demonstrate consistency with the standard to be a business decision, not one that should be prescribed.

We recommend that Hunter Water meets the requirements of the Australian Standard AS ISO 55001. This is consistent with our position on other standards referred to in the licence, and we consider Australian standards should apply to public water utilities where available. In this case, the international standard and the Australian version are identical. See Box 7.1 for the recommended licence clauses.

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<sup>77</sup> Jacobs Group (Australia) Pty Ltd, *Hunter Water Expenditure Review – Final Report*, Jan 2016, p 207.

<sup>78</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 44.

## Box 7.1 Recommended AMS clauses

4.1.1 By 31 December 2017, Hunter Water must develop a Management System for carrying out the functions authorised under this Licence that is consistent with the *Australian Standard AS ISO 55001:2014 Asset management - Management systems - Requirements* or other standard approved by IPART, on request by Hunter Water (**the Asset Management System**)

4.1.2 By 1 July 2018, Hunter Water must ensure that the Asset Management System is fully implemented and must, from that date, ensure that all relevant activities are carried out in accordance with the Asset Management System.

4.1.3 Until the Asset Management System has been implemented in accordance with clause 4.1.2, Hunter Water must ensure that all relevant activities are carried out in accordance with the previous asset management system that was required under the operating licence held by Hunter Water which commenced in 2012.

*[Note: This clause permits Hunter Water to transition its previous asset management system based on the Water Services Association of Australia's Aquamark benchmarking tool to the Australian Standard AS ISO 55001:2014 Asset management - Management systems – Requirements.]*

### Recommendation

- 12 Introduce in the licence a requirement for an asset management system to be consistent with AS ISO 55001 by 31 December 2017.

## 7.3 Remove requirement to provide State of the Assets Report

Hunter Water is required to provide the State of the Assets Report biennially as specified in the Reporting Manual. The report must include a description of each group of assets, an assessment of the expected capability of the assets, major issues or constraints on current and future performance of the assets, strategies and expected costs of future investment in assets, and other matters reasonably required by us.

The State of the Assets Report is meant to provide transparent and readily accessible information to regulators. It is also meant to provide regulators with assurance that they will have access to information required to undertake their duties. We requested this report with the intention of informing our audit and pricing review processes.

### 7.3.1 Issue raised

Hunter Water's Reporting Manual requires it to provide a biennial report on the state of its assets to us. The Reporting Manual also prescribes the content of the State of the Assets Report.

Hunter Water commented that the uses of this report had not been evident, and questioned the potential unnecessary administration costs of such a reporting requirement.<sup>79</sup>

Sydney Water suggested reducing the frequency of reporting to every four years as part of the price review.<sup>80</sup>

### 7.3.2 Options assessed

Options	Descriptions
Option A (Base Case)	Continue to include the requirement for biennial State of the Assets reporting in the Reporting Manual.
Option B	Reduce the required frequency of reporting in the Reporting Manual to coincide with price reviews (4-yearly).
Option C	Remove the requirement for State of the Assets reporting in the Reporting Manual.

The cost of generating the State of the Assets report is \$26,000. This represents a benefit for Option C and a lesser benefit for Option B.

### 7.3.3 Preferred option

We consulted internally to determine if the report is used for any purpose. Information in the report may be relevant to our 4-yearly price review. During the last price review, we requested significantly more asset information for its analysis than that contained in the State of the Assets Report.

It may also be relevant to the annual operational audit. However, neither the pricing team nor the licensing team actively use the report, as the detailed requests for information during both of these processes effectively make the report redundant. There is not a strong justification to require the report every two years.

As a result, we consider that the report is no longer required and Option C is preferred.

The ISO 55001 standard requires organisations to have an asset management policy, asset management objectives, a strategic asset management plan and asset management plans. The information that is required to be included in the State of the Assets Report is sufficiently covered in the ISO 55001 standard requirements.<sup>81</sup> We consider the State of the Assets Report could be a duplication of a reporting requirement under ISO 55001 once Hunter Water's asset management system consistent with ISO 55001 and certified.

The operational audit requirements will become less prescriptive when Hunter Water's AMS is compliant with ISO 55001. Hunter Water will be required to provide the outcome of its annual surveillance audits to the licence auditor, as well as recertification audit results every three years if carried out. Therefore, we envisage the State of the Assets Report would also become less significant for the auditors.

<sup>79</sup> Hunter Water submission to IPART Issues Paper, July 2016, p 53.

<sup>80</sup> Sydney Water submission to IPART Issues Paper, July 2016, p 11.

<sup>81</sup> IPART, *Review of the Hunter Water Corporation Operating Licence - Issues Paper*, May 2016, Appendix D.

The preparation of a strategic asset management plan is a requirement under ISO 55001. We consider that a one-off submission of the strategic asset management plan to us will assist in understanding Hunter Water's overall commitment and direction in asset management. This will subsequently inform the future compliance audit regime of the asset management system.

### Recommendation

- 13 Remove the requirement for State of the Assets reporting in the Reporting Manual.
- 14 Include a one-off reporting requirement to provide a copy of the Strategic Asset Management Plan to IPART.

(Note: this recommended change is shown in section 4.2.1 of the Reporting Manual.)

## 7.4 Maintain EMS and QMS to the most current standards

The current licence requires Hunter Water to develop and implement an EMS certified to AS/NZS ISO 14001:2004: *Environmental Management Systems – Requirements with guidance for use* (AS 14001), to manage risks to the environment of its business and service delivery.<sup>82</sup> Hunter Water achieved certification of its EMS in October 2014, ahead of the required timeframe.

The licence also requires Hunter Water to achieve certification of a QMS that is consistent with AS/NZS ISO 9001:2008 *Quality Management Systems – Requirements* (AS 9001). Hunter Water achieved certification of its QMS in August 2015, ahead of the required timeframe.

### 7.4.1 Issue raised

During the current term of the licence, Hunter Water has developed and certified both environmental and quality management systems to meet the relevant Australian Standards.

Hunter Water considered that it is appropriate to maintain certification of its EMS and QMS and the current provisions are appropriate.<sup>83</sup>

Sydney Water considered that there is significant value in retaining these management system requirements.<sup>84</sup>

The NSW Environment Protection Authority (EPA) noted and encouraged the development and implementation of an EMS to manage risks to the environment from Hunter Water's operations.<sup>85</sup>

We note that new versions of AS/NZS ISO 9001 and AS/NZS ISO 14001 were released in 2015 and 2016 respectively. Certified organisations must adopt the new versions of the standards by no later than September 2018 or 2019 (ie a three year transition period from the date of publication) in order to maintain certification.

<sup>82</sup> *Hunter Water Operating Licence 2012-2017*, cl 6.1.

<sup>83</sup> Hunter Water submission to IPART Issues Paper, July 2016, p 51.

<sup>84</sup> Sydney Water submission to IPART Issues Paper, July 2016, p 14.

<sup>85</sup> Environment Protection Authority submission to IPART Issues Paper, 11 July 2016.

This issue also extends to which set of standards should be used. Both Sydney Water and Hunter Water have indicated a preference for the licence to refer to the International Standards (ISO) for AMS, EMS and QMS, rather than the Australian Standards. In the case of complaint management<sup>86</sup> however, the AS/NZS standard is preferred by the utilities because EWON uses this definition in its training courses, and both utilities are members of EWON.<sup>87</sup>

#### 7.4.2 Options assessed

Options	Descriptions
Option A (Base Case)	No change to the licence
Option B	Remove the requirement for certification of an EMS and/or QMS from the licence
Option C	Remove the requirement for an EMS and/or QMS from the licence
Option D	Remove the requirement for certification of the EMS and QMS but retain a requirement for the EMS and QMS to be consistent with the Australian Standards or other standards approved by IPART. Change the EMS from AS/NZS ISO 14001:2004 to AS/NZS ISO 14001:2015 and the QMS from AS/NZS ISO9001:2008 to AS/NZS ISO 9001:2016.

Option B removes the requirement to maintain certification of the EMS and QMS but does not remove the requirement for management systems that are consistent with ISO 14001 and ISO 9001. In doing so, there would be savings for Hunter Water associated with no longer maintaining certification of approximately \$54,646. We would not incur additional costs associated with assessing the adequacy and implementation of these systems in the absence of certification, as this scenario matches the base case in the current licence (ie we audit Hunter Water's compliance in full).

The EMS and QMS are currently certified and certification lapses in September 2018. There would be savings of re-certification and audit costs if the requirement for certification of the EMS and QMS is removed. Given the nature of its operations, having no requirement in the licence to maintain an EMS or QMS would mean we would not have an instrument with which to monitor and audit Hunter Water's performance in these areas. The net benefits to Hunter Water would be \$10,000 annually and \$30,000 for re-certification (every three years). However the unquantifiable costs to the community would be very large if an environmental or public health crisis developed because Hunter Water's operations were compromised.

Option D would require significant costs to upgrade systems to match new standards. Our mid-range forecast is \$635,080 for a combined EMS and QMS upgrade.

We note that changes associated with Options B and C would create inconsistency with Sydney Water's 2015-2020 Licence (which recently introduced requirements for certification of the EMS and QMS).

We further consider there is a small benefit in keeping the requirement for certification in the licence, to provide formal assurance that the EMS and QMS are maintained to the accepted standard.

<sup>86</sup> AS/NZS 10002:2014 – Guidelines for complaint management in organisations.

<sup>87</sup> Sydney Water submission to Draft operating licence package, 3 march 2017, p 15.



Regarding Option D, we sought information from Hunter Water regarding transition costs for adoption of the new versions of the standards ie AS/NZS ISO 9001:2016 and AS/NZS ISO 14001: 2015. Hunter Water responded that it is obligated to transition to and obtain certification against the new standards, even if the new licence does not require it. As such it considers that there is no net cost or benefit for this requirement.

We are unable to quantify the benefits. However the reasoning that was applied to the 2012 licence review<sup>88</sup> still applies. The potential to enhance Hunter Water's efficiency, improve its service levels, reduce the risk of system failure and minimise environmental impacts will likely exceed the costs of any upgrade.

### 7.4.3 Preferred option

Implementation of an EMS consistent with the Australian Standard is industry good practice and provides a framework for an organisation to identify and target the environmental risk and impact of all its business activities.

Implementation of a QMS consistent with the Australian Standard is industry good practice. An integrated management system may reduce the need to audit elements that are common across all management systems within the business. This would enable operating audits to be more targeted to higher risk elements of those systems.

We consider both an EMS and a QMS consistent with Australian Standards, where appropriate, are essential components in systems-based licensing to achieve Hunter Water's objectives in providing water, wastewater and stormwater services to the community. We note the preference to maintain compliance with the Australian Standard (instead of the International Standard) for complaint management, as members of EWON.

Our preferred option is Option D, requiring minor amendments to the licence conditions, to meet the requirements of the most recently released standards for EMS and QMS. The net cost for Hunter Water to upgrade its EMS and QMS to the newer standards is likely to be outweighed by the potential benefits to the organisation as a whole. This preferred option is supported by Hunter Water, Sydney Water and the EPA as good practice. However, we intend to not recommend a requirement to achieve and maintain certification as we consider this issue a business decision, outside the scope of the licence.

We recommend that where an equivalent Australian standard is available (eg for EMS), the Australian standard is to be nominated as the appropriate standard. Where there is no appropriate or equivalent Australian Standard, (eg AMS), the International Standard is to be nominated as the appropriate standard. We note that generally the standards are identical, and have allowed scope for Hunter Water to nominate its preferred standard by conditioning the licence clause. In some situations, even where the Australian Standard is available, Hunter Water might seek approval for an alternate standard, such as the International Standard or other industry recognised standard approach. In the case where they are the same, then this approval would be relatively simple. In the case where they are different, we would need to consider the material differences in whether to grant approval or not.

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<sup>88</sup> IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, pp 9-14.

We consider the systems based approach to licensing is still at an early stage of implementation. We are considering undertaking audits of high risk components in the next licence term, and would consider relying on certifications for compliance monitoring in the future depending on audit findings and recommendations.

We recommend minor amendments to the EMS and QMS licence conditions to remove the 'development' of an EMS and QMS given they are now developed, update the standards to the most recent version, and require Hunter Water to maintain certifications to the required standards during the licence term. The recommended licence clauses are shown in Box 7.2.

#### **Box 7.2 Recommended EMS and QMS licence clauses**

- 4.2.1 Hunter Water must at all times maintain a Management System for carrying out the functions authorised under this Licence that is consistent with the *Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use*, or other standard approved by IPART on request by Hunter Water (**the Environmental Management System**)
- 4.2.2 Hunter Water must fully implement, and carry out all relevant activities in accordance with, the Environmental Management System.
- 4.3.1 Hunter Water must at all times maintain a Management System for carrying out the functions authorised under this Licence that is consistent with the *Australian/New Zealand Standard AS/NZS ISO 9001:2016 Quality management systems – Requirements*, or other standard as approved by IPART on request by Hunter Water (**the Quality Management System**).
- 4.3.2 Hunter Water must fully implement, and carry out all relevant activities in accordance with, the Quality Management System.

#### **Recommendation**

- 15 Amend the environmental management system and the quality management system licence conditions to require Hunter Water to maintain systems to the most up-to-date standards.



## 8 Customer and stakeholder relations

The current licence requires Hunter Water to publish a Customer Contract, and this contract is included in the existing licence as Schedule C. As part of our review, we assessed a revised Customer Contract submitted by Hunter Water which included amendments to improve the clarity of the contract and a revised rebate scheme. We also considered options to update the licence requirements related to customer and stakeholder relations.

### 8.1 Summary of recommended changes

**Table 8.1** Changes to Part 6 of Licence

Issue	Recommendation	Reason
Amend the Customer Contract	Amend the Customer Contract to make the contract easier to understand. (Note: this amended Customer Contract is shown in Schedule B of the licence)	Easier to read and logical in structure. Improved clarity in relation to the differences between classes of customer and classes of water supplied, and in delineating maintenance responsibilities. Removal of duplicate and obsolete clauses
Modify existing rebates in the Customer Contract	Revise rebate clauses in the Customer Contract to: <ul style="list-style-type: none"><li>▼ increase the amount of rebate for the third events for unplanned water interruptions and wastewater overflows.</li><li>▼ Limit the hours of rebates to planned interruptions between 5am-11pm.</li><li>▼ Use system monitoring to identify customers eligible for low water pressure rebate.</li></ul> (Customer Contract section 16.2)	Increase rebate amounts and change rebate structure to reflect the increase level of inconvenience to consumers due to service interruptions
Change membership of the customer advisory group.	Rename the existing Consultative Forum to a customer advisory group and ensure the makeup reflects the requirements of the Act in relation to customers (new licence clause 5.4).	The amended clause more accurately reflects the requirement under the Act. Delineation between groups that 'must' be included, and those that 'may' be included in customer advisory groups.

Issue	Recommendation	Reason
Code of Conduct.	Add a requirement to use best endeavours to co-operate with WIC Act licensees who wish to negotiate a Code of Conduct. (new licence clause 5.8).	Improve consistency between the licences of Hunter Water and Sydney Water. Reduce risks and enhance cooperation between Hunter Water and WIC Act licensees. Also consistent with the new obligation to service wholesale customers (WIC Act Licensees).
Amend the MoU with DPI Water.	Amend Roles and Responsibilities Protocol condition to now be an MoU with DPI Water to reflect current practice and to address the steps required to calculate and report on system yield (new licence clause 5.10).	Accurately reflects current practice, and provides a benefit in providing a means of auditing compliance with this clause.
Add a requirement to establish an MoU with Fire and Rescue NSW.	Add a requirement to establish an MoU with FRNSW to form the basis for a co-operative relationship. (new licence clause 5.11).	Improve collaboration to identify issues and work together to bring about practical, efficient improvements for fire safety
Non-standard customer contracts	Make no change in relation to use of non-standard customer contracts	Non-standard customer contracts for specific services are appropriate and effective, and less confusing than being included in the general Customer Contract.
Amend MoU with NSW Health	Make no change to MoU with NSW Health	Current system works well and no benefits were identified in recommending a change.
Collaboration with relevant agencies to address matters relevant to state and national security.	Do not include a licence clause requiring cooperation between Hunter Water and relevant Commonwealth and state agencies on matters of national security at this stage.	Critical Infrastructure Centre (CIC) has concerns regarding the security of water assets in general, and the impact of espionage and sabotage in particular on public health and businesses that rely on water. At this early stage of discussion of this matter, a new licence condition may put unnecessary constraints to the development of a collaborative relationship between the agencies.
Billing of end-users	A separate review into the provider-user relationship has merit.	Submissions and the example in Victoria indicate that this issue requires review. There may be potential efficiency benefits, but there may also be costs which impact the various affected parties unevenly.

In general, we consider these changes will address the interests of customers and stakeholders within Hunter Water's Area of Operations.

We propose to not include non-standard Customer Contracts in the licence as this may confuse the general public in relation to the services they receive. We also propose to not

change the requirement to have an MoU with NSW Health, as the existing MoU facilitates effective ongoing interaction between the two organisations.

## 8.2 Amend the Customer Contract

Hunter Water has developed and submitted a proposed new Customer Contract to us. The proposed Customer Contract focuses on ease of understanding and better consistency with Sydney Water's customer contract.

### 8.2.1 Issue raised

Both PIAC<sup>89</sup> and the EWON<sup>90</sup> generally support Hunter Water's proposed revisions to the Customer Contract, noting that moving to a simpler structure to improve readability and clarity are positive steps.

### 8.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Maintain existing Customer Contract
Option B	Adopt revised Customer Contract, as submitted by Hunter Water, with minor material modifications

We did not conduct a CBA on these options. However, we consider that material changes between the current and the revised Customer Contract would all result in qualitative benefits. For example:

- ▼ The inclusion of an 'insolvency event' clause would provide Hunter Water (and its customers) with a means of mitigating losses and potentially recover outstanding debts from businesses that are, or are about to be, insolvent.
- ▼ The revisions to the rebate clauses would strengthen the rebate scheme, providing additional benefits to affected customers and consumers, and reinforcing the notion that these rebates are payable for events that cause 'inconvenience' to customers.
- ▼ The inclusion of a mechanism to suspend affected obligations for unusual events beyond Hunter Water's reasonable control would provide benefits to Hunter Water in terms of its operating performance, without affecting customers' rights in relation to the provision of services.

### 8.2.3 Preferred option

Our initial assessment identified that the existing Hunter Water Customer Contract had some editorial and structural differences with Sydney Water's customer contract. Hunter Water's submission has provided a revised version, which has aimed to provide:<sup>91</sup>

- ▼ A simpler structure and more logical sequencing of clauses

<sup>89</sup> PIAC submission to IPART Issues Paper, 29 July 2016.

<sup>90</sup> EWON submission to IPART Issues Paper, 29 July 2016.

<sup>91</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 39.

- ▼ Improved clarity in relation to provisions that:
  - do not extend to non-standard customers who are subject to separate agreements; or
  - apply specifically to ‘drinking water’, reticulated ‘recycled water’ or both.
- ▼ Updated communication channels and methods for customers to obtain information, including via Hunter Water’s website and a General Enquiry Process.
- ▼ Updated maintenance responsibility descriptions and diagrams that provide greater clarity to customers, particularly for pressure sewer systems. The updates also address challenges with the current Customer Contract raised in customer enquiries or complaints.
- ▼ A mechanism to suspend affected obligations for unusual events beyond Hunter Water’s reasonable control.
- ▼ Reference to an ‘insolvency event’ as an enabler to mitigate losses and potentially recover debt from non-residential customers.
- ▼ Strengthened rebate clauses (wastewater overflows and low drinking water pressure).
- ▼ Updated references to policies and standards under Hunter Water’s new document hierarchy.
- ▼ Removal of duplicate or obsolete references and generally ensuring that the document references current practices whilst maintaining sufficient flexibility appropriate for its term of at least five years.
- ▼ Amendments to existing, and addition of new, definitions and interpretations.

The proposed Customer Contract provisions are generally consistent with Hunter Water’s existing Customer Contract but have a number of differences, as noted above. The changes are largely in structure and editing, but with additional protections for Hunter Water and its customers.

We support Hunter Water’s proposal to amend the Customer Contract. It is significantly easier to read and logical in structure. We have made some further minor amendments and we will continue to discuss and negotiate parts of the Customer Contract during the public consultation phase.

## Recommendation

16 Amend the Customer Contract to make it easier to understand.

*(Note: the amended Customer Contract is shown in Schedule B of the licence.)*

## 8.3 Modify rebates clauses

Hunter Water has developed a revised rebate scheme, which is detailed in the draft Customer Contract. This rebate scheme is more generous than the existing previous Customer Contract and is broadly consistent with other major water utilities, such as Sydney Water.

Our view is that rebates should be provided for events that cause inconvenience to customers, be set at a level proportionate with the extent of inconvenience and the recipient should be the inconvenienced occupant (rather than the account holder who may not be the occupant, for example in leased premises).<sup>92</sup>

### 8.3.1 Issue raised

In each of its submissions to the licence review, EWON raised the following queries:

1. why are the proposed rebates restricted to interruptions in peak hours (ie, between 5am and 11pm) only.<sup>93</sup>
2. why were rebates for planned interruptions only available to affected customers who experienced three or more events in one year, whereas Sydney Water pays on each of the first two events and reimburses the full annual service charge for the third event.
3. why does Hunter Water not match Sydney Water in rebating the annual water or wastewater service charge to customers affected by three or more interruptions or overflows.<sup>94</sup>

We addressed these and other issues in our analysis. Hunter Water provided evidence to our request for information for the CBA.

### 8.3.2 Options assessed

The CBA analysis focused on: <sup>95</sup>

- ▼ Limiting rebates for planned interruptions to the peak hours of 5am-11pm.
- ▼ Increasing rebates for three or more unplanned water interruptions.
- ▼ Increasing rebates for three or more wastewater overflows.
- ▼ Changing the rebates structure for low water pressure as proposed in Hunter Water's submission.

Note that the rebates provided by Hunter Water are issued as multiples of 15 kL on the affected **consumer's** water usage charge.<sup>96</sup> In this way, the inconvenienced **consumer** (ie, property owner or tenant) receives the benefit of the rebate, rather than just the property owner who may not be inconvenienced.

We note that rebates represent a transfer payment; that is, for each rebate paid (representing a cost to Hunter Water), there is an equal value benefit to customers represented by a rebate received. The net impact of these transactions on the NSW community, considered in isolation, is zero. Incremental costs or benefits would only arise from changes in behaviour that resulted from changes to the rebate regime.

<sup>92</sup> IPART's position was established in 2011, regarding rebates for inconvenience rather than as a punitive measure. Refer to report – IPART, *Review of the Customer Contract for Hunter Water Corporation – Final Report*, February 2011, p 7.

<sup>93</sup> EWON submission to IPART Issues Paper, 29 July 2016.

<sup>94</sup> EWON's submission to the draft operating licence package, 3 March 2017.

<sup>95</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 55.

<sup>96</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, Appendix B-Customer Contract.

The information technology costs vary depending on how many changes are introduced to the rebate system. Each rebate change is estimated to cost \$20,000 (except low pressure rebates), but any structural change to the software requires a fixed cost of \$100,000 (2016 dollars).<sup>97</sup>

Sydney Water's rebates are based on a flat fee reimbursement on the bill, or a water/wastewater service fee reimbursement for repetitive unplanned service interruptions or overflows.

#### Issue 1: Limit planned service interruption rebates to 5am-11pm

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Limiting rebates on planned interruptions to interruptions between 5am-11pm.

It is unlikely there would be incremental costs relating to rebates as rebate eligibility is identified automatically and rebates are paid automatically to all eligible customers. That is, there is no change in behaviour as a result of the change in the rebate scheme. No rebates have been paid under the current criteria (ie, events at any time of day) over the last four years and this option includes more stringent criteria (limiting rebate to events occurring during peak hours).

A qualitative benefit arising from Option B is better alignment of rebates with times that customers are inconvenienced. This is consistent with our stated position regarding the purpose of rebates as compensation for inconvenience.<sup>98</sup>

The CBA assessment indicated therefore, on the basis of CBA alone, that Option B is preferred.

#### Issue 2: Increase amount of rebates for unplanned water interruptions

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Increase rebate to an amount equal to annual water service charge for unplanned water interruptions for 3 or more events between 5am-11pm.
Option C	Increase rebate to an amount equal to the annual water service charge for unplanned water interruptions for 3 or more events at any time during a financial year.

It has been assumed that the 'amount equal to the annual water service charge' component of this option relates to the water service charge applying to single residential properties. If the alternative applied, ie the water service charge component was based on the meter size and property type (residential vs non-residential, multi premise, multiple meters etc.) of the affected customer then the software changes would be significantly more complex and the associated cost would be substantially higher.

<sup>97</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 52.

<sup>98</sup> "Because the cost of providing rebates is borne by Hunter Water's customer base we consider there are strong arguments for providing rebates only where customers are inconvenienced", IPART, *Review of the Customer Contract for Hunter Water Corporation, Water - Final Report*, Feb 2011, p 7.

The water service charge is not typically passed on to tenants, which means the inconvenienced occupant is not necessarily the recipient of the rebate (if the rebate is to the water service charge). Furthermore, customers experiencing financial hardship are often tenants.<sup>99</sup>

Benefits arising from a rebate for an amount equal to the annual water service charge are (for both Option B and C):

- ▼ rebate amount closer to the cost of the service for the inconvenienced customer, rather than an arbitrary amount, and
- ▼ may be a greater influence on the behaviour of the utility.

Option C would require rebates to be paid for interruptions including those occurring outside peak hours (ie, 5am to 11pm). This would remove the alignment of the rebate with times that customers are inconvenienced, and would be inconsistent with our position regarding the purpose of rebates.

Both Option B and Option C give rise to the same net social benefit and the same incremental costs. We note however that the costs for Hunter Water (when considered in isolation) are substantially greater under Option C when compared to the Base Case or Option B. For this reason, Option B may be preferred over Option C as this Option represents an incremental, rather than a relatively large, change towards a rebate structure for unplanned interruptions similar to Sydney Water.

The CBA assessment indicated therefore, on the basis of CBA alone, that Option B is the preferred option.

### Issue 3: Increase frequency of rebates for wastewater overflow

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Require Hunter Water to pay for the first, second and third wastewater overflow.
Option C	Require Hunter Water to pay a rebate amount equal to the annual wastewater service charge for wastewater overflows for three or more events.
Option D	Require payment of a rebate amount equal to the annual wastewater service charge for wastewater overflows for two or more events.

Wastewater overflows on private property appear to be the most inconveniencing and emotive service-related event, based on responses to the 2010 customer survey and Customer Service contracts (including complaints). Under Options B, C and D customers will, on average, receive larger rebates than currently available, which may better reflect the inconvenience experienced.<sup>100</sup>

<sup>99</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 53.

<sup>100</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 60.



Option B may result in a benefit from a rebate amount and structure that better aligns with customer inconvenience as the total rebate amount received increases with each event.

For Options C and D, benefits arising from a rebate for an amount equal to the annual water service charge are:

- ▼ compensation for an increased level of inconvenience due to repeated interruptions, and
- ▼ may be a greater influence on the behaviour of the utility.

Although there is cost to Hunter Water of providing greater rebates, across the whole of NSW, this can be considered in the nature of a transfer.<sup>101</sup>

Both Option C and D give rise to the same net social benefit and the same incremental costs. We note however that the costs for Hunter Water (when considered in isolation) are substantially greater under Option D when compared to the Base Case or Option C. For this reason, Option C may be preferred over Option D as this Option represents an incremental, rather than a relatively large, change towards a rebate structure for unplanned interruptions similar to Sydney Water.

The CBA assessment indicated therefore, on the basis of CBA alone, that Option B is the preferred option.

#### Issue 4: Change eligibility of rebates for low water pressure

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Hunter Water to pay a rebate for one low pressure event per year based on system monitoring.
Option C	Hunter Water to pay a rebate for one low pressure event per quarter based on system monitoring.

**Option B and C:** There have been few escalated complaints during the 2012-2017 licence period objecting to the eligibility criteria for the low water pressure rebate, however Hunter Water considers this option to more appropriately recognise the inconvenience of a reduced service level.

**Option C only:** Low water pressure is most likely to be experienced during periods of high demand. Option B considers the highest demand day for each year whereas this option considers the highest demand day for each billing period, which will vary substantially between seasons. This is likely to result in fluctuations in rebate eligibility across bills, with most temporary pressure problems being experienced only over summer (i.e. rebate issued in summer, possible rebate during shoulder season and no rebate during winter) and stable rebate eligibility for those customers with permanent low pressure.

Table 8.2 provides an outline of the current and the recommended rebates.

<sup>101</sup> We note that the cost of higher rebates is borne across NSW and not only across Hunter Water's customer base, as rebates expense is deducted in calculating dividends for Hunter Water.



**Table 8.2 Rebates**

Rebate	Current criteria	Recommended criteria	Recommended rebate (\$2.25 per kL in 2016-17)
Planned water interruption	Three or more interruptions, each exceeding five hours.	Three or more interruptions between 5am and 11pm, each exceeding five hours.	15kL (\$33.75) after third event
Unplanned water interruption	1st and 2nd events, exceeding five hours between 5am-11pm.	No change.	15kL (\$33.75) for first event 15kL (\$33.75) for second event
	3 or more between 5am-11pm each exceeding 1 hour duration	Remove current criteria and replace with 3rd event exceeding five hours between 5am-11pm	30 kL (\$67.50) for third event
	1 or more events between 11pm-5am (outside of peak hours)	No change (on confirmed report)	15kL (\$33.75)
Wastewater overflow	One dry weather wastewater overflow to your property - Payable after the first event	No change.	30 kL (\$67.50)
	Two dry weather wastewater overflow to your property- no rebate	Two dry weather wastewater overflow to your property - Payable after the second event	60 kL (\$135.00)
	Three or more dry weather wastewater overflow to your property – 120 kL payable after the third event	Three or more dry weather wastewater overflow to your property - Payable after the third event	270 kL (\$607.50)
Low Pressure	Confirmed report <15 m head, for at least 30 mins Rebates paid on 6th event in 12 months.	Confirmed report <20 m head, for at least 30 mins Or Modelled events: 15-20 m head	15 kL (\$33.75) Payable for one event per 12 months.

### The purpose of service level rebates

There are two main reasons for providing service level rebates to customers:

1. to provide compensation to the customer for inconvenience;
2. to penalise the service provider for poor performance.

We consider the first reason to be the main driver for rebates for water interruptions.

It is difficult to define a difference in the value of inconvenience between Hunter Water and Sydney Water customers. It is easier to demonstrate a difference in the effect of a penalty on Hunter Water compared to Sydney water.

### Compensation for inconvenience

Hunter Water has stated that its rebates predominantly serve as a method of compensating customers who experience a reduced level of service.<sup>102</sup> This is because the expenditure required to address the cause of rebates is generally disproportionately large relative to expenditure on rebates, and this means that, in isolation, there are weak incentives to prevent rebatable events. Hunter Water further stated however that alignment between service level rebate event categories, system performance standards and externally-reported performance indicators provides an incentive for Hunter Water to improve performance. This is because:

- ▼ system performance standards (water pressure, water continuity and wastewater overflow standards) are a fixed limit on the number of affected properties or customers, with the potential for significant consequences for breach of the limits,<sup>103</sup> and
- ▼ comparative performance monitoring and reporting through National Water Initiative (NWI) indicators and IPART performance indicators provide incentive to improve performance.<sup>104</sup>

There is also a link between performance and the majority of rebates allowed by Hunter Water. A substantial majority of rebates paid by Hunter Water are for first and second events, which reflect the number of interruptions experienced (in contrast to a three or more event rebate which does not increase as more events occur). Looking at averaged figures over three years, 7,973 rebates were paid by Hunter Water. Of these rebates, 1,353 (or 17%) were provided for three or more service interruptions and 17 (0.2%) for three or more wastewater overflows. No rebates were paid for multiple low pressure events.<sup>105</sup>

### Comparison of rebates with other utilities

We have addressed EWON's concerns about the equivalence of rebates between Sydney Water and Hunter Water.

When comparing Hunter Water's and Sydney Waters' rebates by event category, Sydney Water's rebates are generally higher where they are provided for multiple events (eg, wastewater overflows).

### Penalty for non-performance

Where the larger differences in rebates occur (eg, for three or more planned service interruptions and two or more wastewater overflows) Sydney Water waives the entire years'

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<sup>102</sup> Hunter Water submission to IPART Issues Paper, July 2016, p 40.

<sup>103</sup> Sections 17 and 17A of the *Hunter Water Act 1991* provide for penalties such as a letter of reprimand, monetary penalty up to \$150,000 or cancellation of the operating licence.

<sup>104</sup> Hunter Water reply to request for information, 13 March 2017.

<sup>105</sup> Hunter Water reply to request for information, 14 September 2016, worksheets 34(new).b, 35(new).b and 36(new).b.

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service charge. These amounts are in the nature of a penalty to Sydney Water, rather than compensation. There is no factual evidence to support an argument that they are proportional to the extent of inconvenience. The quantum of the rebate provided was arbitrarily and voluntarily increased by Sydney Water in 2011 based on an argument that:

- ▼ it was weighted relative to the extent of inconvenience caused to customers (particularly for repeat events);
- ▼ that the rebates hadn't been changed in a long time, and
- ▼ were too low in value.

There was no factual investigation into setting a price based on the level of inconvenience suffered.

We note that it is possible for Sydney Water's penalties to be higher than Hunter Water's penalties without devaluing the experiences of the latter's customers.

The overall costs of offering a rebate representative of the full service charge for three or more events will not be substantial for Hunter Water. We note that, while a customer survey on rebates and systems performance standards is required in the recommended licence, to better inform future changes, it is not unreasonable to require Hunter Water to increase its rebate payments in the short term.

### **8.3.3 Preferred option**

On balance, we consider that the benefit from better aligning rebates with the times when customers are inconvenienced, despite the historical lack of need for rebates to be paid, outweighs the costs relating to information technology upgrades and potential increased labour costs under Option B.

The issue regarding restriction of rebates to peak hours has been expressed previously by EWON.<sup>106</sup> We consider that the issue has been adequately addressed in the revised Customer Contract proposed by Hunter Water and no further changes are required.

Regarding the quantum of rebates being paid by individual utilities, we note the arbitrary nature of these payments. There are significant differences in the quantum of rebates paid, and the circumstances and conditions between utilities in NSW and around the country.

Rebates are generally aligned with system performance standards and externally reported performance indicators. Our investigation and analysis has found no factual justification for the quantum of the rebates provided by any water utility. Analysis of similar water utilities in other jurisdictions indicates that very few provide rebates for each event. We conclude that the current rebate payment quantum and frequency are arbitrary.

We consider that larger rebates for multiple events would better reflect inconvenience to affected consumers. Further, given the low numbers of customers affected, Hunter Water should be required to increase its rebates, pending the outcome of the proposed customer survey into rebates and system performance standards. We do not consider price parity with rebates provided by Sydney Water to be a necessary precondition at this point in time.

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<sup>106</sup> IPART, *Review of the Customer Contract for Hunter Water Corporation – Final Report*, February 2011, p 7.

However, as a point of comparison, we recommend an increase in Hunter Water's rebates for multiple events to achieve a similar quantum payment.

We recommend the following changes to rebates:

- ▼ for planned water interruptions, limit rebates to interruptions between peak hours of 5am to 11 pm.
- ▼ for low water pressure events, provide rebate for one low pressure event per year based on system monitoring or individual confirmed reports.
- ▼ for customers who have three or more unplanned water interruptions, increase the rebate from 15kL to 30kL , and
- ▼ for customers who have more than one dry weather wastewater overflow:
  - for the second wastewater overflow, provide a rebate of 60 kL, and
  - for three or more wastewater overflows, increase the rebate from 120kL to 270 kL.

It should be noted that all rebates currently paid by Hunter Water are paid as water usage charges, not water/wastewater service charges.

We further recommend that Hunter Water should conduct a customer survey into current performance standards and rebates, and collect information relevant to the value of 'inconvenience'.

#### Recommendation

- 17 Revise rebate clauses in the Customer Contract for planned and unplanned water interruptions, low water pressure and wastewater overflows.
- 18 Conduct customer survey to address customer expectations regarding rebates for service interruptions and to inform the value of 'inconvenience'.

## 8.4 Change membership of the Customer Advisory Group

The current licence contains clauses to require Hunter Water to maintain and regularly consult with its customers and consumers through a Consultative Forum (cl 5.5 of 2012-2017 licence).

### 8.4.1 Issues raised

Stakeholders did not raise any specific issues with the Consultative Forum during consultation. Through the course of the review, we noted two specific issues:

1. To provide consistency between licences and utilities, we proposed to change the name of the Consultative Forum to a more generic Customer Advisory Group (CAG).

2. The Act notes a requirement for the licence to maintain procedures “to consult with its customers at regular intervals...”.<sup>107</sup>

We note that the current licence clauses include membership of both customers and consumers.

#### **8.4.2 Options assessed**

We assessed whether to maintain the existing licence clauses or to change the licence requirements in the new licence to better reflect the requirements of the Act and to maintain consistency with other licences.

The requirements under the Act relate to ‘customers’. Specifically, section 36 of the Act stipulates that an owner of land is taken to have entered into a Customer Contract with Hunter Water, and is therefore a ‘customer’.

In our previous licence reviews, some of the provisions of the Customer Contract have been extended to cover consumers. This may explain the current membership of the Consultative Forum, being representative of the community at-large. However, we consider that the current wording requiring Hunter Water to use its best endeavours to include representation of specific groups to differ from the requirements of the Act.

We also note an excessive level of prescription regarding the membership of the CAG. We have not consulted on this particular issue during this review, but recommend the next licence review to reassess the membership of CAG.

#### **8.4.3 Preferred option**

We consider the membership of the CAG listed in the current licence condition is broader than the requirement specified in the Act. We propose to modify the licence condition such that Hunter Water ‘must include’ customers, and ‘may include’ consumers and other interest groups. This approach would allow Hunter Water to make the decision on whether consumers or other interest groups should be included in the membership of the CAG.

Where we separate customers and consumers into different groups listed in the recommended licence, we consider business customers as owners of business premises, and business consumers as persons who leased the business premises such as restaurant owners or newsagent owners. Residential customers are, for example, owners of houses, and residential consumers are tenants or other family members who lives in the houses.

The recommended licence clause is shown in Box 8.1.

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<sup>107</sup> *Hunter Water Act 1991*, s 13(2)

## **Box 8.1 Recommended clause for the Customer advisory group**

### **5.4.3 Hunter Water:**

- a) must ensure that, at all times, the membership of the customer advisory group is appointed and determined by Hunter Water in accordance with the customer advisory group charter; and
- b) must use its best endeavours to include, as members of the customer advisory group, at least one Customer representing each of the following categories:
  - i) business;
  - ii) organisations representing low income;
  - iii) Customers living in rural and urban fringe areas;
  - iv) residential;
  - v) local government;
  - vi) pensioners;
  - vii) Customers with disabilities;
  - viii) Indigenous Australians; and
  - ix) Customers from culturally and linguistically diverse backgrounds.
- c) may include, as members of the customer advisory group, at least one person representing each of the following categories:
  - i) business Consumers;
  - ii) residential Consumers; and
  - iii) environmental groups.

- 19 Change the membership of the customer advisory group to require inclusion of certain types of customers only.

## **8.5 Add a requirement to establish a Code of Conduct with WIC Act licensees**

In the current licence, there are no requirements for Hunter Water to have a Code of Conduct with WIC Act licensees. However, WIC Act licensees have a requirement to have a Code of Conduct with the interconnected public water utilities in their licences. The recent Sydney Water licence review determined that this change was appropriate to minimise risks, to ensure there was this obligation on both parties and to enhance co-operation between the public water utility and WIC Act licensees.<sup>108</sup>

### **8.5.1 Issue raised**

DPI Water raised the issue in its submission, noting that a clause similar was added to the recent Sydney Water licence, and therefore should be added to Hunter Water's licence, as it faces the same issues in dealing with WIC Act licensees.<sup>109</sup>

<sup>108</sup> IPART, *Cost Benefit Analysis of proposed changes to Sydney Water Corporation's Operating Licence, Water Licensing – Draft Report*, Feb 2015, p 47.

<sup>109</sup> DPI Water submission to IPART Issues Paper, 29 July 2016, p 5.

### 8.5.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Add a condition in the licence requiring Hunter Water to have a Code of Conduct with WIC Act licensee.

WIC Act licensed network operators are already required to establish a Code of Conduct with the incumbent public water utility as a condition of their licence.<sup>110</sup>

Co-operation between Hunter Water and WIC Act licensees can result in the following benefits:

- ▼ Assist in establishing a more level playing field in terms of regulatory requirements (and hence negotiations) between Hunter Water and WIC Act licensees.
- ▼ Reduce the establishment costs of WIC Act schemes.
- ▼ Clarify responsibility for interconnected infrastructure, which can reduce the risk of system or service failure for both organisations.

The first two points above can assist in enhancing the potential for competition in the water industry – which can lead to a range of benefits, including greater innovation, lower costs, and enhanced service levels.

Having a code of conduct would reduce risks and enhance co-operation between Hunter Water, licensed network operators and retail suppliers in Hunter Water’s area of operation.

We consider the costs of this recommended change are negligible, as it is already the current practice, and that there are unquantifiable benefits of this change relating to facilitating improved and more equitable negotiating relationships between the public water utility and the WIC Act licensees.

### 8.5.3 Preferred option

We prefer Option B, adding a new clause in the licence requiring Hunter Water to use its best endeavours to negotiate a Code of Conduct with any WIC Act licensees that seek to establish an agreement with the utilities. The option is supported by DPI Water, and will improve consistency between the licences of Hunter Water and Sydney Water. The recommended clause is shown in Box 8.2. This option is also consistent with the new obligation for Hunter Water to provide services to WIC Act licensees.

<sup>110</sup> CI B10 WIC Act Licence – for an example refer to the Huntlee network operators licence, [https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/granted\\_licence\\_-\\_huntlee\\_water\\_pty\\_ltd\\_-\\_network\\_operator\\_-\\_3\\_march\\_2015.pdf](https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/granted_licence_-_huntlee_water_pty_ltd_-_network_operator_-_3_march_2015.pdf)



## **Box 8.2 Recommended clause for a code of conduct clause**

5.8.1 Hunter Water must use reasonable endeavours to co-operate with any Licensed Network Operator and Licensed Retail Supplier that seeks to establish with Hunter Water a code of conduct required under a licence under the WIC Act.

5.8.2 Where the Minister administering the WIC Act has established a code of conduct under clause 25 of the WIC Regulation, Hunter Water will be taken to have satisfied its obligation under clause 5.8.1 by applying the water industry code of conduct established by the Minister to the relevant WIC Act Licensee.

### **Recommendation**

20 Add a requirement to negotiate with any WIC Act licensee that seeks to establish a Code of Conduct.

## **8.6 Amend Roles and Responsibilities Protocol with DPI Water**

Hunter Water's current licence requires it to use its best endeavours to develop and agree, and maintain and comply with, a Roles and Responsibilities Protocol with DPI Water for the development of the Lower Hunter Water Plan.<sup>111</sup>

### **8.6.1 Issue raised**

Both Sydney Water<sup>112</sup> and Hunter Water<sup>113</sup> agreed that a continuation of the Roles and Responsibilities Protocol with DPI Water is preferable and sensible.

Sydney Water noted it would ensure consistency with its licence requirement.<sup>114</sup>

Hunter Water noted that, with the next supply augmentation review needed by no later than 2023, it makes sense that Hunter Water and DPI Water contribute their expertise in a collaborative manner to the next LHWP iteration.<sup>115</sup>

In reply to our information request, Hunter Water stated that amending the condition to say "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan" would not accurately describe of the status of the LHWP over the new licence term.<sup>116</sup> In its submission to the licence review, Hunter Water stated that the 2014 LHWP is in its implementation phase however DPI Water intends to review and update the LHWP during the new licence term.<sup>117</sup>

Hunter Water has provided potential wording for the existing licence clause (cl 3.3.1) as follows:

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<sup>111</sup> *Hunter Water Operating Licence 2012-2017*, p 5.

<sup>112</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 10.

<sup>113</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

<sup>114</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 10.

<sup>115</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

<sup>116</sup> Email to IPART, Hunter Water, 7 September 2016.

<sup>117</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

Hunter Water must use its best endeavours to:

- a) develop and agree a Roles and Responsibilities Protocol with the Metropolitan Water Directorate for the development and implementation of the Lower Hunter Water Plan; and
- b) maintain and comply with the Roles and Responsibilities Protocol that has been developed and agreed under clause 3.1.1(a).

### 8.6.2 Options assessment

Options	Descriptions
Option A (Base Case)	Retain in the licence the condition in its current form that requires Hunter Water to develop and agree, and maintain and comply with, a roles and responsibilities protocol with DPI Water.
Option B	Amend the condition to say "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan".
Option C	Remove the roles and responsibilities protocol with DPI Water from the licence.

We have considered alternative options to the current requirements. Given the current protocol has no expiry date, and that the Lower Hunter Water Plan has now been developed, we have considered changing or removing the existing condition.

The analysis assumes that the relationship between DPI Water and Hunter Water would be documented and possibly formalised regardless of whether it is a requirement of the licence. This means that under Option C there is no avoided cost of developing and agreeing the protocol.<sup>118</sup>

**Option B:** Update the licence condition to reflect the state of the LHWP. A Protocol is still required as per the base case.

**Option C:** We could not identify any costs relating to this option.

There would be no avoided cost of developing and agreeing the protocol because the relationship between DPI Water and Hunter Water would be documented (and possibly formalised) in any case (as discussed above).<sup>119</sup>

The potential need for a compliance audit of the existing condition is eliminated, which would avoid the cost of our operational audit of this clause. However our practice over the current licence period has been to seek DPI Water's views and only conduct an audit by exception, which has occurred at no cost, suggesting that this saving would not be realised.

### 8.6.3 Preferred option

We prefer Option B, as it accurately reflects current practice, and provides a net benefit in providing a means of auditing compliance with this clause. Option B also better aligns the existing licence clause 3.3.1 with the status of the LHWP and licence clause 3.3.1 of the Sydney Water licence.

<sup>118</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 63.

<sup>119</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 63.

For consistency with new and future licences, we recommend changing the requirement for a protocol between the agencies, to the requirement for an MoU. However, we note that the instruments are similar and do not consider the alternative instrument to be non-compliant with the licence.

We also note that the LHWP is a non-statutory policy document that allows Hunter Water flexibility to efficiently achieve objectives and outcomes. We also note that greater specificity around this clause could affect our ability to set Hunter Water's maximum prices based on the prudent and efficient costs of delivering its monopoly services. The recommended licence clause amendment is shown in Box 8.3.

### **Box 8.3 Recommended clause for an MoU with DPI Water**

5.10.1 Hunter Water must use its best endeavours to:

- a) maintain a memorandum of understanding (which may be referred to as a roles and responsibilities protocol) with the Department of Primary Industries Water in relation to:
  - i) the roles and responsibilities for the Department of Primary Industries Water and Hunter Water in respect of the review and implementation of the Lower Hunter Water Plan; and
  - ii) calculation and reporting of System Yield; and
- b) comply with the memorandum of understanding maintained under clause 5.10.1(a).

*[Note: Clause 5.10.1 does not limit the persons with whom Hunter Water may enter into a memorandum of understanding or a roles and responsibilities protocol.]*

5.10.2 The purpose of the memorandum of understanding referred to in clause 5.10.1(a) is to form the basis for a co-operative relationship between the parties to the memorandum of understanding. In particular, the purpose of the memorandum of understanding referred to in clause 5.10.1(a) is to recognise the role of Department of Primary Industries Water in assessing options to address water supply security in the lower Hunter region.

### **Recommendation**

- 21 Amend the licence to require an MoU or a roles and responsibilities protocol with DPI Water.
- 22 Amend the current licence condition relating to the MoU with DPI Water so that it forms the basis of a co-operative relationship between the parties, and recognises the role of DPI Water in assessing options to address water supply security in the lower Hunter region.

## **8.7 Add a requirement to establish an MoU with Fire and Rescue NSW**

The recent Sydney Water licence includes a new requirement for it to liaise with Fire and Rescue NSW (FRNSW) and use 'best endeavours to develop and enter into an MoU'. The licence also prescribed some of the matters that such an MoU should address. We sought

stakeholder feedback on whether the Hunter Water licence should include similar requirements.

The purpose of the MoU is to form the basis for co-operative relationships between the parties, to develop roles and responsibilities for each party, identify needs and constraints, and to identify and develop strategies for efficient and effective provision of firefighting water.

### 8.7.1 Issue raised

Hunter Water submitted that it has voluntarily begun negotiations with FRNSW (initially) with a view to developing an MoU. In subsequent meetings Hunter Water indicated that it is keen to work more closely with FRNSW and does not object to a requirement to formalise this relationship.

Sydney Water submitted that its work to date on establishing an MoU with FRNSW has allowed stakeholders to collaborate, to bring real improvements for fire safety, thus bringing greater safety improvement. It also noted that two separate MoUs with FRNSW and Rural Fire Service (RFS) would formalise good working relationships with both parties.<sup>120</sup>

FRNSW supported a requirement for an MoU with Hunter Water. It noted that with the advent of the pressure management program by water authorities to manage leakage losses in their water supply systems, FRNSW has observed pressures and flows that do not appropriately support FRNSW activities.<sup>121</sup> It recommended that the licence incorporate an ongoing community safety obligation and requirement to provide minimum pressures and flows across its network to facilitate fire brigade intervention as well as hydrants placed at regular intervals to facilitate access.

We did not receive a submission from RFS.

### 8.7.2 Options assessed

Option	Descriptions
Option A (Base Case)	No change to the licence.
Option B	Include a licence requirement for an MoU with FRNSW without specific requirements.
Option C	Include a licence requirement for an MoU with FRNSW with specific requirements (similar to SWC's licence).
Option D	Include a licence requirement for an MoU with FRNSW with specific requirements relating to minimum pressures and flows (over and above the SWC's licence conditions).

Hunter Water notes that capital expenditure savings could be substantial if there were more effective planning and decision making in this policy area.

<sup>120</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 17.

<sup>121</sup> FRNSW submission to IPART Issues Paper, 29 July 2016.

**Costs for Option B and C:** Both options involve costs relating to a one off cost of \$5,000 (\$2,500 for Hunter Water and \$2,500 for FRNSW) in developing and reporting an MoU as well as ongoing meeting costs of \$10,000 annually for both FRNSW and Hunter Water. There is an increased cost under Option C of \$50,000 for Hunter Water in 2018-19 that relates to additional reporting and compliance costs.

**Costs for Option D:** There are significant, and difficult to quantify, costs relating to infrastructure upgrades. Hunter Water notes that a minimum supply standard would be expensive to implement and may not guarantee improved fire safety (or may not do so efficiently). The cost of infrastructure upgrades to comply with minimum pressures and flow is highly dependent on thresholds set and the feasibility of various upgrade solutions. For example if 10% of the network required upgrading it may cost around \$200 million. This is significant compared with our 2016 price determination which allowed Hunter Water a total capital expenditure of \$365 million (in 2015-16 dollars) over the 4 year determination period.<sup>122</sup>

Hunter Water's water prices do not include an allowance for the additional expenditure. The additional capital expenditure would require Community Service Obligation funding from the NSW Government, reducing the ability to fund other services. Alternatively, using additional debt may compromise Hunter Water's credit rating, which would increase debt costs and potentially place financial sustainability at risk.<sup>123</sup>

**Benefits for Option B** include:

- ▼ greater flexibility for Hunter Water and FRNSW to agree mutually beneficial content of the MOU.
- ▼ Hunter Water and FRNSW can collaborate to identify issues and work together to bring about practical, efficient improvements for fire safety.

**Benefits for Option C:** Benefits arising from this option are the same as for Option B except there would be less flexibility to agree content of an MoU as the Governor's approval is required to change the licence. This may result in requirements that do not address needs and cannot be easily amended to suit mutually agreed changes or changes in circumstances.

**Benefits for Option D:** Benefits arising from this option are the same as for Option C, with an additional benefit of enhanced firefighting capability for a small portion of connected properties.

### 8.7.3 Preferred option

From the CBA, both options B and C provide a net benefit compared with the base case. Our analysis shows that there are greater benefits, and only marginally higher costs, arising from Option C when compared with Option B. Therefore we recommend that Option C be adopted. A new licence clause is recommended as shown in Box 8.4.

We note that the water supply network is one of several mechanisms affecting water availability for urban firefighting. Urban fire protection is provided through a range of

<sup>122</sup> IPART, *Review of prices for Hunter Water Corporation, from 1 July 2016 to 30 June 2020, Water — Final Report*, June 2016, p 59.

<sup>123</sup> Hunter Water's reply to IPART request for information, 7 September 2016.

mechanisms including building codes and requirements for on-site systems, the water supply network, and firefighting capabilities of FRNSW and the RFS. Evolving standards mean that there are always opportunities to improve.

#### **Box 8.4 Recommended clause for MoU with Fire and Rescue NSW**

##### **5.11.1 Hunter Water must use its best endeavours to**

- a) develop and enter into a memorandum of understanding with FRNSW by 31 December 2017; and
- b) once the memorandum of understanding referred to in clause 5.11.1(a) is developed and entered into, comply with the memorandum of understanding.

*[Note: Clause 5.11.1 does not limit the persons with whom Hunter Water may enter into a memorandum of understanding.]*

##### **5.11.2 The purpose of the memorandum of understanding referred to in clause 5.11.1 is to form the basis for co-operative relationships between the parties to the memorandum of understanding. In particular, the purpose of clause 5.11.1 is to:**

- a) develop the roles and responsibilities of the parties to the memorandum of understanding as they relate to each other;
- b) identify the needs and constraints of the parties to the memorandum of understanding as they relate to each other; and
- c) identify and develop strategies for efficient and effective provision of firefighting water consistent with the goals of each party to the memorandum of understanding.

##### **5.11.3 The memorandum of understanding referred to in clause 5.11.1 must require:**

- a) the establishment of a working group, comprised of representatives from Hunter Water and FRNSW; and
- b) the working group to consider the following matters (at a minimum):
  - i) arrangements regarding information sharing between Hunter Water and FRNSW;
  - ii) agreed timelines and a format for Hunter Water to provide a report to FRNSW detailing the network performance with regard to availability of water for firefighting (taking into account the minimum available flow and pressure in localised areas of the network);
  - iii) arrangements for Hunter Water to consult with FRNSW in the design of new assets and planning of system maintenance, where modelling indicates that minimum available flow and pressure may unduly affect firefighting in the network section under consideration; and
  - iv) other matters as agreed by both parties to the memorandum of understanding.

#### **Recommendation**

- 23 Add a requirement to establish an MoU with Fire and Rescue NSW to form the basis for a co-operative relationship.



## 8.8 Make no change in relation to use of non-standard Customer Contracts

This issue relates to how Hunter Water can, or should, enter into contracts with various types of customers, including WIC Act licensees (wholesale customers), and users of unfiltered water.

Both the Act and the standard Customer Contract provide for other agreements to override the default provisions available to all customers. This enables negotiation of terms and conditions for the provision of non-standard services through non-standard contracts with one or more customers.

### 8.8.1 Issue raised

Hunter Water and Sydney Water had opposing views on this issue.

Hunter Water suggested there is merit in having more than one type of customer contract, particularly with regard to residential and business customers. It argued that it would be beneficial in tailoring provisions for the specific class of customer. However it noted that it is unclear if there is a legal basis to establish more than one type of customer contract under the licence and the Act.<sup>124</sup>

Sydney Water considers that there is no need for more than one type of customer contract and that individually negotiated contracts currently allowed for in the licence address the needs of 'non-residential' customers.<sup>125</sup>

### 8.8.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Provide a template for a non-standard customer contract (eg, for WIC Act licensees or unfiltered water customers) in the licence.

The CBA on this issue focuses on unfiltered water customers, and whether the non-standard customer contract applicable to them should be included in the licence.

The issues associated with WIC Act licensees are discussed in Section 4.4. Currently both Sydney Water and Hunter Water negotiate non-standard customer contracts with WIC Act licensees in the form of Utility Services Agreements (USAs). The USAs are commercially negotiated on a case-by-case basis and therefore provide scope to reflect the terms and conditions and types of services required for each new scheme. This is a better way of addressing this issue rather than attempting to develop standard terms and conditions for what are generally bespoke arrangements between competitors.

Hunter Water and NSW Health agree that unfiltered water is not potable at all times.<sup>126</sup> Option B involves a cost of lost revenue to Hunter Water relating to 55 unfiltered water

<sup>124</sup> Section 35 of the *Hunter Water Act 1991* states that the terms and conditions of a customer contract are to be set out in the operating licence.

<sup>125</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 13.



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customers who have not signed non-standard agreements and therefore could potentially be disconnected. There would be significant costs to these customers in providing rainwater tanks, and trucking in potable water supplies when needed. In addition, there would be a substantial increase in audit and compliance cost associated with including a template in the licence.

Using the same assumptions as above, there would be a benefit to customers who tanker in water and do not pay for unfiltered water.

We note that current non-standard contracts are in place. However the uptake by the affected customers has been relatively low to date.

### **8.8.3 Preferred option**

On balance, we recommend no change is made to the licence. Our analysis considers that the practice of agreeing non-standard contracts with customers for specific services is appropriate and effective.

The benefits are:

- ▼ The main Customer Contract is more succinct, more easily read and less confusing to the general public when it only contains provisions common to most customers.
- ▼ Specific categories ('template') of non-standard agreements can be developed by Hunter Water for similar types of customers, managing risks for these customers and Hunter Water whilst minimising the administrative burden.

## **8.9 Make no change in relation to an MoU with NSW Health**

The current licence requires Hunter Water to maintain and comply with an MoU with NSW Health as the drinking water quality regulator to facilitate effective interaction between the two organisations. In particular, the MoU recognises the role of NSW Health in providing advice to the Government in relation to drinking water quality standards and the supply of water which is safe to drink.<sup>127</sup>

### **8.9.1 Issue raised**

Hunter Water noted in its submission that it would be worthwhile clarifying compliance expectations during operational audits, in particular the issue regarding 'approval' by NSW Health.<sup>128</sup> However, Hunter Water's current approach is to involve NSW Health throughout the development of its significant change proposals to ensure that mutually acceptable outcomes are achieved. Hunter Water intends to continue this practice. Hunter Water can see benefits in agreeing with NSW Health the types of changes that are considered 'significant' and therefore may warrant more formal acknowledgement of

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<sup>126</sup> IPART, *Hunter Water Corporation operating licence review – Cost Benefit Analysis, 2017-2022: Water - Final Report*, May 2017, p 24.

<sup>127</sup> *Hunter Water Operating Licence 2012-2017*, Condition 9.1, p 19.

<sup>128</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 16.

agency involvement. To this end they consider it sensible to continue the formal arrangement between the two agencies.

Sydney Water supports the current arrangements and believes maintaining a licence obligation to require an MoU highlights the importance of preserving the relationship between the two parties.<sup>129</sup>

NSW Health supports the obligation to require an MoU, as it outlines the basis for the cooperative relationship between the two organisations.<sup>130</sup> The MoU is aligned to the licence review which provides an opportunity to review any relevant clauses.

### 8.9.2 Options assessment

Options	Descriptions
Option A (Base Case)	No change to the licence.
Option B	Remove the requirement for an MoU with NSW Health from the licence.
Option C	Be more specific in the requirements for an MoU with NSW Health, to include specific auditing and reporting requirements in the MoU rather than in the licence.

We considered an option to remove the requirement for an MoU with NSW Health from the licence, and considered to the auditing and compliance role of IPART and the risk associated with removal of this requirement.

There would be no avoided cost of developing and agreeing the MoU because the relationship between NSW Health and Hunter Water would need to be documented (and possibly formalised) regardless of whether it is a regulatory requirement.

The only difference between this option and the base case is that it invokes potential for an audit of compliance.

There may be an avoided cost of IPART's operational audit of this clause.

We consider there is a small benefit in keeping the requirement in the licence to provide formal assurance the MoU with NSW Health is maintained.

We have not identified benefits relating to Option B.

### 8.9.3 Preferred option

We prefer Option A, and do not propose to recommend changes to the licence in relation to the MoU with NSW Health.

<sup>129</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p 16.

<sup>130</sup> NSW Health submission to IPART Issues Paper, 29 July 2016, p 4.

## 8.10 Security risks to critical water infrastructure

A disruption to water supply or water and/or wastewater treatment in the Hunter region could have major health consequences for the general public and also impact a diverse range of businesses that rely on water.

Within the Hunter region, a number of critical infrastructure assets depend on the ongoing integrity of Hunter Water assets and their operation. These include:

- ▼ Water - there is an interconnection (both ways) between Hunter Water and the water system operated by Wyong and Gosford City Councils.
- ▼ Electricity Generation - the Eraring scheduled generator sits within Hunter Water's service area, and the generators of Vales Point B and Colongra are just outside of the Hunter Water service area and may have some dependence on the interconnection when it is in use.
- ▼ Defence – Royal Australian Air Force Base Williamtown.
- ▼ Ports - Newcastle Port handles 14 per cent of Australia's bulk cargo and is within Hunter Water's service area.<sup>131</sup>

### 8.10.1 Issues Raised

The CIC is part of the Attorney General's Department, and is concerned with national security risks of sabotage, espionage and coercion to critical infrastructure, particularly in regard to outsourcing of core services such as maintenance, design and construction of new facilities and equipment, and operational activities.<sup>132</sup>

The submission from the CIC<sup>133</sup> notes that water utilities generally understand and manage many of the risks related to maintaining the business's operational continuity. However, the CIC is particularly concerned about national security risks of sabotage, espionage and coercion, in light of the trend to outsource core services such as maintenance, design and construction of new facilities and equipment, and operational activities.

In relation to espionage, water companies hold detailed customer usage data. Such holdings of data represent attractive targets for foreign intelligence services to target particular individuals or gain insights into particular customers and their activities (e.g. Defence operations), or inform sabotage of other critical infrastructure sectors.

In relation to sabotage, a hostile actor could take advantage of operational access through outsourcing, offshoring and supply chain arrangements to disrupt water supply, damage other critical infrastructure assets, and erode public trust in government services.

The CIC considered that there are a number of 'potential mitigations' for these issues as follows:

- ▼ key personnel to hold security clearances,

<sup>131</sup> CIC, Submission to the review of Hunter Water's operating licence 2012-2017, 3 March 2017, p 2

<sup>132</sup> CIC, Submission to the review of Hunter Water's operating licence 2012-2017, 3 March 2017, p 3

<sup>133</sup> CIC, Submission to the review of Hunter Water's operating licence 2012-2017, 3 March 2017, pp 2-3

- ▼ information about operational technology (such as SCADA systems) and associated ICT (Information and Communication Technology) infrastructure be held solely within Australia,
- ▼ appropriate security controls implemented to prevent the export of personal data records, and
- ▼ limitations on remote access to operational systems.

In subsequent discussions, Hunter Water supported an approach to include general provisions in the licence to use best endeavours to establish a collaborative relationship with CIC, and/or other relevant government agencies that manage matters of state or national security, and allow flexibility for different engagement mechanisms.<sup>134</sup> Existing mechanisms include the Trusted Information Sharing Network<sup>135</sup> for Critical Infrastructure Resilience – Water Services Sector Group, which is managed by the Attorney-General’s Department. CIC is also part of the Attorney-General’s Department.

We note that the Australian Security Intelligence Organisation (ASIO) and the Australian Federal Police also have key roles in managing national security matters.

### 8.10.2 Options assessed

The CIC note that a range of potential mitigation options could be considered to minimise the potential for access and control of Hunter Water’s assets.<sup>136</sup>

We considered that there are a number of potential strategies for addressing the CIC’s concerns in the new licence. These include, in order of increasing regulatory oversight:

1. make no changes to the licence - this effectively presumes that national security matters relating to this infrastructure are adequately dealt with through the AMS and/or QMS and no additional regulatory requirements are necessary.
2. add a requirement for Hunter Water to have an Information Security Management System in the licence;
3. include a condition in the licence that requires Hunter Water to participate in a working group established by the CIC, dealing with critical infrastructure;
4. include a condition in the licence for ‘best endeavours to develop and maintain an MoU with the CIC dealing with critical infrastructure’, with or without prescription on the content of an MoU.
5. include a condition in the licence that mirrors the ‘potential mitigations’ provided by the CIC in its submission.<sup>137</sup>

<sup>134</sup> Email to IPART, E. Turner, Hunter Water Corporation, 17 March 2017

<sup>135</sup> The Trusted Information Sharing Network (TISN) for Critical Infrastructure Resilience was established by the Australian Government in 2003. It is Australia’s primary national engagement mechanism for business-government information sharing and resilience building initiatives on critical infrastructure resilience. The TISN provides a secure environment for critical infrastructure owners and operators across eight sector groups to regularly share information and cooperate within and across sectors to address security and business continuity challenges. The work of the TISN is also complemented by a range of business-government engagement mechanisms on broader national security policy issues.

<sup>136</sup> CIC, Submission to the review of Hunter Water’s operating licence 2012-2017, 3 March 2017, p 3.

<sup>137</sup> CIC, Submission to the review of Hunter Water’s operating licence 2012-2017, 3 March 2017, p 3.

6. include a condition in the licence that the ‘utility must address matters of national security for their critical infrastructure to the satisfaction of the CIC’, similar to the health related conditions.
7. include multiple prescriptive conditions in the licence (in a similar manner to the electricity network licences), noting that these effectively deal with the four major points made by the CIC, but in a more detailed/prescriptive manner.

Through subsequent discussions with the water utilities, we reduced the potential options from seven to the practical option indicated below. Any level of prescriptivity in the licence at this early stage would appear to be premature.

Options	Descriptions
Option A (base case)	Make no change to licence.
Option B	Include a requirement in the licence for Hunter Water to use its best endeavours to establish a constructive working relationship with the CIC and/or other relevant government agencies or departments.

Option B could potentially give rise to a benefit of enhanced safety and security of water supply to the broader community resulting from a collaborative relationship between Hunter Water and the appropriate security agencies at a state and federal level.

### 8.10.3 Preferred option

There may be potential for cyber security to be managed through the Asset Management System. It requires additional information to be held regarding the nature, configuration and vulnerabilities of the hardware and software assets to add support to situational awareness and threat assessment for new vulnerabilities. This method would apply particularly to Hunter Water’s customer information database, and to the operational control systems (SCADA) in use across its various sites.

A potential issue is the agreement that Hunter Water has in place with Veolia Water Australia (VWA), for the operations and maintenance of its water and wastewater treatment plants. One of the CIC’s key conditions relates to maintaining key information about operational technology within Australia, and limiting remote or foreign access to these systems. Whilst VWA is incorporated in Australia, the parent company, Veolia Environment S.A. is a French transnational company. Hunter Water noted that security and confidentiality provisions exist in the current contract, but also noted that access to international expertise was one of the drivers for contracting with VWA.<sup>138</sup>

We do not support prescriptive controls in the licence at this stage, given that the discussion around national security risks to critical infrastructure is still in its early stages with respect to the water industry.

We have considered adding a non-prescriptive clause into the licence such as Option B. However, this type of non-prescriptive licence clause would be difficult to assess for compliance without the inclusion of specific requirements.

<sup>138</sup> Information provided to IPART, Teleconference, Hunter Water Corporation, 15 March 2017.

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Our assessment is that, at this early stage of investigating the appropriate mitigation measures for potential national security risks, the relationship between Hunter Water and the relevant agencies should be developed independently of the licence. The development of a 'working party' or similar vehicle to establish a collaborative relationship between the relevant parties, and to tailor the appropriate mitigation measures to Hunter Water's processes, would be beneficial. However we prefer that, initially, the relevant agencies discuss the way forward voluntarily and proactively without the potential constraints of a licence condition.

We recommend that no new licence conditions related to national security issues be included in the licence at this stage. Hunter Water has participated constructively and cooperatively in recent discussions on this matter. We anticipate Hunter Water will continue to meet separately with the relevant agencies to gain a deeper understanding of the issues and develop actions to address them. We consider that a gradual maturation of the relationship may provide an agreement of sorts (eg an MoU) which may then be considered in future licence reviews.

#### Recommendation

- 24 Do not add a new licence clause requiring collaboration between Hunter Water and relevant Commonwealth agencies on matters of national security at this stage.

### 8.11 Billing of end users for water and sewerage services

Pursuant to Section 36(1) of the Hunter Water Act 1991 (the Act), and subject to sections 36(3) and 36(4) of the Act, the Customer Contract applies to an owner of land connected to a water main or sewer main owned by Hunter Water Corporation. The Customer Contract and licence are drafted in a manner consistent with the Act's definitions. If the consumer is not a land owner, he or she is not a customer of Hunter Water under the Act.

#### 8.11.1 Issue raised

A query that arose from the public workshop concerned the requirement that Customer Contracts can only be held by property owners. The query focused on the disparity between this requirement for water and sewerage services and other user-pays services such as telephone, electricity and gas services, which are held by the user/consumer.

#### 8.11.2 Options assessed

The thrust of the query is that water and wastewater supply services should mirror the user pays system already in place for other utility industries. However, the Act precludes this option under section 36, as noted above.



A number of issues were noted in various publications regarding a change to user pays:<sup>139</sup>

- ▼ Increased economic efficiency – costs associated with the provision of service should be recovered from the users of that service. Inefficient use of services by tenants may result from not having timely access to usage information.
- ▼ Consumer protection measures currently available in Customer Contracts would be available in full to tenants.
- ▼ Administrative costs reduced – double handling by landlords/estate agents, and a reduction in legal disputes between tenants and landlords.
- ▼ Significant cost implications for water utilities – billing system changes, increased meter readings and associated administrative costs, increased costs in administering hardship programs, and increases in bad debts for the utility as a result of reduced debt-recovery mechanisms through property leases relative to property transfers.
- ▼ Changes would impact some parties more than others.

We encountered this issue when undertaking the review of Sydney Water's 2000 price determination (Report No 8, 2000).<sup>140</sup> We noted "that establishing a service provider-customer relationship between Sydney Water and tenants is difficult for a number of reasons, including:

- ▼ the need for separate bills to the landlord and the tenant
- ▼ provisions within the *Sydney Water Act, 1994* and the customer contract." (Similar provisions in the *Hunter Water Act 1991* exist as noted above.)

In the majority of states and territories, the property owner is the water utility's customer, and is billed in that capacity. Under each jurisdiction's equivalent of the *Residential Tenancies Act*, landlords are allowed to pass on the water usage or variable component of the bill to the tenants for payment, provided certain conditions are met. We note differences between NSW and other states in table 8.3 below:

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<sup>139</sup> i) Productivity Commission, *Australia's Urban Water Sector*, Report No. 55, Final Inquiry Report, 2011; and  
ii) ESCOSA, *Inquiry into Reform Options for SA Water's Drinking Water and Sewerage Prices*, Final Inquiry Report, Dec 2014; and  
iii) Ibid, Appendices 2 and 3

<sup>140</sup> IPART, *Sydney Water Corporation, Prices of water supply, sewerage and drainage services – Medium-term price path from 1 October 2000, Determination No. 8, 12 September 2000*, p 38



**Table 8.3 Summary of billing arrangements across Australia**

Jurisdiction	Residential	Non-residential
South Australia	Landowner	Landowner
Victoria	Tenants are responsible for water charges and sewage disposal charges where the property is separately metered. Otherwise all charges are billed to the property owner	Landowner
NSW	Landowner	Landowner
Western Australia	Landowner (However WaterCorp will send a copy of the water usage charges to the tenant where requested by the landowner).	Landowner
Queensland	Landowner	Landowner
ACT	Landowner	Landowner
Tasmania	Landowner	Landowner

**Source:** Essential Services Commission of South Australia (ESCOSA) – Inquiry into reform options for SA Water’s Drinking Water and Sewerage Prices – Final Inquiry Report, December 2014, p 53

## Victoria

In 2012, the Victorian Government passed the *Water Amendment (Governance and other reforms) Act 2012* (the Governance Act). One of the amendments concerned tenancy arrangements and the occupier’s liability to pay.<sup>141</sup>

If a landlord of a residential property, with its own water meter wants the tenant to pay water usage and any sewage disposal charges, the landlord is responsible for telling the water corporation when the residential tenant will start occupying the property. The water corporation can then arrange for the meter to be read when the tenant commences their occupation of the property.

The residential tenant is responsible for informing the water corporation when it vacates the property. The water corporation can then arrange for the meter to be read and appropriate charges levied. This will transfer liability back to the property owner for any subsequent water usage charges and sewage disposal charges.

The tenant will only be liable to pay water usage and sewage disposal charges (not the fixed service charge) after the meter is read.

If the tenant/landlord doesn’t notify the water corporation when occupancy of the property ends/begins, the tenant/landlord will continue to be liable for all water usage and sewage disposal charges until notification is given and a meter reading is taken. Service charges are levied on the property owner, not the tenant.

The Governance Act also amended a number of existing sections of Victoria’s Water Act, including changes to debt recovery provisions, customer rights, powers to require property

<sup>141</sup> The Governance Act FAQs, Department of Environment and Primary Industry Victoria (DEPI), at <http://www.depi.vic.gov.au/water/governing-water-resources/water-entitlements-and-trade/the-water-act/changes-to-the-water-act-made-by-the-governance-act/the-governance-act-faqs> accessed on 9 March 2017.

owners to connect to sewer, billing arrangements and the conversion of the water corporations from Corporations Act companies into statutory water corporations.<sup>142</sup>

## South Australia

In 2014 the Essential Services Commission of South Australia (ESCOSA) undertook an inquiry into the water industry.<sup>143</sup> One of the aspects of the inquiry focused on the issue of billing end users for services.

The inquiry found that, in the case of tenancies, there is a disconnect between the customer who is billed by the public water utility and the end user of the service.<sup>144</sup> That disconnect may give rise to the potential dilution of the effectiveness of pricing signals to customers. This position is supported in the Productivity Commission report into Australia's urban water sector, which notes that there is "no clear justification for landlords, rather than tenants paying for water usage."<sup>145</sup>

To enact such a change, over and above the administrative and structural changes to billing and residential tenancies, changes would need to be made to the relevant water Acts and accompanying regulations, *The Residential Tenancies Act 1995* (S.A), and *The Retail and Commercial Leases Act 1995* (S.A). The Productivity Commission report notes that if rents are not reduced by landlords to compensate for transfer of water bills to tenants, transitional arrangements should be put in place to compel landlords to pass on savings.<sup>146</sup>

### 8.11.3 Preferred option

There is insufficient up-to-date information available regarding the NSW situation regarding this issue. There has been a consistent level of feedback from one particular stakeholder group concerning this issue. A desk-top literature review notes that there is some merit to the suggestion, that overall economic efficiency might be enhanced from a change to user pays. However the data also notes that the impacts will be unevenly distributed, with the main effects to be felt by those less able to cope with the increases in costs.

From a whole-of-society perspective, efficiencies may be achieved through a reduction in administrative costs. Initially, significant costs will be borne by the water utilities to change billing systems and administrative structures. These may be offset somewhat by savings to administration costs for landlords and through reduced levels of dispute at the Residential Tenancies Tribunal. Additional protections for tenants under existing customer contracts, better access to water usage data, leading to more efficient water consumption and fewer leaks/losses in the system may also provide additional benefits. This evidence is largely circumstantial and would require significant investigation and analysis.

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<sup>142</sup> DEPI (Vic) website, <http://www.depi.vic.gov.au/water/governing-water-resources/water-entitlements-and-trade/the-water-act/changes-to-the-water-act-made-by-the-governance-act>, accessed on 9 March 2017.

<sup>143</sup> Essential Services Commission of South Australia (ESCOSA) – Inquiry into reform options for SA Water's Drinking Water and Sewerage Prices – Final Inquiry Report, December 2014. <http://www.escosa.sa.gov.au/projects-and-publications/projects/water/inquiry-into-drinking-water-and-sewerage-retail-services-pricing-reform>

<sup>144</sup> Ibid, p 49

<sup>145</sup> Productivity Commission 2011, Australia's Urban Water Sector, Report No. 55, Final Inquiry Report, Canberra, p 159. <http://www.pc.gov.au/inquiries/completed/urban-water/report>

<sup>146</sup> Ibid, p 160

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Both the Productivity Commission report and the ESCOSA report noted that it would be necessary for property owners to pass on an equivalent reduction in rent to tenants to minimise this cost implication. Prescriptive actions may be necessary to make sure these savings are passed through to tenants.

The Victorian experience indicates that a provider-user billing system is workable, although there are undoubtedly cost implications for the utilities, and subsequently for all customers. However, we consider that there is merit in reviewing the current system, the necessary legislative changes, the cost impacts and the safeguards necessary to protect tenants.

Options could include changing to 'user pays', or a hybrid version such as the one currently employed in Victoria. Any such review should encompass each of the major water utilities, the costs and benefits of any changes, a review of current regulations to determine which Acts and Regulations would require modification and attempt to identify potential consequences.

## 9 Performance monitoring and reporting

The current licence and Reporting Manual includes conditions and requirements related to performance monitoring and reporting.<sup>147</sup> We considered options to improve or streamline the requirements for the reporting of information. We also sought views on whether Hunter Water should continue providing us with the same NWI indicators that it provides to the Bureau of Meteorology.

### 9.1 Summary of recommended changes

**Table 9.1 Changes to Part 6 of Licence**

Issue	Recommendation	Reason
Include a new clause to require Hunter Water to report to IPART on its performance against the NWI indicators.	Amend the reporting requirements in the licence condition to require Hunter Water to report to IPART against NWI performance indicators (new licence clause 6.2.1(e)).	IPART is required by contractual obligation to collect and report NWI data on behalf of the NSW Government.
Changes to the requirements related to IPART's performance indicators.	Recommend no change to the IPART performance indicators. Minor amendments are included for clarifications.	IPART to undertake an industry wide review of performance indicators post licence review completion.

### 9.2 Include new clause to require reporting against NWI indicators to IPART

The current licence does not require Hunter Water to report to us on its performance against the NWI indicators. However, it does so voluntarily as part of its wider compliance activities.

#### 9.2.1 Issue raised

Hunter Water noted in its submission that it supports inclusion of a licence condition to report against NWI indicators, noting that it would be consistent with Sydney Water's licence and would meet the Council of Australian Government's (COAG's) principal agreement for water reform ie, the NWI.<sup>148</sup> Both Sydney Water and DPI Water also supported continuing reporting of the NWI indicators.

<sup>147</sup> Current operating licence, clause 8 and Reporting Manual, chapter 8.

<sup>148</sup> Hunter Water submission to IPART Issues Paper, July 2016, p 51.

In 2006, we were nominated by the NSW Government to be the Data Coordinator and Audit Coordinator for NSW public water utilities in the National Framework for Reporting on Performance of Urban Water Utilities Deed (Deed).<sup>149</sup> Although not a party to the Deed, IPART (as the NSW Government's appointee) is required to collect the NWI data from public water utilities in NSW and report to the relevant national body (currently the Bureau of Meteorology (BOM)).

### 9.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Add a new licence clause to require Hunter Water to report to IPART against NWI indicators.

The CBA analysis indicated that, as Hunter Water currently reports against the NWI indicators to the BOM, the costs and benefits of Option B are the same as the base case. Hunter Water would continue to provide the collected data in the Compliance and Monitoring Report to us.<sup>150</sup>

As noted, we required, under the terms of the Deed, to coordinate the collection, reporting and auditing of Hunter Water performance with regards to the NWI performance indicators. BOM does not monitor compliance, it merely collates data across the industry.

### 9.2.3 Preferred option

We prefer Option B, to include a new licence condition requiring the continued collection, collation and reporting of information to IPART as per the NWI indicators, administered and modified from time to time by the BOM. However, on further analysis we have concluded that an additional licence is not required to achieve the outcome.

To facilitate the required change, we recommend modifying the Reporting Manual clause (new licence clause 6.2.1) in the licence as well as an additional sub-clause in the Reporting Manual (chapter 8) requiring Hunter Water to report against the NWI performance indicators. (Refer Box 9.1).

<sup>149</sup> DLA Phillips Fox, *National Framework for Reporting on Performance of Urban Water Utilities Deed*, signed December 2006.

<sup>150</sup> IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report*, April 2012, pp 51-52.

### **Box 9.1 Recommended clause for reporting obligations**

6.2.1 Hunter Water must comply with all of its reporting obligations set out in the Reporting Manual, including in relation to:

- a) water conservation;
- b) supply services and performance standards;
- c) organisational systems management;
- d) customer and stakeholder relations; and
- e) performance monitoring and reporting, including:
  - i) IPART performance indicators; and
  - ii) the National Water Initiative Performance Indicators.

#### **Recommendation**

- 25 Amend licence conditions to require Hunter Water to report to IPART against NWI performance indicators as per the Reporting Manual.

### **9.3 Make no change to requirements to report against IPART performance indicators**

We undertook a review of its performance indicators in 2012.<sup>151</sup> The outcome of the review was a streamlining of reportable indicators, with improved consistency between utilities.

For this review, we sought stakeholder views on how the reporting of information against these indicators could be improved to reduce the regulatory burden on Hunter Water.

#### **9.3.1 Issue raised**

The submissions received were largely supportive of retaining the current reporting requirements. Sydney Water noted that it would be beneficial if there were consistency in the indicators reported by both utilities.<sup>152</sup> It also stated that there may be alternative approaches of leveraging existing reporting to meet the required outputs of the DWQMS.<sup>153</sup>

Hunter Water also put the view that there may be opportunities to achieve greater consistency in definitions across some performance indicators and thereby reduce the regulatory burden. Hunter Water nominated the Annual Information Return (AIR) as the item requiring the largest input of resources and time.<sup>154</sup> However this report is not a requirement of the licence or Reporting Manual. It is a requirement of the water pricing function and is not part of this review.

<sup>151</sup> IPART, *Tribunal briefing – Revised Performance Indicators for Sydney and Hunter Water*, 9 May 2012.

<sup>152</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016, p15.

<sup>153</sup> Sydney Water submission to IPART Issues Paper, 29 July 2016 p 16.

<sup>154</sup> Hunter Water submission to IPART Issues Paper, 15 July 2016, p 52.

### 9.3.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	IPART to conduct a Hunter Water-specific performance indicator definition review as part of the licence review process.
Option C	IPART to conduct a Hunter Water-specific performance indicator definition review as part of the licence review process and conduct an industry-wide performance indicators review after July 2017.

**Option B:** Capital and operating costs resulting from changes in performance indicators are heavily dependent on the nature of the proposed changes. An increase or decrease in the number of indicators would cause an incremental increase or decrease in the cost of maintaining sufficient records to enable accurate measurement against the indicators.

Other issues that might increase costs are the potential lack of alignment and loss of comparability between NSW public water utilities and the costs relating to a discontinuous data set.

There is also a potential cost to us of further customising its NSW Water Utilities Performance database and report.

There could be potential stakeholder confusion and misinterpretation of our database and/or report.<sup>155</sup>

**Option C:** This option could lead to abortive costs due to required system changes to report new or altered indicators arising from the first review, that are subsequently discontinued in the second review.<sup>156</sup>

Other incremental costs include:

- ▼ increased labour costs for Hunter Water related to participating in multiple reviews,
- ▼ potential lack of alignment and loss of comparability between NSW metropolitan water utilities and a discontinuous temporal data set if indicators are altered or discontinued as part of the first review and then reinstated as part for the second review, and
- ▼ duplication of effort by stakeholders who are active across several jurisdictions (eg, advocacy groups).

**Option B and C:** Benefits that arise from both options are:

- ▼ the ability to refine the current definitions and resolve existing inconsistencies in indicators,
- ▼ potential increases in efficiency and productivity that may arise from the reviews.<sup>157</sup>

<sup>155</sup> IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, p 53.

<sup>156</sup> Ibid.

<sup>157</sup> IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, p 53.



### 9.3.3 Preferred option

On balance, given the feedback from the two public water utilities and the qualitative information in the CBA, we consider option C should be pursued as a separate review across the industry.<sup>158</sup> However, we consider that a Hunter Water-specific review cannot be undertaken in the time available in a meaningful manner.

Therefore, we propose to recommend no changes to the licence in relation to the IPART indicators. There is no change to the licence package, but an action for us to pursue at the conclusion of the review.

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<sup>158</sup> Ibid.

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## 10 Schedules

### 10.1 Update the area of operations

We are proposing that Hunter Water must report on any changes to the area of operations, and must also provide a more detailed description of the area of operations (maps and words) as new areas are added or removed.

#### Recommendation

26 Include the current map of Hunter Water's Area of Operations.

*(Note: this recommended change is shown in Schedule A of the licence).* Include authorisation of the transfer of water to and from Central Coast Council in the Area of Operations.

#### 10.1.1 Issue raised

The area of operations was not included as an issue in the Issues Paper and none of the stakeholders raised any concerns. However, during our review of the current licence, we formed the view that improvements could be made.

Schedule B of the existing licence contains a description of the local government areas and various other areas of land that make up the approved area of operations supported by a map of parts of Singleton Shire.

When drafting the new licence, we found that:

- ▼ the map boundary of the area of operations was inaccurate,
- ▼ the description of local government areas has been superseded by new council names (following amalgamations), and
- ▼ Hunter Water has been supplying services to areas outside its approved area of operations through agreements with Midcoast Water and the Central Coast Council. It was initially unclear whether these services were covered by the licence.

Further discussions with Hunter Water clarified the issue of supplying water and wastewater services to areas outside of the area of operations. We are satisfied that the provision of these services is within the area of operations. Hunter Water subsequently provided an up-to-date map of the area of operations.

### 10.1.2 Options assessed

We considered whether there is a need to add a new licence condition to ensure changes to the area of operations are undertaken in accordance with the Act.<sup>159</sup> We concluded that this would be unnecessary duplication of the Act.

We also addressed the issue of the Central Coast to Hunter Water Pipeline agreement. This agreement, signed in 2006, allows for the two-way transfer of water to replenish water storages in each region, as required. To date, this issue has not been covered by the licence, although we determine prices associated with the transfer.

We were concerned that the agreement could be construed as requiring Hunter Water to operate outside of its area of operations, leading to a view that it may be in breach of its licence. We investigated this issue with a view to incorporating changes in the licence that would unambiguously authorise Hunter Water to operate the Hunter Water to Central Coast pipeline and perform all related functions.

### 10.1.3 Preferred option

The amended area of operations is included in Schedule A of the new licence.

The new licence has been strengthened to include authorisation of the transfer of water to and from the Central Coast Council. This gives authorisation to Hunter Water's limited activities outside of its area of operations. Refer to clause 1.2.2 of the licence. A new licence clause is recommended, as shown in Box 10.1.

#### **Box 10.1 Recommended clause authorising operation of the Central Coast pipeline**

1.2.2 Without limiting clause 1.2.1, this Licence authorises Hunter Water to do all things necessary or convenient to achieve, and to promote the capability to achieve, the transfer of water between its Area of Operations and the local government area of the Central Coast Council in accordance with the Hunter/Central Coast Pipeline Agreement.

These changes have not been explicitly addressed in the CBA as they are only clarifying existing regulatory requirements and should not involve any costs to the community.

<sup>159</sup> *Hunter Water Act 1991*, s 16.

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## Glossary

ADWG	Australian Drinking Water Guidelines
AGWR	Australian Guidelines for Water Recycling
AMS	Asset Management System
Aquamark	Asset management performance assessment tool developed by WSAA
AS/NZS ISO 9001	<i>AS/NZS ISO 9001 Quality Management Systems – Requirements</i>
AS/NZS 10002	<i>AS/NZS 10002 : Guidelines for complaint management in organisations</i>
AS/NZS ISO 14001	<i>AS/NZS ISO 14001 Environmental Management Systems – Requirements with guidance for use</i>
AS ISO 55001	<i>AS ISO 55001 Asset management – Management systems - Requirements</i>
BOM	Bureau of Meteorology
CBA	Cost-benefit analysis
CIC	Critical Infrastructure Centre, part of the Attorney General’s Department
COAG	Council of Australian Governments
Consumer	Any person who consumes or uses Hunter Water’s services (as defined in the operating licence), and includes, but is not limited to, a tenant or occupier of a Property
Customer	Any person who is taken to have entered into a Customer Contract under section 36 of the Act, or a person who has made a contract with the Corporation of a kind referred to in section 37 of the Act
Customer Contract	The terms and conditions of the Customer Contract contained in Schedule B of the operating licence
DPI Water	Department of Primary Industry - Water
ELWC	Economic Level of Water Conservation
ELL	Economic Level of Leakage

EMS	Environmental Management System
EPA	Environmental Protection Authority
EWON	Energy and Water Ombudsman NSW
FRNSW	Fire and Rescue NSW
Hunter Water	Hunter Water Corporation
IEEE 1366: 2012	Institute of Electrical and Electronic Engineers, Guide for Electrical Power Distribution - Reliability Indices
IPART	Independent Pricing and Regulatory Tribunal
ISO 55001	<i>ISO 55001 International Standard for Asset Management</i>
LHWP	Lower Hunter Water Plan
Minister	Minister for Energy and Utilities
MoU	Memorandum of Understanding
NCC	Newcastle City Council
Non-potable water	Water that is not of drinking water quality
NSW Health	NSW Ministry of Health
NWI	National Water Initiative
Operating licence/ Licence	Hunter Water's operating licence issued under Section 12 of <i>Hunter Water Act 1991</i>
PAS 55	British Standards Institution (BSI) Publicly Available Specification for the optimised management of physical assets.
PIAC	Public Interest Advocacy Centre
QMS	Quality Management System
Review	End of term operating licence review
RFS	Rural Fire Service
SAIDI	System Average Interruption Duration Index – total duration of interruption for the average customer for a predefined period of time.
SAIFI	System Average Interruption Frequency Index – how often the average customer experiences a sustained interruption over a predefined period of time.

Services	Supplying water, providing sewerage and drainage services, and disposing of Wastewater by Hunter Water
Sewerage system	Means the sewer mains, pipes, treatment plants and other equipment provided, constructed, managed, operated and maintained by Hunter Water to provide sewerage services under the Licence including the collection, transportation, treatment and disposal of sewage.
SPS	System Performance Standards
Sydney Water	Sydney Water Corporation
System Yield	means the maximum amount of water that Hunter Water estimates (using a hydrological model) can be supplied from water sources to its water treatment plants while meeting storage performance criteria
Unfiltered Water	Dam water that is dosed with chlorine but is not filtered or otherwise treated.
SOC	State Owned Corporation
The Act	<i>Hunter Water Act 1991</i>
Wastewater	Any discarded water, whether clean or contaminated, that is discharged into the sewerage system. Also includes sewage.
Water Conservation Strategy	Refer definition in section 5.4
Water Storage and Transmission	means the capture, storage and release of water within Hunter Water's infrastructure and the natural river systems, upstream of its water treatment plants.
WIC Act	<i>Water Industry Competition Act 2006</i>
WIC Act Licensees	Organisations licenced under the WIC Act (ie, having either a Network operators licence and/or a Retail Supplier licence)
WQMS	Water Quality Management System
WSAA	Water Services Association of Australia



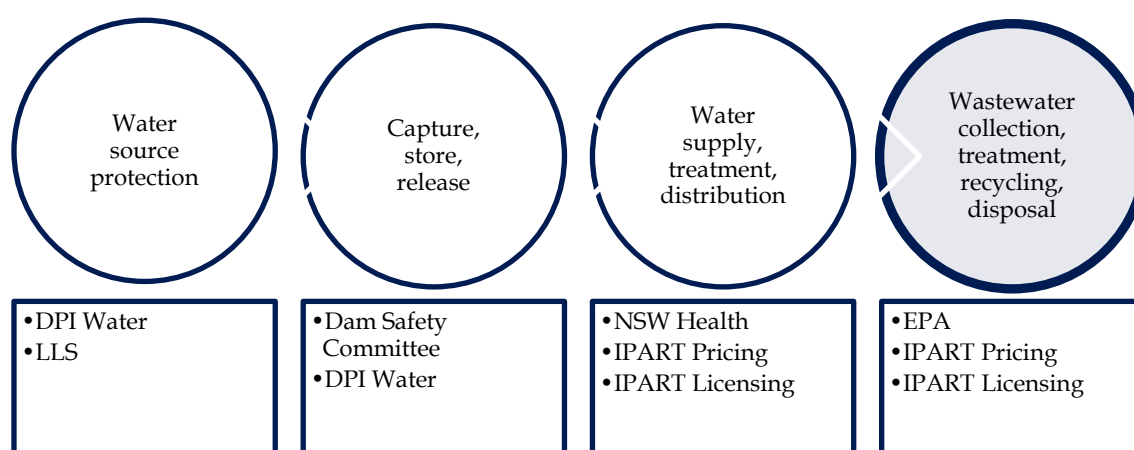




## Appendices

## A Water supply chain governance

IPART administers the licence. The licence does not cover every operational aspect of Hunter Water as there are other regulators with key roles in the water supply chain, as shown below. The licence is designed to avoid duplications with the roles of other regulators.



**Table A 1 Regulators, their roles and regulatory instruments**

Regulator	Key role	Regulatory instrument
NSW Department of Primary Industries (DPI) Water	Water legislation, policy and planning	Water Sharing Plans, Water licences and approvals
NSW Ministry of Health (NSW Health)	Water quality, public health	Public Health Act, Fluoridation of Public Water Supplies Act
Independent Pricing and Regulatory Tribunal NSW (IPART)	Operational compliance monitoring and review, Water Pricing	Operating licence, Customer Contract, Reporting Manual Price determinations
NSW Environment Protection Authority (EPA)	Control wastewater pollution to the environment	POEO Act, Environment Protection Licences
Local Land Services (LLS)	Health of water catchments	Regional Catchment Action Plans
Department of Planning and Environment	Development assessment	EP&A Act, LEPs, SEPPs



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## B Summary of Submissions

In this Appendix, the following code is used to summarise stakeholder's position:

Code	Stakeholder's position
+	The operating licence should do more
-	The operating licence should do less
#	The operating licence should continue, with minor adjustments
0	Neutral comments from stakeholders or position undecided

**Table B.1 Summary of submissions for the Issues Paper (by issues) – July 2016**

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation (HWC)	Water Quality	1	#	Supports retention of the drinking water obligations in its operating licence. The Chief Health Officer may grant major public water utilities an exemption from section 25 of the Public Health Act 2010, which manages the potential for regulatory duplication.	No change to Operating Licence (OL) as part of this review.	6.5
NSW Health	Water Quality	1	#	NSW Health has provided HWC with an exemption from certain requirements under the <i>Public Health Act 2010 (PHA)</i> in order to avoid regulatory duplication between the PHA and their operating licence. If the operating licence were amended such that the requirements of the PHA were not met, the Chief Health Officer may revoke the exemption.	No change to OL as part of this review.	6.5
Sydney Water Corporation	Water Quality	1	0	No preference over whether water utilities are regulated under the Quality Assurance Program Provision of the Public Health Act 2010 or under a Drinking water Quality Management System provision in an operating licence.	No change to OL as part of this review.	6.5

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Water Quality	2	#	It would be worthwhile clarifying compliance expectations during operational audits. However, Hunter Water's current approach is to involve NSW Health throughout the development of its significant change proposals to ensure that mutually acceptable outcomes are achieved. Hunter Water intends to continue this practice. Hunter Water can see benefits in agreeing with NSW Health the types of changes that are considered 'significant' and therefore may warrant more formal acknowledgement of agency involvement.	No change to OL as part of this review.	6.3
NSW Health	Water Quality	2	0	NSW Health does not see itself as an approval authority and has no statutory approval processes. However, they are happy with the current arrangements of review and expressing satisfaction with finalised documents.	No change to OL as part of this review.	6.3
NSW Health	Water Quality	2	+	The Operating license could be updated to reflect the wording used in the Sydney water operating license which specifies 'to the satisfaction of NSW Health'	No change to OL as part of this review.	6.3
Sydney Water Corporation	Water Quality	2	#	Supports the articulation of requirements as they appear in SWC's 2015-2020 operating licence.	No change to OL as part of this review.	6.3
Hunter Water Corporation	Water Quality	3	#	Considers that the risk of inappropriate use of recycled water by non-residential customers is already adequately addressed through various elements of Hunter Water's recycled water quality management system including contractual terms that enable suspension of service. These customers sign agreements, attend workshops, with the customer given information and training to implement onsite preventative measures addressing potential compliance gaps. HWC can access its	IPART has completed investigation of this issue. Main industrial customers are no longer contracted to HWC for this product. No further action required.	NA

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
				customers sites to audit compliance with their agreements.		
NSW Health	Water Quality	3	0	<p>IPART issue's paper does not accurately reflect NSW Health's comments on the use of recycled water by industrial customers.</p> <p>The Australian Guidelines for Water Recycling recommend end user agreements between utilities and users which specify the actions and conditions that the end user is required to adhere to. Compliance with the guidelines is therefore sufficient detail to include in the operating licence.</p> <p>The implications of HWC ceasing supply to industrial customers needs to be understood with regard to HWC's discharge requirements under its various Environment Protection License conditions.</p>	IPART has completed investigation of this issue. Main industrial customers are no longer contracted to HWC for this product. No further action required.	NA
Sydney Water Corporation	Water Quality	3	#	<p>Supports the empowerment of the Recycled Water Quality Management System to address any potential inappropriate use of recycled water for both industrial and residential customers.</p> <p>Does not believe a specific action relating to water utility overseeing end use should be included within the operating licence.</p>	No change to OL as part of this review.	NA



Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Water Quantity	4, 5, 6	+	Supports inclusion of ELWC. Water conservation target and ELL should be discontinued once new methodology is approved. New approach should consider relative size of HWC to its peers with regards implementation. HWC has participated in SWC IRG providing advice and input to the ELWC methodology and has a good understanding of it.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Department of Primary Industries - Water	Water Quantity	4	0	Differences between the water security planning requirement for Sydney and the Hunter region should be considered before deciding whether or not to adopt similar ELWC requirements in Hunter Water's operating licence. If an ELWC approach is adopted in the licence, it would be desirable to frame the requirement with reference to the LHWP to support consistency and integration and reduce the risk of duplication.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Public Interest Advocacy Centre	Water Quantity	4	+	Supported SWC adopting an ELWC approach and would support HWC doing the same. Water conservation, leakage prevention and recycled water targets are no longer considered necessary.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Sydney Water Corporation	Water Quantity	4	+	Supports the inclusion of an ELWC in HWC's new operating licence but suggest minor wording changes to ensure the regulated utility and other stakeholders have a clear understanding of the role of the ELWC.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Department of Primary Industries - Water	Water Quantity	5	#	Supports an ongoing need for Hunter Water to report on its water conservation outcomes and a summary of current water conservation initiatives. If the reporting requirement is removed from the operating licence, DPI water will still need to obtain the information directly from Hunter Water to inform the MERI	No change to OL as part of this review.	5.2

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
				(Monitoring, Evaluation, Reporting and Improvement) plan which evaluates Hunter Water's water conservation performance from the perspective of the LHWP.		
Department of Primary Industries - Water	Water Quantity	6	0	Introducing a new ELWC clause for Hunter Water would be consistent with Sydney Water's operating licence, but may result in duplication or inconsistency unless framed in a way that supports the integration with the LHWP. It may be inefficient to set up a new process for water conservation, separate from the integrated modelling of a portfolio of demand and supply measures for the LHWP. There is a potential gap which was raised in Sydney Water's issues paper on the methodology for determining ELWC in which requirements create an expectation the corporation will implement water conservation projects but the implementation of the projects are not firm requirements under an operating license.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Public Interest Advocacy Centre	Water Quantity	6	#	Does not support HWC's proposal to remove current conservation targets from the operating license before seeking approval of an ELWC method. PIAC supports the method used for SWC where they had to maintain current targets which will only be removed once their ELWC method is approved.	IPART agrees and will maintain targets until ELWC is implemented	5.2
Sydney Water Corporation	Water Quantity	6	0	SWC would be happy to assist IPART and HWC in developing an ELWC approach using learnings from their own development of ELWC.	No change to OL as part of this review.	5.2

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Department of Primary Industries - Water	Water Quantity	7	#	Both Hunter Water and DPI Water have ongoing roles and responsibilities for the implementation, monitoring, evaluation and development of the current and future LHWP. The new operating licence should continue to reflect Hunter Water's ongoing obligations regarding the LHWP. The operating license could strengthen the requirement on Hunter Water to implement the LHWP and in turn to strengthen the driver to invest efficiently in supply and demand measures to achieve broad societal outcomes. IPART could strengthen the relationship between the operating licence and the LHWP with a requirement for Hunter Water to comply with its obligations to implement the LHWP and contribute to its periodic review.	The roles and responsibilities Protocol is for negotiation and agreement between HWC and DPI Water	9.5
Hunter Water Corporation	Water Quantity	7	#	Continue with Roles and Responsibilities protocol with DPI Water. Any OL requirements in relation to scope should not be too prescriptive.	No significant changes required - editorial	9.5
NSW Health	Water Quantity	7	#	Yes they should maintain a relationship with DPI Water as the Lower Hunter Water Plan is under constant review and has relevance to multiple agencies including NSW Health.	No change to OL as part of this review.	9.5
Sydney Water Corporation	Water Quantity	7	#	It would be prudent that HWC's new operating licence continue to require a roles and responsibilities protocol with DPI Water.	No change to OL as part of this review.	9.5
Hunter Water Corporation	Assets and Infrastructure	8	+	Supports inclusion of ISO 55001 - best practice	No significant changes required - editorial	7.2
Sydney Water Corporation	Assets and Infrastructure	8	+	ISO 55001 is the most appropriate.	No change to OL as part of this review.	7.2

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Assets and Infrastructure	9	0	Hunter Water welcomes further discussion with IPART of the intended use of the State of the Assets report and the most appropriate means to meet this need.	Agree that the State of the Assets Report should either be removed as a requirement of reduced to match the pricing determination timeline.	7.3
Sydney Water Corporation	Assets and Infrastructure	9	-	The State of the Assets report could only be produced every four years for the pricing review. IPART could rely on assurance and performance reports between pricing reviews.	Agree that the State of the Assets Report should either be removed as a requirement of reduced to match the pricing determination timeline.	7.3
Hunter Water Corporation	Assets and Infrastructure	10	#	Maintain current targets for system performance standards. Price submission significantly affects how HWC will meet these levels, along with customers willingness to pay for them.	No changes to current targets contemplated. HWC to undertake customer survey and data collection to inform future assessment of targets. New operating licence condition.	6.4
Sydney Water Corporation	Assets and Infrastructure	10	#	Current system performance standards do not necessarily represent customer advocated service levels or reflect efficient life cycle costs of assets. Simply tightening current standards without exploring customer preferences or efficient costs is unlikely to bring service benefits but could limit cost efficiencies being implemented. The current standards in HWC operating licence should not be changed for the new licence but should be reviewed in the future.	No change to SPS targets as part of this review. New operating licence condition to require survey and data collection.	6.4
Hunter Water Corporation	Customers and consumers	11	#	Supply of unfiltered water to customers between Chichester Dam and Dungog water treatment plant is already addressed in the water quality provisions in the operating licence. Hunter Water's preference is to continue to use non-standard contracts to formalise the relationship with unfiltered water customers.	Continue using non-standard contracts to address the issue regarding unfiltered water users. No additional licence conditions required. Minor amendment to existing conditions to include 'non-potable' water.	6.2

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
NSW Health	Customers and consumers	11	0	Have strong concerns about the provisions of non-potable water to customers, who may themselves, or third parties, use the water for unsuitable functions (cooking, brushing teeth etc.). The provisions of non-potable water where potable water is not feasible should be well managed and controlled, probably best done through clear and concise individual customer agreements which are reflective of the management framework of the Australian Drinking Water Guidelines.	Continue using non-standard contracts to address the issue regarding unfiltered water users. No additional licence conditions required. Minor amendment to existing conditions to include 'non-potable' water.	6.2
Hunter Water Corporation	Customers and consumers	12, 13, 14, 16	+	New draft Customer Contract provided for comment. Simpler structure, improved clarity, updated communication channels, strengthened rebate clauses and removal of obsolete and duplicate references.	New Customer Contract. Minor alterations to existing conditions. Mainly editorial and structural changes to aid understanding. Ongoing discussion regarding some of the wording changes.	9.2-9.3
NSW Health	Customers and consumers	13,14,15	#	WICA licensees are not typical customers and should need to negotiate non-standard Customer Contracts. If a licensee failed to control risks in the distribution system, HWC should not* be obligated to supply the licensee. [* the word 'not' was inadvertently left out in the submission]	No change to OL as part of this review.	9.7
Department of Primary Industries - Water	Customers and consumers	13	+	A clause should be added to Hunter Water's operating licence to ensure that HWC works with WIC licensees to develop a code of conduct.	Recommend inclusion of licence condition similar to Sydney Water's licence condition.	9.4
Hunter Water Corporation	Customers and consumers	13	#	Wholesale customers - Hunter Water does not consider that there is a need to provide additional obligations in Hunter Water's operating licence or Customer Contract to facilitate the negotiation of utility services agreements with wholesale customers.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Sydney Water Corporation	Customers and consumers	13	#	There are sufficient requirements in general competition law to ensure dealings with wholesale customers comply with competition principles. There is no need to duplicate these provisions nor include any potentially conflicting provisions within an operating licence.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Department of Primary Industries - Water	Customers and consumers	14	0	No changes should be made without considering the relationship between definitions in both the operating licence and related price determinations	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	14	#	Supports the current definitions of customers and consumers in operating licence and Customer Contracts	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	14	+	Critical of HWC for restricting water (without sufficient warning) to properties where tenants are not responsible for paying utility bills. Suggests HWC should lift the restriction if it is established that the outstanding amount is not normally paid by the tenant.	HWC has responded to this claim. No further action is required to address this issue.	NA
Department of Primary Industries - Water	Customers and consumers	15	0	This matter should be considered once IPART's current review of the prices SWC and HWC can charge wholesale customer is complete	No response	NA
Hunter Water Corporation	Customers and consumers	15	#	Does not consider that there is a reasonable basis to place any additional licence obligations on Hunter Water to service anyone other than property owners.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Sydney Water Corporation	Customers and consumers	15	#	There are sufficient requirements in general competition law to ensure SWC's and HWC's dealing with wholesale customers comply with competition principles. Duplicating that in an operating licence is not optimal.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Department of Primary Industries - Water	Customers and consumers	16	+	Supports the standard HWC Customer Contract which contains obligations that are consistent with those required under the Sydney Water customer contract.	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Supports HWC decision not to introduce a late payment fee for overdue account balances.	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Supports HWC linking rebate levels to multiples of water usage in relation to supply interruptions, which is adjusted every year.	Changes to Rebates to be included in new Customer Contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Does not support HWC's proposal to tighten the eligibility criteria from providing a rebate for interruptions that occurred at any time in the day, to peak hours only (ie 5am-11pm). This may disadvantage some customers who are eligible for rebates due to service interruptions.	Changes to Rebates to be included in new Customer Contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	0	The rebate purpose is twofold. First it is to compensate customers who experience a reduced level of service. Second it acts as an incentive to prevent service failures.	Changes to Rebates to be included in new Customer Contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	+	Suggests the proposed wastewater overflow rebates is significantly less when compared to SWC.	There is no supportable reason to amend this rebate as requested. The original basis for the set level is still valid.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's plans to review Customer Contracts to improve readability, clarity and consistency with legislation and Sydney Water's Customer Contract.	No response required. New Customer Contract to be included in draft package, subject to minor wording modifications.	9.2
Public Interest Advocacy Centre	Customers and consumers	16	+	Suggests HWC provide a one-page plain English summary of the key provisions in the Customer Contract.	HWC already provides this to its customers No change to OL as part of this	9.2



Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
					review.	
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's proposal to introduce stricter eligibility requirements for planned interruption rebates.	Changes to Rebates to be included in new Customer Contract.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's proposal to revise rebate payments for dry weather wastewater overflows.	Changes to Rebates to be included in new Customer Contract.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Support HWC's proposal to revise the low water pressure rebate payment schedule.	Changes to Rebates to be included in new Customer Contract.	9.3
Hunter Water Corporation	Customers and consumers	17	0	The Hunter Water Act 1991 has not been substantively reviewed in the 25 years since its enactment and therefore a review would be timely. It would be cost-effective and beneficial to consider amending some provisions associated with varying the Customer Contract as part of such a broader review.	No change to OL as part of this review.	NA
Sydney Water Corporation	Customers and consumers	17	0	Supports flexibility regarding variations to the Customer Contract, noting this would require changes to the legislation as well as the operating licence	No change to OL as part of this review.	NA
Hunter Water Corporation	Customers and consumers	18	0	There is merit in having more than one type of Customer Contract, particularly having separate documents for residential and non-residential (business) customers. ie business(non-residential) customers have a separate CC to residential.	No change to OL as part of this review.	9.7
Sydney Water Corporation	Customers and consumers	18	#	No need for more than one type of Customer Contract. The current process of individually negotiate contracts is more appropriate to address the needs of specific customers.	No change to OL as part of this review.	9.7

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	19	#	EMS and QMS - no significant changes required. Appropriate to maintain EMS and QMS, and also maintain certification	No change to OL as part of this review.	7.4
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	19	#	There is value in retaining these management system requirements in the operating licence.	No change to OL as part of this review.	7.4
Environment Protection Authority	Environment, Quality, Performance Monitoring and Memoranda of Understanding	19	#	Notes and encourages the development and implementation of EMS to manage risks to the environment from Hunter Water's operations. Encourages IPART to review HWC's Environment Protection Licenses as part of the operating licence review to ensure consistency.	No change to OL as part of this review.	7.4
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	20	#	Opportunities to streamline reporting requirements through greater consistency in performance indicator definitions	An industry-wide review is recommended to be conducted after the completion of the operating licence review (ie post July 2017)	8.3
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	20	0	Does not consider that any performance indicators are unnecessary or unduly costly to compile but note that the situation may be different for HWC.	No change to OL as part of this review.	8.3

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Department of Primary Industries - Water	Environment, Quality, Performance Monitoring and Memoranda of Understanding	21	+	Support including a requirement for HWC to report against NWI performance indicators in the operating licence. DPI Water relies on the reporting of particular indicators for annual evaluations of the LHWP implementation and performance.	No change to OL as part of this review.	8.2
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	21	#	Maintain NWI reporting requirements with inclusion of an OL clause to require it (currently a gap in the OL)	Agreed and to be implemented either in OL or Reporting Manual	8.2
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	21	+	There is benefit in including the requirement for HWC to report against NWI performance indicators in the operating licence.	Need to draft and include a licence condition to compile and report against NWI indicators.	8.2
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	22	#	The current water quality reporting obligations are considered transparent and appropriate.	No change to OL as part of this review.	NA
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	22	-	An alternate approach of leveraging existing reporting under the drinking water quality management system may suffice, for example use of exception reporting for some elements of the framework	No change to OL as part of this review.	NA

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	23	0	Thorough review of AIR requirements to minimise reporting burden	Not relevant. Pricing to review AIR requirements.	NA
NSW Health	Environment, Quality, Performance Monitoring and memorandum of Understanding	23	0	IPART issues paper was inaccurate in stating SWC daily online water quality report was made to 'inform the public and prevent risks to public health'.	Comment - no change required	NA
NSW Health	Environment, Quality, Performance Monitoring and memorandum of Understanding	23	-	Daily reporting of water quality should not be a requirement under the operating licence.	Comment - no change required	NA
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	24	#	Continue with MOU with NSW Health	No change to OL as part of this review.	9.8
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	24	#	Supports the role of the MoU and believes maintaining licence obligation to require a MoU highlights the importance of preserving the relationship between the parties	No change to OL as part of this review.	9.8

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
NSW Health	Environment, Quality, Performance Monitoring and memorandum of Understanding	24	#	Support the obligation to require an MoU with NSW Health.	No change to OL as part of this review.	9.8
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of Understanding	25	#	Continue with exemption from PH Act, and current auditing requirements	Agreed - CBA analysis confirms that both NSW Health and Hunter Water would prefer to maintain the current auditing arrangements	6.5
NSW Health	Environment, Quality, Performance Monitoring and memorandum of Understanding	25	#	NSW Health is already informed directly by HWC of any immediate risks or potential risks to public health. NSW Health's review of recycled water and drinking water management plans focuses on potential public health issues but should not be considered an approval or endorsement of the utility's documentation. NSW Health is consulted by IPART for input into the audit scope and directly by the auditor as required, they regard the audit process as essential to ensure the ongoing adequacy of the recycled water and drinking water management plans and compliance with the Australian Guidelines for Water Recycling and Australian Drinking Water Guidelines.	NSW Health is not seeking any alteration to the auditing process. No net benefit to be gained from the change. NSW Health has no resources available for this role.	6.5
Sydney Water Corporation	Other potential licence issues	26	0	There are no potential issues in relation to competition in either our or Hunter Water's operating licences. This is also a legal matter.	No change to OL as part of this review.	NA

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Hunter Water Corporation	Other potential licence issues	27	+	Considers that there would be advantages in an operating licence review commencing two years prior to a price review. Knowledge of new or amended licence obligations one year prior to the lodgement date for a price submission would enable the water utility to incorporate any revised performance standards or additional compliance costs into operating and capital expenditure proposals.	IPART to implement timing adjustment for future reviews to be 2 years apart (ie 4 year cycle)	4.2
Public Interest Advocacy Centre	Other potential licence issues	27	+	Considers there is merit in holding future licence reviews before price determinations.	IPART to consider timing adjustment for future reviews to be 2 years apart (ie 4 year cycle) from 2022	4.5
Sydney Water Corporation	Other potential licence issues	27	0	There may be merit in aligning the two reviews but any change in timing must ensure there are no adverse financial or system performance impacts. It is difficult for a business to assess the necessary funding requirements for the price review without being able to assess the impacts of any changes to performance standards that may arise from a review of the operating licence.	IPART to consider timing adjustment for future reviews to be 2 years apart (ie 4 year cycle) from 2023	4.5
Fire and Rescue NSW	Other potential licence issues	28	+	Recommend IPART place obligations in the Hunter Water Corporation operating license to develop a Memorandum of Understanding with FRNSW, incorporating an ongoing community safety obligation and requirement to provide minimum pressures and flows across the network.	Recommend inclusion of licence condition similar to Sydney Water's licence condition	9.6
Hunter Water Corporation	Other potential licence issues	28	+	Water for firefighting - HWC does not object to formalising this relationship with FRNSW	HWC to meet with and negotiate with FRNSW	9.6
Sydney Water Corporation	Other potential licence issues	28	+	Supports an introduction of two MoUs, one with RFS and one with FRNSW	IPART to support MOU with FRNSW. No response from RFS at this stage.	9.6

Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Individual - Frank and Kim Johnson	Other issue - Complaint	NA	0	Complaint in relation to HWC's handling of wastewater overflows on a number of local properties.	IPART has contacted HWC who are investigating the complaint	NA
Public Interest Advocacy Centre	Other issue - Liveable cities	NA	0	Would like to see a conversation about how operating licences and price determinations can account for the role of water in liveable cities	IPART has reviewed inclusion of stormwater/drainage augmentation requirements, to mirror SWC OL clauses. IPART notes that Hunter Water has the right to augment stormwater/drainage infrastructure as required. Minor changes to existing licence condition.	4.3
Newcastle City Council	Other issue - Stormwater	NA	0	Not satisfied that HWC is doing enough maintenance on stormwater assets, says all of the funds they collect for stormwater services should be expended on maintenance.	The assertion is inaccurate. IPART assessment indicates that between direct and indirect costs, all money collected is used.	4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Despite SWC and HWC having the same operating licence provisions (Section 1.3.1), SWC is involved in and provides resources to floodplain management planning and amplification of stormwater assets. HWC does not undertake stormwater asset amplification and this is causing some issues as one third of properties in Newcastle are flood prone. Furthermore, their lack of actions is impacting on future development in Newcastle West where capacity constraints within the Hunter Water stormwater system at Cottage Creek impact on redevelopment of the area.	HWC may augment/construct its stormwater/drainage assets, but is not required to do so. This also impacts on HWC's capex and opex budgets and IPART's determination of efficient costs. We intend to modify the OL to include 'augment' into the licence so that HWC may augment its stormwater assets without making it a requirement to do so.	4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Council seeks amendment to HWC operating license so they are required to augment drainage service for its assets	As above	4.3



Stakeholder	Issue category	Issue No. <sup>a</sup>	Stakeholder Position	Stakeholder Comment	IPART's Response	Draft Report Chapter Reference
Newcastle City Council	Other issue - Stormwater	NA	+	Request that HWC operating licence be made more consistent with SWC's so they have similar roles and responsibilities for drainage management including asset renewal, waterway health and flooding risk and ensure HWC actively engages in the preparation and implementation of floodplain risk management plans in accordance with the NSW Government's Flood Prone Land Policy.	As above	4.3
Newcastle City Council	Other issue - Stormwater	NA	0	Disagrees with HWC opinion that stormwater does not need to be treated. Believes it is inconsistent with the <i>Protection of the Environment Operations Act 1997</i> .	As above	4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Recommends that HWC work cooperatively with councils and stakeholders to develop Water Cycle Management Plans for each catchment with common drainage and HWC should seek to rehabilitate and naturalise stormwater assets needing renewal rather than replacing these assets with concrete to align with community objectives outlined in local and state planning documents.	As above	4.3

— The 'Issue Number' refers to the numbers in the *Review of the Hunter Water Corporation Operating Licence - Issues Paper*, May 2016.

**Table B.2 Summary of submissions for the Draft Operating Licence Package (by stakeholders) – March 2017**

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Critical Infrastructure Centre	Other issue - security risk	New	+	A number of critical infrastructure assets depend on Hunter Water (eg Water supply, electricity generation, Defence (Williamstown RAAF Base), and Newcastle Ports. Potentially vulnerable to sabotage, espionage and coercion. Eg accessing and using customer information, disruption of supply or damage to infrastructure. Potential mitigations include requiring key personnel to hold security clearances, ICT and SCADA information to be held solely within Australia, appropriate cyber security and limitations on remote access to operational systems.	A number of potential options were developed to address this issue, from no changes (relying on existing regulatory requirements) through to very prescriptive licence conditions mirroring those in the electricity sector. The Tribunal decided that it was not appropriate to require consultation and suggested Hunter Water and relevant agencies should proactively and independently develop a relationship focused on relevant issues.	8.10
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	0	Supports applying rebates to the water usage charge, so that the occupant of the premises affected is the recipient of the rebate rather than the owner of the premises.	Noted.	8.3
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	0	Is satisfied that restriction of supply interruption rebates to peak hours (5am-11pm) does not prevent customers who are inconvenienced outside of these hours from lodging a claim.	Noted.	8.3

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	+	Notes that rebate for planned drinking water interruptions is only available to customers who have experienced 3 events in one year, whereas Sydney Water pays a rebate for each of the first two interruptions, and then rebates the full water service charge for the third event.	Very few public water utilities give rebates for each planned interruption event (e.g. Yarra Valley Water, Sydney Water). We consider rebates are payment for inconvenience. Planned interruptions are less inconvenient than unplanned interruptions. Planned interruptions are also a necessary part of infrastructure maintenance. We recommend minimal change to rebates for planned interruptions, which is to limit the rebate to interruptions occurring in peak hours (5am-11pm) only, making it consistent with the criteria for unplanned interruptions.	8.3
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	+	Notes the value of rebate for 3 or more unplanned service interruptions is higher in Sydney Water's Customer Contract than in Hunter Water's Customer Contract.	We consider that there is no thorough evaluation or strong justification to support Sydney Water's current rebate levels. The increase in rebates proposed by SWC in 2009-10, was based on an argument that was weighted relative to the extent of inconvenience caused to customers, including repeat events, and that the rebates hadn't been changed for a long time and were too low. Considering the increase in level of inconvenience of repeated interruptions, we recommend an increase in the rebate for unplanned interruptions for three or more events from 15kL to 30kL.	8.3

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	+	Suggests Hunter Water to increase its rebates to match Sydney Water's, either through increasing the kilolitre allowance per event and by providing a rebate for each event.	We consider that, Hunter Water should increase the value of its rebates for the third events for unplanned water interruptions and wastewater overflows to a level that is similar to its annual service charge. Customer surveys and an investigation into rebates and performance standards before the next licence review will provide the information necessary to make a definitive recommendation at a later time.	8.3
Energy and Water Ombudsman NSW	Customers and consumers - Rebates	9.3	+	Suggests Hunter Water to match the value of wastewater overflows rebate to those of Sydney Water's rebate for repeated events. EWON notes the significant discrepancy between the value of the rebates provided by each utility when the inconvenience suffered by a customer is the same no matter where they live.	We consider that, Hunter Water should increase the value of its rebates for the third events for wastewater overflows to a level that is similar to its annual service charge, to reflect the increase level of inconvenience. Customer surveys and an investigation into rebates and performance standards before the next licence review will provide the information necessary to make a definitive recommendation at a later time.	8.3
Energy and Water Ombudsman NSW	Customers and consumers - Customer Contract	9.2	+	In relation to flow restrictions on tenants, EWON proposes Hunter Water to i) allow tenants facing restriction of water flow extra time to establish payment plans or to access NCAT; and ii) Hunter Water should lift restrictions on the basis of part payment for tenants (which is currently unavailable under HWC's policy for tenants/restrictions).	We consider that flow restrictions on tenants are covered adequately by the provisions of the Customer Contract. Any issues regarding application of the policy should be discussed between EWON and Hunter Water. Specific additional requirements in the licence or the Customer Contract are not necessary at this stage.	8.2

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Hunter Water	Customers and consumers - Obligation to supply	4.4	+	<b>Obligation to Supply:</b> Supports the change but requires consistent definition of wholesale services to match the wholesale pricing review.	We have removed the use of the term 'wholesale customer' in the recommended licence. The obligation to service applied to WIC Act Licensee and property. The type of services available for connection includes supplying water, providing sewerage services and/or disposing of wastewater, which follows the 'foreclosed' principle as Hunter Water is a monopoly supplier.	4.4
Hunter Water	Other issue - Stormwater	4.3	0	<b>Stormwater:</b> Supports the changes, which will enable better liaison with Councils to improve stormwater flows, water quality and liveability issues.	Noted.	4.3
Hunter Water	Water Quantity	5.4	0	<b>Economic level of water conservation:</b> Supports the ELWC approach.	Noted	5.4
Hunter Water	Performance Monitoring	6.4	#	<b>Performance standards:</b> Supports IPART's proposed approach to retain current system performance standards pending customer engagement on values and preferences. Suggests joint project with Sydney Water to survey customers to inform future changes to System Performance Standards. Hunter Water plans its capital works program to meet the water pressure standard, subject to the 370 ML/Day limit. Hunter Water suggests IPART retain 370 ML/day limit for low water pressure, as its removal effectively tightens the water pressure standard.	System Performance Standards will be reviewed as part of additional investigations planned for completion before the next licence review. Agree to retain 370 ML/day provision until further investigations on System Performance Standards are complete.	6.4

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Hunter Water	Customers and consumers - Rebates	9.3	-	<b>Customer Contract - Rebates:</b> Do not support changes in the operating licence to extend rebates to consumers. It is impractical as billing is based on property ownership. Hunter Water has no knowledge of tenancies and no mechanism to rebate consumers directly. Under the terms of standard residential tenancy agreement, a landlord can pass on water usage charges to tenants provided that certain minimum criteria have been met (such as the provision of water efficient fixtures and fittings).	Wording in recommended licence clause 5.2.1(b) has been changed.	8.3
Newcastle City Council	Other issue - Stormwater	4.3	0	Notes that a clause has been added to empower Hunter Water to augment their drainage assets.	Noted.	4.3
Newcastle City Council	Other issue - Stormwater	4.3	+	Requests that annual reporting of the moneys collected and expended on stormwater services be reported to the public.	We monitor Hunter Water's expenditure and income to determine efficiency and prudence in its financial reporting and operations. The information would be reported at each pricing determination (ie every 4 years). Otherwise the information could be extracted from Hunter Water's annual report. There is no requirement for this information to be published explicitly.	4.3

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Newcastle City Council	Other issue - Stormwater	4.3	+	Notes that the drainage augmentation clause does not <b>require</b> Hunter Water to undertake works to augment and increase capacity. Council's position is that Hunter Water should be required to participate in collaborative works for flood risk management, to develop Water Cycle Management Plans (WCMP) cooperatively with Councils and other stakeholders.	Hunter Water has no obligation in this area as the <i>Hunter Water Act 1991</i> has no provisions in this regard. The outcome of flood risk management and WCMPs is environmental management/improvement. These issues are covered by environmental legislation and the environmental regulator, and therefore not duplicated in the operating licence. Council is encouraged to develop communication and collaborate with Hunter Water independently of the operating licence.	4.3
Newcastle City Council	Other issue - Stormwater	4.3	+	Notes that a stormwater capacity constraint has been addressed, but stormwater quality issue has not been addressed by IPART. Council recommends an integrated approach to stormwater where opportunities to increase capacity of Hunter Water's assets are considered in combination with design life and waterway health.	Hunter Water has no such obligation under the <i>Hunter Water Act 1991</i> or the operating licence, and we do not intend to obligate Hunter Water in this regard. Council should collaborate with Hunter Water separately.	4.3
NSW Health	Water Quality	6.5	#	NSW Health is satisfied that the operating licence provides for adequate protection of public health.	Noted.	6.5
NSW Health	Customers and consumers - MoU	9.8	#	Supports the retention of MOU and water quality obligations in the operating licence.	Noted.	8.9
NSW Health	Water Quality	6.3	#	Does not object to the removal of the requirements for Hunter Water to "seek approval" for significant changes to Water Quality Management System documents.	Noted.	6.3

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
NSW Health	Water Quality	6.2	#	Considers that risks from non-potable water use are best managed through clear and concise information and agreement with customers.	Noted.	6.2
NSW Health	Water Quality	6.5	#	Supports IPART's auditing role and the obligation in the operating licence.	Noted.	6.5
NSW Health	Water Quality	6.5	0	Intends to grant Hunter Water a similar exemption (exemption from a Quality Assurance Program) for the duration of the new operating licence.	Noted.	6.5
Property Owners' Association	Customers and consumers	9.2	+	The new licence must clearly define the terms for customer, consumer and user.	We consider our definition of Customer consistent with the Hunter Water Act. Changing the definition of Customer is outside of the scope of this review. Our definition of Consumer includes any person who consumes or uses water. We consider the definitions appropriate.	8.11, Customer Contract
Property Owners' Association	Customers and consumers	NA	+	The new licence must require that all residential households be supplied with a contractual agreement and with an individual metered supply, and allow uniform credit management.	We consider there may be merit in reviewing the provider-customer relationship and recommend a review to the Government to consider the policy implications.	8.11
Property Owners' Association	Customers and consumers	NA	+	The new licence must require the Customer Advisory Group to be made up of those holding Customer Contracts if the name is the intent.	We have reviewed the membership of the customer advisory group and made a recommendation to include certain types of customers only.	8.4



Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Property Owners' Association	Customers and consumers	5.2	+	Change the Water Consumption Target definition to better reflect use per head of population rather than per household/customer.	We recommend replacing the Water Conservation Target and the Economic Level of Leakage with the Economic Level of Water Conservation (ELWC) approach. The Water Conservation Target will be removed once the ELWC methodology has been approved and applied.	5.4
Property Owners' Association	Customers and consumers	NA	+	Water meters be supplied to all households and be tested regularly, and provide revised procedures for assessing water use for properties with defective/missing water meters.	We consider meter problems should be dealt with between the property owner and Hunter Water separate to the operating licence review.	NA
Property Owners' Association	Customers and consumers	NA	+	New operating licence to include the introduction of a 100% user pays system.	This is outside the scope of this operating licence review.	NA
Sydney Water	Other issue - Licence Structure	3.2	0	<b>Licence structure:</b> Considers the proposed licence structure may make it easier for stakeholders to understand. A consistent approach to the licence structure across utilities would make it easier to compare obligations.	Noted. We are adopting a similar licence structure for the new WaterNSW licence, which is under review at the same time as the Hunter Water operating licence.	3.2
Sydney Water	Other issue - Licence Objective	4.2	+	<b>Licence objective:</b> Supports the proposed licence objective in principle, but suggests wording be changed. The proposed licence objective is confusing because points b) and c) are not objectives of the licence, but rather describe the licence review process. Prefer wording of the objective clause remain unchanged or be made consistent with Sydney Water's licence.	We made minor wording change in the recommended licence clause 1.1.1(b) from 'consider' to 'recognise'. We consider the rest of the clause suitable.	4.2

Stakeholder	Issue category	Draft Report Section No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Final Report Chapter Reference
Sydney Water	Other issue - Stormwater	4.3	0	<b>Stormwater services:</b> Supports the addition of new licence clause regarding stormwater services. Considers the example in the draft report not consistent with good stormwater management practice.	Noted.	4.2
Sydney Water	Customers and consumers - Obligation to supply	4.4	-	<b>Obligation to supply services:</b> Do Not support. Suggests postponing or redrafting to ensure consistency between regulatory instruments. Operating licence imposes an obligation to provide "services" instead of wholesale services. New obligation should apply only to wholesale services and this requires a definition that matches the one in the wholesale pricing determination. Equally need wholesale customer definition to match the one in the pricing determination. Also need to clarify area of operations limitation regarding end-use customers.	We have removed the use of the term 'wholesale customer' in the recommended licence. The obligation to service applied to WIC Act Licensee and property. The type of services available for connection includes supplying water, providing sewerage services and/or disposing of wastewater, which follows the 'foreclosed' principle as Hunter Water is a monopoly supplier.	4.4
Sydney Water	Other issue - Review period	4.5	0	<b>Licence review period:</b> Would assist Sydney Water with long-term planning and resourcing. Supports IPART further considering the review period for all regulated water utilities, and requests that Sydney Water be involved in future discussions.	Noted.	4.5
Sydney Water	Water Quantity	5.4	#	<b>Economic level of water conservation:</b> Supports the draft licence conditions. Needs to clarify the 'level of leakage' and the notes in relation to this matter.	Revised the relevant licence clauses to remove the proposed requirement on Hunter Water to apply the Economic Level of Leakage to determine the level of leakage in the recommended licence.	5.4
Sydney Water	Water Quantity	5.4	0	<b>Water conservation report:</b> Supports transparent reporting on water conservation activities.	Noted.	Reporting Manual section 2.

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Sydney Water	Water Quality	6.3	0	<b>Note to clarify unfiltered water:</b> Supports <b>Maintain water quality compliance regime:</b> Supports	Noted. We consider obtaining NSW Health's agreement on 'significant changes' is part of the implementation of the Drinking Water Quality Management System to the satisfaction of NSW Health in recommended licence clause 3.1.2.	6.3
Sydney Water	Performance Monitoring	6.5	-	<b>Water quality indicators:</b> Do not support retention of water quality indicators in Appendix B, already covered by ADWG reporting requirements. Sydney Water operating licence does not have water quality indicators in its Reporting Manual.	We contacted NSW Health for input on this matter. NSW Health suggests retention of this indicator. All IPART performance indicators are retained until a future review is complete, after the conclusion of this licence review.	9.3
Sydney Water	Performance Monitoring	6.4	#	<b>System Performance Standards:</b> Inconsistency in how Hunter Water's pressure and water continuity standards are counted (number of properties) compared to its wastewater overflow standard. Counting each part of multiple occupancy separately is not consistent with Sydney Water's licence. Suggests one bill - one count.	Minimal change has been introduced to clarify the counting of granny flats. System Performance Standards will be reviewed as part of additional investigations planned for completion before the next licence review.	6.4
Sydney Water	Organisational systems management	7.2, 7.4	0	<b>Systems:</b> Prefers operating licence to refer to ISO standards instead of AS/NZS, where they are consistent. AS/NZS standards are not always updated at the same time. Note that for complaint management, the AS/NZS standard is preferred, matches EWON's definition of customer.	We consider that, in the first instance, Hunter Water's systems to be made consistent with AS/NZS standards, with scope to request adherence to an equivalent standard eg ISO, to be made by Hunter Water if it is necessary.	7.2, 7.4
Sydney Water	Performance Monitoring	8.2, 8.3	+	<b>Performance indicator reporting:</b> Recommends re-insertion of current licence clause 8.4, and should relate to both NWI indicators and performance indicators. Alternatively address in cl 5.2.	We have clarified and addressed this issue in the recommended licence clause 6.2.	9.2, 9.3

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Sydney Water	Other issue - Reporting Manual	8.3	#	<b>Reporting manual issues:</b> Recommends drafting amendments in section 5.1.1, 6.3 and Appendix A in the Reporting Manual.	Noted. Minor changes made in the Reporting Manual.	Reporting Manual sections 5 & 6
Sydney Water	Customers and consumers - Customer Contract	9.2, 9.3	-	<b>Customer Contract:</b> Generally support changes or are neutral. Do not support changes to rebates extended to consumers. Impractical. Billing based on property ownership. No knowledge of tenancies and no mechanism to rebate consumers.	Wording in recommended licence clause 5.2.1(b) has been changed.	8.2, 8.3
Sydney Water	Other issue - Drafting error	NA	#	Minor editing changes to operating licence clause 6.5.1 and section 6.3 of Reporting Manual.	The title of the complaints handling standard has been updated. Drafting error corrected in the Reporting Manual section 5.1.	Reporting Manual section 5
Sydney Water	Customers and consumers - Code of conduct	9.4	-	<b>Code of Conduct:</b> Support in principle, but limit to where a WIC licensee requests a code of conduct - not a definite requirement for all WIC licensees. Also reference to 'codes under the WIC Reg' - needs editing.	Clause 5.8 of the recommended operating licence has been redrafted to address this issue.	8.4
Sydney Water	Customers and consumers - MoU	9.8	#	MOU with DPI Water: Supports this type of requirement. MOU with FRNSW: Supports this type of requirement. MOU with Health: Supports in principle. Recommend removing the requirement to comply with the MOU (not a compliance instrument).	Noted the support for the MOUs with DPI Water and FRNSW. NSW Health does not oppose the change with 'comply'. We have added 'best endeavours to comply' with the MOU with NSW Health in the recommended licence clause 5.9.1.	8.6, 8.7, 8.9