

# SOUTH AUSTRALIAN WATER METERING CODE

*Issues Paper*

May 2014



## REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (**the Commission**) invites written submissions from all members of the community on this paper. Written comments should be provided **16 June 2014**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is Commission's policy to make all submissions publicly available via its website ([www.escosa.sa.gov.au](http://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).

Responses to this paper should be directed to:

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Any queries relating to this consultation should be directed to:

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# SOUTH AUSTRALIAN WATER METERING CODE

## BACKGROUND

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 Essential Services Commission of South Australia (the **Commission**) is responsible for the economic regulation of water and sewerage retail services in South Australia (**SA**), which includes services provided by SA Water, Local Government and private operators. Our role includes industry licensing, consumer protection, performance monitoring, compliance and retail pricing matters.

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 WIA declares the water industry to constitute a regulated industry for the purposes of the ESC Act thus enabling the Commission's general regulatory powers

under that Act. In accordance with the WI Act, the Commission is compelled to make a retail licence subject to certain conditions, including conditions requiring compliance with applicable codes or rules made under the ESC Act.

The Commission has made various key regulatory instruments thus far, such as the Water Retail Code, in accordance with the requirements of the WI Act. However, no specific code has been developed for water metering similar to those that exist for the gas and electricity industries. Indeed, it appears that no such regulatory requirements apply to the water industry in any Australian jurisdiction.

While SA Water is currently the primary water and sewerage service provider in South Australia, there are other water and sewerage service providers in South Australia that provide similar services. A code, if required, would place a mandatory requirement on all retailers to comply with its requirements when operating as a licenced retailer in SA.

Stakeholders, interest groups and the wider community are encouraged to forward submissions on this Issues Paper, thereby contributing to the process of determining the need for a water metering code and, if deemed necessary, the code itself. A series of questions for consideration can be found at the end of this paper.

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## IS THERE A NEED FOR A WATER METERING CODE?

Consumers who pay for an essential service must be provided with a degree of transparency and protection in receiving those services, particularly where a monopoly service provider is involved. The Commission is cognisant of the current metering arrangements and notes that no evidence of any material problems have been brought to its attention.

Consumption on the basis of water meter readings directly results in customer invoicing. Inaccurate meters have the potential to create significant billing issues. Compliance with codes and standards is intended to address retailer behaviour, meter accuracy and correctness of charges based on meter readings.

SA Water also measures trade waste from businesses that are required to install an effluent flow meter as a condition of its trade waste discharge permit. These meters provide accurate information regarding the rate, and volume of discharge to the sewer.

The installation, use and accuracy of water meters are governed by a series of Australian Standards. All retailers, licenced for the purposes of the WI Act, are also bound to comply with the various codes and guidelines of other regulatory bodies.

The metrological properties of meters are defined by the appropriate Australian Standards and Specifications. The question is whether or not these Standards and Specifications are being adhered to.

The Commission must weigh up benefits to the consumer against the level of complexity, or the regulatory burden imposed by a code, that may be faced by retailers in context to the number of customers served.

In general, this paper refers to the supply and delivery of potable and recycled water to customers, usually by SA Water (the monopoly service provider), and metropolitan and regional councils or private operators, but also includes the sale of water from bulk water suppliers to individual councils and other

organisations. If the current arrangements are seen to have certain shortcomings, it may be necessary to prescribe requirements for the supply, use and operation of water meters provided by retailers in SA.

In December 2010, the Commission consulted on the introduction of a metering code in its paper *“Economic Regulation of the South Australian Water Industry - Statement of Issues”*. One respondent to the paper noted that the development of a Water Metering Code would provide clarity and protection for new market entrants and customers. This would assist in regulating the industry and supporting the entry of new providers across the water industry. Another respondent favoured a consistent approach across essential services and supported regulation of metering in the water industry in the same way that electricity and gas metering is regulated.

In the interest of consumer protection, there is merit in opening this matter to further consultation to enable the Commission to determine the need for further regulatory controls in the form of a Water Metering Code.

A code may specify the requirements for services such as metering installation, meter reading and use of the associated data which is collected and used by retailers. It may also set out the requirements for meter certification, accuracy and testing, and other considerations such as substituted readings (when permissible) and validation of the meter data.

The above aspects could be contained within a code, but given their technical nature, the Office of the Technical Regulator (**OTR**) may be more appropriate to oversee such requirements.

## CONSUMER PROTECTION

The primary objective of consumer protection measures in the area of water and wastewater services is to satisfy peoples’ basic needs for potable water and wastewater collection and treatment. Services should be provided in a manner that is cost efficient to the retailer and to the consumer.

A water metering code would logically include consumer protection provisions. For instance, meter accuracy is critical and consumers should only pay for the water that they actually use. Where leakage occurs within a property, the property owner pays for water, used and lost, as metered. The cost of water lost from burst mains and the like is built into tariffs and paid for by all consumers.

The accuracy of customer metering is important in determining the amount of water that is lost from the system before delivery to the consumer, and hence, the amount recovered from customers to pay for it. Consumers should have confidence that they are being metered and billed accurately.

The Water Retail Code provides some customer protections, however, it does not provide for the underlying processes for meter management in accordance with the appropriate standards. Such things as meter testing and replacement (on an individual basis or bulk replacement program), could be captured under the code or within an asset plan administered by the OTR.

## EXISTING ARRANGEMENTS

This section describes SA Water’s general practices in respect of providing water metering services.

SA Water assesses an application for water supply to determine the appropriate meter size for the customer. Once the application has been processed and the associated charges paid, SA Water will connect the customer.

Water meters are read quarterly and customers are billed accordingly. Generally, meters are accurate and reliably record water consumption. 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 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.

If a customer is dissatisfied with their meter accuracy, application can be made to SA Water 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.

Meters are sealed for tamper protection to prevent, as best as possible, any bias in meter performance. Meters generally tend to read low over time (in favour of the customer), and will be replaced if the cost recovery period is less than five years.

## STANDARDS AND COMPLIANCE

The National Measurement Institute (**NMI**) has adopted and amended the standard, NMI R 49 *“Water Meters Intended for the Metering of Cold Potable Water and Hot Water”* (Parts 1, 2 and 3). This standard is harmonised with the recommendations of an international standard compiled by the International Organisation of Legal Metrology (OIML). All water meters intended for the metering of cold potable water must comply with the NMI R 49 Standard;

### NMI R 49-1

*Part 1: Metrological and technical requirements;*

**NMI R 49-2**

*Part 2: Pattern approval and initial verification;*

**NMI R 49-3**

*Part 3: Model test report.*

Pattern approval is the process of assessing a type or model of water meter. The performance of the meter is evaluated under various influences and disturbances. Properties of the meter, such as pressure and temperature class, are assessed and performance is assessed under accelerated usage conditions. The markings and display of measurement values are also assessed.

Standard NMI R 49-1 specifies terminology, technical characteristics, metrological characteristics and pressure loss requirements for cold potable water and hot water meters. It applies to water meters that can withstand a range of maximum admissible working pressures (MAP).

NMI R 49-1 also applies to water meters, used to meter actual volume flow, that are based on electrical or electronic principles and/or mechanical principles that incorporate electronic devices. It also applies to electronic ancillary devices.

A similarly adopted standard, NMI M 10 (Parts 1, 2 & 3) is a standard for water that is not to the quality level of drinking water. It sets out the same degree of technical and metrological detail as NMI R 49.

As noted earlier, in-service meter testing is carried out in accordance with AS 3565.4.

## PRINCIPLES

In considering the need for a water metering code the following principles should be taken into account:

- Meters and their installation must be practical and, where appropriate, consistent with Australian Standards.
- The measurement and charges for water through water meters should ensure fairness for both the customer and the retailer. Both parties must be aware of, and understand, their rights and responsibilities.
- A retailer must be subject to clear and defined practices that reflect its commitment to the accurate measurement of the delivery of water to its customers.
- All information provided to customers relating to water consumption must be accurate (within specified standards), clearly presented, easily obtainable and up-to-date.
- Customers' enquiries regarding the accuracy of metering will be handled promptly, fully and fairly.

Code provisions are subordinate to legislative requirements. A code itself is not a standard, and reference to relevant standards would generally be contained within the code.

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Stakeholders and members of the community are encouraged to forward a submission on this Issues Paper in regard to the following questions or to any other matters relevant to the introduction of a Water Metering Code.

## QUESTIONS

1. *Are the existing practices, processes, standards and specifications for meters sound and do they provide for satisfactory meter provision services?*
2. *Do the current metering arrangements provide adequate customer protections in keeping with the Commission's primary objective of protecting the long-term interests of consumers?*
3. *If not, does a strong case exist to introduce a Water Metering Code?*
4. *What additional benefits to customers (and retailers) would be realised by the introduction of a code?*
5. *If introduced, what other aspects of metering should be included in a Water Metering Code?*
6. *What metering information should be provided to customers and how should it be conveyed?*

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## TIMETABLE FOR THIS REVIEW

Written comments should be provided by 16 June 2014. The Commission will release its Draft Decision for public consultation in August 2014.

STAGE	TIMING
Public Consultation	5 May – 16 June 2014
Release of Draft Decision	August 2014
Public Consultation on Draft Decision	6 weeks



The Essential Services Commission of South Australia is the independent economic regulator of the electricity, gas, ports, rail and water 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.

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