

WATER METERING CODE

Draft Decision

August 2014



REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (**Commission**) invites written submissions from all members of the community on this paper. Written comments should be provided by **19 September 2014**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is the Commission's policy to make all submissions publicly available via its website (www.escosa.sa.gov.au), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to publish any submission based on length or content (for example containing material that is defamatory, offensive or in breach of any law).

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The Essential Services Commission of South Australia is the independent economic regulator of the water, electricity, gas, ports and rail industries in South Australia. The Commission's primary objective is the *protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services*. For more information, please visit www.escosa.sa.gov.au.

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GLOSSARY OF TERMS

Commission	Essential Services Commission of South Australia
CWMS	Community Wastewater Management Systems
EPA	Environment Protection Authority
ESC Act	Essential Services Commission Act 2002
EWOSA	Energy & Water Ombudsman of South Australia
NMI	National Measurement Institute
SA	South Australia
WI Act	Water Industry Act 2012
WSAA	Water Services Association of Australia

EXECUTIVE SUMMARY

The Essential Services Commission (**Commission**) is the economic regulator of the water and sewerage services retail sectors in South Australia under the *Water Industry Act 2012*. As a part of that role, the Commission is responsible for the development, implementation and on-going monitoring of consumer protection codes and rules in those sectors.

The Commission is consulting on the need (or otherwise) to introduce regulatory consumer protection provisions in relation to water metering, for example, through the introduction of an industry code under the *Essential Services Commission Act 2002*. Underpinning the review is the proposition that water customers should be satisfied that consumption of water is accurately metered and that they are billed accordingly.

It is the Commission's draft position that, at this time, there does not appear to be a gap in consumer protection in respect of water retail services metering that would justify the introduction of further regulatory requirements.

The purpose of this Draft Decision is to seek stakeholder and community views on the Commission's draft position and its reasoning.

Of note, this review does not extend to metering for sewerage retail services or trade waste services, nor to a consideration of whether or not meters should be rolled-out to all connection points at which water retail services are supplied. The Commission has separately inquired into the costs and benefits of such a mandatory roll out program and has found that the costs would significantly outweigh any benefits.

To date, the Commission has developed two broad-ranging consumer protection codes. Those codes are: the *Water Retail Code – Major Retailers*; and, the *Water Retail Code – Minor and Intermediate Retailers*. They set behavioural standards which apply to licensed water and sewerage services retailers in their dealings with customers.

The matters covered by the codes include customer information provision, connection obligations, reliability of supply standards, billing and payment requirements, complaint handling and dispute resolution processes and disconnection rules.

In developing the codes, the Commission noted an intention to review the need for further regulatory instruments or controls which might enhance consumer protection (where the benefits outweigh the costs of regulation) once the overarching Water Retail Code was in place.

One matter identified for further consideration was whether or not the combined operation of the Water Retail Codes together with other technical standards (such as mandatory standards developed by the National Measurement Institute) would provide sufficient consumer protections in respect of water metering arrangements.

The Commission has now reviewed the terms of both the codes and those other technical standards. With the benefit of submissions received in response to an Issues Paper on this matter it released in May 2014 and further research it has undertaken, it has reached the

draft conclusion that, at this time, there is no relevant consumer protection gap which needs to be addressed through further regulatory action by the Commission.

In particular, the Water Retail Codes provide that, where a meter is in place, a customer must be billed on the basis of meter readings and any changes to prices or tariffs must be pro-rated based on such readings. Further, customers have the right to seek meter tests where they suspect the relevant readings are inaccurate.

In terms of technical standards, the National Measurement Institute has developed mandatory standards that deal with matters such as metrological and technical requirements, pattern approval and initial verification and model test reports. Standards Australia has a suite of voluntary standards¹ which include such things as in-service compliance testing. Further, the Water Services Association of Australia has developed a number of non-binding national codes governing a range of metering related issues.

The Commission notes the low number of water metering complaints reported by customers to the Energy and Water Ombudsman (13 in the period March 2012 – May 2014). Further, of the 303 complaints made by customers to SA Water regarding meter accuracy in that same period, only one meter was found to be over-recording water use, about nine per cent were found to be under-recording water use, with the remaining ninety per cent found to be accurate. While not conclusive, those data indicate that metering issues are not a significant source of customer concern and that existing technical standards appear to work effectively.

The Commission is seeking submissions on this Draft Decision from interested parties by **19 September 2014**.

¹ If Australian Standards are called up in State and/or Commonwealth legislation, they become mandatory.

1. INTRODUCTION

The Commission is established under the *Essential Services Commission Act 2002 (ESC Act)* as a regulator of certain essential services in South Australia, with a primary objective of protecting the long-term interests of South Australian consumers with respect to the price, quality and reliability of those essential services.

The *Water Industry Act 2012 (WI Act)* establishes the regulatory framework for the water and sewerage industry covering economic regulation, technical regulation, water planning and customer complaint handling. All retail water and sewerage services are covered by the WI Act, including non-drinking water, recycled water and stormwater retail services. A retail service is defined as the sale and supply of water by a person for use where the water is to be conveyed by a reticulated system; or the sale and supply of sewerage services for the removal of sewerage.

Under the WI Act, the Commission is responsible for the economic regulation of water and sewerage retail services in South Australia, which includes services provided by SA Water, Local Government and private operators. That role includes industry licensing, consumer protection, performance monitoring, compliance and retail pricing matters.

The WI Act requires the Commission to establish a consumer protection framework through the use of industry codes made under the ESC Act. Industry codes prescribe detailed rules of conduct and procedure that must be followed by industry participants.

1.1 Purpose and draft decision

The Commission is consulting on the need (or otherwise) to introduce regulatory consumer protection provisions in relation to water metering, for example, through the introduction of an industry code under the ESC Act.

Underpinning the review is the proposition that water customers should be satisfied that consumption of water is accurately metered and that they are billed accordingly. The key consideration in that context is to ensure that no gaps in customer protection exist between the Commission's existing regulatory framework and the provisions of current industry-based technical standards.

The purpose of this Draft Decision is to seek stakeholder and community views on the Commission's draft position and its reasoning.

1.2 Scope

In considering the need (or otherwise) for regulation of water metering, this review does not extend to metering for sewerage retail services or trade waste services, nor to a consideration of whether or not meters should be rolled-out to all connection points at which water retail services are supplied. The Commission has separately inquired into the

costs and benefits of such a mandatory roll out program and has found that the costs would significantly outweigh any benefits.²

1.3 Process

On 2 May 2014, the Commission published an Issues Paper entitled *South Australian Water Metering Code* for public consultation.³ That Issues Paper sought submissions on the need for a Water Metering Code in the water industry in South Australia.

Five submissions were made to the Issues Paper:

- ▲ Australasian Sub Meters (Meter Supplier)
- ▲ City of Salisbury (Licensee)
- ▲ Barossa Council (Licensee)
- ▲ SA Water (Licensee)
- ▲ National Measurement Institute

Copies of those submissions are available on the Commission's website.⁴

The Commission has been assisted by the submissions it has received through this review process. The Commission has carefully considered the issues raised by stakeholders through the consultation period and, where relevant, incorporated the suggestions into this Final Decision.

Where appropriate, the Commission has, either by direct quotation or by reference to themes or arguments, mentioned certain arguments and submissions in the text to assist stakeholders to understand the positions it has reached; however, a failure to reference an argument or submission does not mean that the Commission has not taken that argument or submission into account in its deliberations.

While the Commission has not adopted all positions put in submissions, all submissions have been helpful in informing the consideration of each of the relevant issues and the competing viewpoints.

² In 2013, under the Water Industry Act the Commission undertook a review into the costs and benefits of rolling-out metering to all public housing customers. A copy of the final report for that review is available from the Commission's website at <http://www.escosa.sa.gov.au/projects/188/water-industry-act-review-of-water-meter-arrangements.aspx>. The Commission is currently inquiring into Reform Options for SA Water's Drinking Water and Sewerage Prices which, in part, includes consideration of a roll-out of meters to all SA Water customers. A copy of the draft Inquiry report is available at <http://www.escosa.sa.gov.au/projects/189/inquiry-into-drinking-water-and-sewerage-retail-services-pricing-reform.aspx>

³ Refer: <http://escosa.sa.gov.au/projects/210/water-metering-code.aspx>

⁴ Refer: <http://escosa.sa.gov.au/projects/210/water-metering-code.aspx>

2. DISCUSSION

To date, the Commission has developed two broad-ranging consumer protection codes under the ESC Act. Those codes are: the *Water Retail Code – Major Retailers*; and, the *Water Retail Code – Minor and Intermediate Retailers (Retail Codes)*.⁵ The Retail Codes set behavioural standards which apply to licensed water and sewerage services retailers in their dealings with customers.

In developing the codes, the Commission noted an intention to review the need for further regulatory instruments or controls which might enhance consumer protection (where the benefits outweigh the costs of regulation) once the overarching Retail Codes were in place.⁶

One matter identified for further consideration was whether or not the combined operation of the Retail Codes, together with other technical standards (such as mandatory standards developed by the National Measurement Institute), would provide sufficient consumer protections in respect of water metering arrangements.

2.1 Market Overview

The water retail market in South Australia comprises 41 licensed water retailers. These are categorised as minor, intermediate or major, depending on the scale of their operations. A minor retailer provides a retail services to 500 or fewer connections, an intermediate retailer to more than 500 but less than 50,000 connections and a major retailer to 50,000 or more connections (SA Water is the only major retailer).⁷

A Retail Code applies to each licensee (based on their categorisation) and compliance with the terms of that Retail Code is a licence condition.

2.2 Current consumer protection arrangements

As noted above, there are two current regimes providing consumer protections in respect of metering for water retail services. The first is the Commission's Retail Codes, the second is the suite of industry-based technical standards (such as standards developed by the National Measurement Institute and Standards Australia).

2.2.1 Scope of the Retail Codes

The Retail Codes provide customer protections associated directly with metering, such as billing frequency and the basis for billing.

In particular, they contain requirements on billing disputes and the process to be followed where a customer requests a meter reading or metering data to be checked, or the meter tested. Further, in the event a customer is undercharged or overcharged as a result of a

⁵ Water Retail Codes <http://www.escosa.sa.gov.au/water-overview/codes-guidelines/water-codes.aspx>

⁶ Economic Regulation of the South Australian Water Industry <http://www.escosa.sa.gov.au/library/120607-EconomicRegulationWaterIndustry-FinalAdvice.pdf>

⁷ A complete list of licensees can be found on the Commission's website at <http://www.escosa.sa.gov.au/water-overview/licensing/retail-licences.aspx>

metering inaccuracy, the Retail Codes specify the process to be followed by a retailer when correcting the error.

Under the provisions of the Retail Codes, if a customer is dissatisfied with their meter accuracy, an application can be made to the retailer for a meter test. The customer's meter is tested alongside a test meter to prove accuracy and, if proven inaccurate, is replaced. If the meter proves satisfactory, the customer may still insist on a further test which is carried out by an accredited organisation. If the meter proves within specification the customer is charged for the test.

Any undercharged or overcharged amounts will be corrected on the customer's bill in accordance with the provisions in the Retail Code. If the customer remains unsatisfied with the results of the meter test, they may escalate their complaint in accordance with the retailer's Enquiries, Complaints and Dispute Resolution Procedure for resolution.

2.2.2 Industry Technical Standards

The National Measurement Institute has developed a suite of mandatory⁸ standards that are underpinned by the *National Measurements Act 1960*. Standards Australia has also developed various standards (these standards are voluntary unless they are called up in State or Commonwealth legislation). Further, the Water Services Association of Australia (WSAA) has developed a number of non-binding national codes governing a range of metering related issues.

National Measurement Institute Standards (mandatory)

- NMI R 49-1 Metrological and technical requirements
- NMI R 49-2 Pattern approval and initial verification
- NMI R 49-3 Model test report

Australian Standards (voluntary - unless specified by legislation)

- AS 3565.1 – Meters for cold and heated drinking and non-drinking water
- AS 3565.2 – Meters for water supply – Combination meters
- AS 3565.3 – Meters for water supply – Water Meters with integral dual-check valves
- AS 3565.4 – Meters for water supply – In-service compliance testing
- AS 3565.5 – Meters for water supply – Water meters with two integral single check valves

WSAA National Codes (voluntary)

- WSA 10 - Sub-Metering Code of Practice Version 1.1
- WSA 11 - Compliance Testing of In-Service Water Meters Version 1.1
- WSA 12 - Meter Selection and Installation Code of Practice Version 1.1
- WSA 13 - Fire Service Metering Code of Practice Version 1.1
- WSA 14 - Sub-Metering Code of Practice Version 1.1
- WSA 15 - Trade Waste Metering Code of Practice Version 1.1
- WSA 16 - 2013 Water Meter Pattern Compliance and Data Sharing Code of Practice Version 1.1
- WSA 17 - Standpipe and Hydrant Metering Code of Practice (Draft)

⁸ As water meters are used for trade measurement the NMI standard has become the mandatory industry standard.

Generally, meters are accurate and they reliably record water consumption. Meters are sealed for tamper protection to prevent, as best as possible, any bias in meter performance. They are replaced at their end-of-life (following testing), when measuring accuracy is determined to be out of specification.

In-service compliance testing is carried out by SA Water in accordance with AS 3565 – Meters for Water Supply, Part 4. That standard requires a sample of meters to be taken from service and tested for accuracy. If the sample of meters fails the accuracy test, the population of that meter type and age is replaced. Testing is carried out on a three year cycle.

2.3 *Are current arrangements adequate?*

In combination, the provisions of the Retail Codes and the industry technical standards cover a broad field including consumer-facing issues (Retail Codes) and technical metrological matters (technical standards).

2.3.1 *Submissions*

Respondents to the Issues Papers put a range of views as to the effectiveness of those arrangements.

Australasian Sub Meters put the view that it does not believe that the current metering arrangements provide adequate customer protections. However, that view was largely based on its position that meters should be rolled-out to all connection points.

As noted earlier in this Draft Decision, the Commission has separately considered that matter, finding that the costs of a mandatory meter roll-out, under a range of scenarios, significantly outweigh any overall consumer benefits that might be realised. For that reason this review is not considering meter roll-out.

Barossa Council, the City of Salisbury and SA Water, while noting that there might be some potential consumer benefits (for example, greater standardisation of retailer metering practices), each noted the potential for additional costs to be imposed through further regulatory requirements.

In its submission, the Barossa Council, which retails bulk re-use water, noted that it agrees the basis of charging with customers prior to commencing supply and that, given the nature of the water provided, the actual cost of water supplied is very low. In those circumstances the Council noted that any improved accuracy over its current metering arrangements would need to be considered against the costs of complying with new metering requirements.

While the Barossa Council did not quantify those costs, nevertheless the point it makes is that, for at least some sub-sectors of the water supply market, given the low price of the service provided, any additional regulatory costs that flow through to end-use consumers may adversely affect the economic merits of current arrangements.

The City of Salisbury provides a service which is of a similar nature to that of the Barossa Council (although it provides it mainly to domestic customers). In its submission it also noted that installation, maintenance and reading of meters could become a significant cost burden in the context of the service it provides. However, it did note that a water metering code could be of value in ensuring all retailers are working to similar standards and improving customer confidence in the industry.

The Commission accepts that, for low-cost sectors of the water industry, the propositions put by the Barossa Council and the City of Salisbury are valid concerns and that, for at least that class of service, current technical standards appear likely to be adequate, with additional regulation risking adding a cost with limited offsetting customer benefits.

SA Water's submission noted that there is sufficient existing national governance and guidance on customer metering and that, in its view, further regulation would provide no further benefit while increasing the costs of compliance.

2.3.2 Customer complaints

The Commission has considered other evidence which might go to the effectiveness of current arrangements. In particular, it has considered the number of complaints made to the Energy and Water Industry Ombudsman and to SA Water (no data are yet available for other water retailers) in relation to water metering.

In terms of complaints made by customers to the Energy and Water Ombudsman, there were only 13 water metering complaints in the period March 2012 – May 2014.

In terms of complaints made to SA Water, of the 303 complaints made by customers regarding meter accuracy over the past two years, only one meter was found to be over-recording water use, about nine per cent were found to be under-recording water use, with the remaining ninety per cent found to be accurate.⁹

While not conclusive, those data indicate that metering issues are not a significant source of customer concern and that existing technical standards appear to work effectively.

2.3.3 Market settlement

Unlike the electricity and gas markets, there are no obligations in relation to the conversion of accumulated metering data into trading interval metering data to facilitate a wholesale market settlement, nor do the same complexities of data management exist.

2.4 Draft conclusions

When taking into account mandatory water metering technical standards and the customer protections contained in Water Retail Codes, there does not appear to be a gap in consumer protection which would justify the introduction of additional regulation for the metering of water retail services.

⁹ For the calendar year 2013 (the first year in respect of which the Commission collected data as the economic regulator of SA Water), SA Water reported 1713 complaints across all elements of its regulated business activities.

Feedback received in submissions to the Commission's earlier Issues Paper on this issue largely supports this view.

There have been few water metering complaints reported to Energy and Water Ombudsman over the past two years, with a low number of complaints regarding meter accuracy reported by SA Water (of which only one showed an error in favour of SA Water). No other evidence of any material problems within the scope of this review in respect of water metering practices in South Australia has emerged from the review process to date.

The design of water meters also provides a financial incentive to water retailers to ensure accuracy which, in turn, also reduces financial risks for customers. This is because meters tend to under-read consumption as they wear, due to additional water being able to slip through the meter where gaps are created between contact surfaces of the moving parts. It is therefore in the best interest of the retailer to manage its meter fleet to minimise the revenue impact of inaccurate meters.

Water metering has to date, been adequately regulated in terms of meeting retailer and customer requirements by the existing technical standards.

For these reasons and the reasons set out in the forgoing sections, it is the Commission's draft position that, at this time, there does not appear to be a gap in consumer protection in respect of water retail services metering which would justify the introduction of further regulatory requirements.

DRAFT DECISION

Taking into account mandatory water metering standards and the customer protections contained in the Commission's Water Retail Codes, at this time there does not appear to be a gap in consumer protection in respect of metering for water retail services which would justify the introduction of further regulatory requirements such as a Water Metering Code.

3. NEXT STEPS

The Commission is seeking stakeholder and community view on the draft positions and reasoning set out in this Draft Decision. Submissions should be provided by **19 September 2014**.

Details on how to make submissions is set out on the inside front cover of this document.

The Commission will consider any relevant issues raised in the submissions and intends to release a Final Decision in October 2014.



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