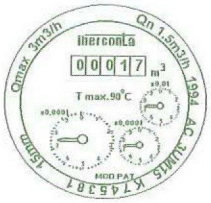
Excess in Dispute?...  *.... Fix it, Meter it!*

ABN 78 028 159 350

The Acting Director Pricing & Analysis
Essential Services Commission of SA
GPO Box 2605
Adelaide SA 5001

Attention Mr Stuart Peevor

Re: Metering Issues Paper No 5 - the installation of individual water meters and smart water meters

Thank you for the opportunity to comment on the possibilities of sub metering and smart meters.

It's important to note in the context of the ESCOSA report that when I established this business – Strata Water Solutions, 20 years ago – the intention was to offer an inexpensive alternative to *existing* strata dwellings where the installation of individual SAWater meters was either not economically viable or impossible to undertake. It was never meant to replace the SAWater options however and even today I invite potential customers as a priority, to firstly consider the SAWater initiatives – manifold meters, before proceeding with individual private sub meters.

In many respects, my "allegiance" (as an ex employee) to the preferred SAWater options has been ignored. Many enquiries are received from unit owners who have firstly contacted SAWater and are then referred by them to my office because of the prohibitive cost. In addition, Developers also have seen the merits of installing private sub meters with significant cost savings. Body Corporate Managers have supported their customers when the issue of water usage is raised at AGM's etc and sought the Strata Water Solutions option.

My comments in relation to specific questions raised in the report.

Are the current shared water metering and shared billing arrangements satisfactory? If not why?
No. Simply the apportioning of water bills based on unit entitlement, occupancy levels, agreed percentage split or any other arbitrary formula is not fair or realistic. The "user pays" concept introduced in this state 20 years ago does not exist with shared meters. Where there is a shared meter, the spirit of water conservation - saving water, lacks incentive, is not prevalent and is generally inconsistent with the rest of the community. In addition it creates "ill feeling" and conflict between frugal water users and those not as considerate.

Landlords charging tenants a proportionate split for water used in their Strata or Community titled unit or incorporating the charge in rent payable are unfairly charging the tenant. That split for example would include usage on common land (not able to be identified without sub meters) and tenants are not liable to pay water usage on the common land of a Corporation.

Should individual metering be mandatory for new build properties even if it is shown to be more expensive than the status quo?

This question cannot be answered without addressing the existing practice of installing individual meters. If the meters are fitted by the Government utility under the current arrangements as a

"manifold" on the boundary then the cost is significant. A Developer of a Community Title comprising 20 lots under existing arrangements would be required to run 20 plumbing lines. Under current sub metering installation, the Developer will run one line through the development (a ring route) with branches to each lot. This cost is significantly less than the current SAWater setup...

"even if it is shown to be more expensive than the status quo?" If there are no changes to the SAWater manifolds which set the meters on the boundary this statement understates the significance of the cost to a Developer.

To that extent, the comment in the report "Developers of new group sites may chose either a large group meter or a manifold solution (if feasible) at the boundary" is inaccurate or rather fails to recognise that some Developers of their own initiative and a sense of responsibility are installing private sub meters. Many new sites at Mawson Lakes and new subdivisions in Munno Para West have private sub meters installed.

Should individual metering be retrofitted to existing properties? If yes, should it be mandated or optional?

There are instances where it is simply not possible. If sub metering does not account for all water usage and at the very least pick up all plumbing lines to the dwelling, front and back external garden taps then the water measurement will be incomplete. The Sub Contract Plumbers engaged by my business are instructed not to proceed with a quote if there are any elements of doubt which could lead to the collection of incomplete data eg a block of 5 units attached or semi detached with no evidence of individual isolation ("turn off") valves and/or one inlet pipe to a cavity wall would not proceed to a quote. We decline to quote on approximately 2 in 10 requests.

In 2012 the sole owner of a block of 4 investment units at Henley Beach applied to SAWater and had fitted a 4 meter manifold. They were set on the boundary at a cost of approx $1100 - $1200. He then sought a quote from my contract plumber to plumb the 4 units. The plumbers cost for this work? $15000.

Whilst the owner had obviously not adequately assessed the cost beforehand, he then proceeded with private electronic sub meters which were fitted under laundry sinks. "Savings" were in excess of $10000 and the SAWater meters will remain not connected, nor removed from the site.

The mandatory retrofit will not work and should be optional.

There is also the issue of common ground watering (particularly on Strata sites. Community title dwellings tend to have front garden taps plumbed to each individual lot).

We determine common ground usage as the difference between the aggregate or sum of the usage on the sub meters DEDUCTED from the usage on the SAWater meter for the same period. Under existing SAWater arrangements, it would not be possible to accurately identify a common ground pipe and then meter it. It is not that simple.

Strata Water Solutions has many instances of 2 maisonettes sharing an SAWater meter where individual sub meters are either not possible or the owners chose to instal one sub meter and by deduction from the SAWater meter usage, the calculated balance "left over" is applied to the second

dwelling. This option is not recommended by Strata Water Solutions but is often the preferred cheaper option selected by unit owners.

The presence of one SAWater meter (not manifold meters) enables us to "audit" the water usage on the site and to "balance back" total usage on the sub meters to that recorded on the SAWater shared meter which we read at the same time. It is then often possible to identify if the SAWater meter has slowed down, stopped and needs replacing or that the SAWater meter and or one or more of the sub meters has been misread.

Appendix 1 relates to a property in the Adelaide CBD which has 2 SAWater meters each supplying 6 Apartments. Notice the aggregate 40 kls "under" on one set and the 40 kls "over" on the other set. This clearly shows there is an interconnection of pipework between the back and front set of apartments.
Until Strata Water Solutions became involved on this site, usage was apportioned equally on the individuals Quarterly SAWater accounts based on the SAWater usage on the meter supplying the respective 6 lots. That has been clearly shown to be incorrect as a result of the interconnection of pipework now evident and proven by the sub meter readings.

Without appropriate regulations in place, this ability to interconnect pipework will always happen. I believe Sydney Water have in place or propose that they will design the plumbing layout for new apartment blocks and any alterations are subject to approval of the Water Authority.

I would like to give 3 examples of sub metering where I cannot contemplate the possibilities of SAWater or any other authority being capable of adequately having systems in place to accurately measure water usage

1. A block of 42 apartments in the CBD with 3 water meters plumbed to each apartment – Cold water, Hot water and tank water meters. Water supplied from one large SAWater meter plumbs directly to each apartment – drinking water. Another line feeds directly to bulk hot water tanks on the roof and then to each apartment as Hot water and is measured on a hot water sub meter. The tank meter measures water drawn from groundwater tanks to toilet facilities in each apartment. When the tanks fall below a defined level they are supplemented by mains water.
   Water accounts are prepared by Strata Water Solutions by aggregating the usage on the Cold and Hot water sub meters. The Tank meters are not used for billing but the balance of water used through the shared SAWater meter is considered to be the supplementary supply to the groundwater tank. It is classified as "common ground" and billed to the Community Corporation.
   Hot water usage to each apartment is also used as a basis to prepare Gas bills.

2. Similarly a block of 30 apartments in the southern suburbs have individual Cold water and Hot Water meters. There are also 4 private electricity sub meters – measuring electricity to a lift, Bldg A, Bldg B and Bldg C. The AGL electricity account is apportioned to each apartment based on their hot water usage (heated by electricity). Each apartment also has an AGL meter for lighting and power.
   The SAWater is apportioned based on the sum of water measured to each unit and the hot and cold sub meters.

3. In the Northern suburbs (particularly Munno Para West) Developers are required to make provision for recycled water. The developments are plumbed with the purple recycled piping and the colour coded taps. The owners and tenants are using the water (measured on a private purple recycled water meter) to water gardens, flush toilets etc. IT IS NOT RECYCLED WATER. There is no recycled system operating and the pipework is interconnected at the main SAWater meter. Many owners are not aware of this fact

Would customers be willing to pay a fee for the provision of an individual meter to an existing property?

There are many owner/occupiers who are high water users and are aware that others are subsidising their usage. They see this as a "benefit" and will vote against any proposal to sub meter. If they are Landlords they have tended to simply incorporate an appropriate cost in setting a market rent.

Certainly I believe the costs to existing Strata Corporations will be prohibitive unless the meters are fixed and located appropriately. Individual meters at the boundary may require cutting concrete.

In conjunction with two long established Adelaide Plumbing firms, I gave a quote for an arbitrary 20 000 HousingSA units - $6m fitted on existing pipework, $80m + if plumbed from the boundary.

Smart Metering

My experience with smart meters is limited but the experiences to date are not impressive and I feel the technology is too uncertain at this time.

AGL have a smart meter supplying 18 Community titled lots at Salisbury. Strata Water Solutions reads the private sub meters and apportions the electricity account based on those meters.

Firstly, we have no check (or audit) on the reading of the utility meter. If my Meter Reader reads the sub meters the next day after the main utility meter has been read there is no check. The smart reader is "zeroed" or initialized after reading.

One account received from AGL was an "Estimated Reading". When I enquired as to why, I was advised that the data was corrupt. A return visit by the Utility also failed to gain a retrospective reading as that data also was found to be corrupt.

Strata Water Solutions has access to an online metering system developed by a local business. The system has the ability to access water consumption for any date range retrospectively. It is updated daily with the night before usage being the most recent. This web based system would fit within the definition of smart metering.

The problems have been significant and often. They relate mainly to the communications network and the system has been inoperative for at least 9 months of the eighteen months of our contract – the modem requires replacement, the internet connection is faulty, there are insufficient backup files.

These issues do not seem insurmountable but the system is not convincing. When the system works it is impressive but downtime has simply been an embarrassment.

Appendix 2 is not an example of smart metering. It is actually an example of the Itron Remote Reading Units (Cybles) used extensively by Strata Water Solutions and using Radio frequency to capture data remotely off site (normally from the street without entering the property). This particular Graph highlights the malfunction of a sprinkler system. The apartment is a rented unit and the owner's Property Manager is advised of the leakage alarm generated by a leak which by definition is greater than 2 litres per hour and consistent.

Re: Billing Consumers rather than Landowners- Paper No 6

Strata Water Solutions has approx 4500 customers billed quarterly. We pay the Utility bills – Gas, water and electricity "up front" usually on a final notice to allow maximum time to recoup as much of those bills as possible.

The owners are billed NOT Consumers. There are always 10-12% of Debtors outstanding at any one time. Owners have shown a preference for the tenant to be billed but that is never going to happen. Our Agreement is with the Body Corporate to read the individual sub meters. It is the owners who comprise the Corporation, not the tenants as consumers. Any procedure aimed at billing the tenants will not be acceptable.

The present system although resented by Landlords works. The Property Manager on receipt of our invoice for water usage then on charges the tenant at an appropriate time in conjunction with the Landlord's rent charges. (I am aware however of some poor accounting practices implemented by a minority of Property Managers classifying the receipt of water payments from the tenant as income to the Landlord and charging a commission on this transaction).

Strata Water Solutions has hundreds of accounts forwarded directly to Property Managers acting on behalf of the owner/landlord.

John Fisher BBus,Grad Dip Accounting
Strata Water Solutions
5/11/13

Appendix 1.

Ref No **772** **Water Usage** Community Corp 20459 Inc 213-219 Waymouth St Adelaide Meters Fixed:
26/09/2013 Contract starte 10/05/2012

Cold Water

Unit / Lo	Street No.	Meter Type	Meter No.	Prior 15/06/2012	Qut 1 10/09/2012	Qut 2 17/12/2012	Qut 3 18/03/2013	Qut 4 17/06/2013	Special Rdg	Notes to Latest Reading
0	Supplies Lots 7 -12	C	D00440245	14492	14771	15099	15428	15731		
					279	328	329	303		
7	213-219 Waymouth St Adelaide	C	00-1569410	1330	1359	1391	1420	1450		
					29	32	29	30		
8		C	00-1569388	2227	2270	2324	2370	2386		
					43	54	46	16		
9		C	01-1113886	2718	2753	2790	2818	2849		
					35	37	28	31		
10		C	00-1569393	2593	2624	2671	2709	2742		
					31	47	38	33		
11		C	00-1569414	2075	2138	2204	2267	2310		
					63	66	63	43		
12		C	00-1569387	2709	2739	2772	2804	2830		
					30	33	32	26		
99	Unallocated/Common Gr	C	No Meter	0	0	0	0	164		
					0	0	0	164		
	Use for this Group		Private Meters		231	269	236	343		
			Unapportioned or CGround		48	59	93	-40		
0	Supplies Lots 1-6	C	K21140056				18	356		
								338		
1	213-219 Waymouth St Adelaide	C		1700	1728	1760	1785	1814		
					28	32	25	29		
2		C	01-1113887	2839	2905	2988	3054	3144		
					66	83	66	90		
3		C	00-1569360	2496	2535	2554	2588	2627		
					39	19	34	39		
4		C	01-1113893	2262	2300	2331	2365	2392		
					38	31	34	27		
5		C	00-1569409	2382	2458	2533	2568	2654		
					76	75	35	86		

Ref No **772** Water Usage Community Corp 20459 Inc 213-219 Waymouth St Adelaide Meters Fixed:
26/09/2013 Contract starte 10/05/2012

Cold Water

				Prior	Qut 1	Qut 2	Qut 3	Qut 4	Special Rdg	Notes to Latest Reading
6	213-219 Waymouth St Adelaide	C	00-1569413	1850	1888	1930	1957	1984		
					38	42	27	27		

Use for this Group	Private Meters	298
	Unapportioned or CGround	40

Appendix 2.

Customer infos

Last name : 838

First name : 8

Address : 14 Shribank St (Recycled)
Munno Para West

Account Numb... 838-8-R-1

Meter infos

SN Read : 100057

SN Waited : 100057

Energy : Cold water

Meter status

RF reading

SN correct

No control

Control index OK

Itron

Knowledge to Shape Your Future

Previous reading

Index : 149.933 m3

Date :

Actual reading

Index : 205.661 m3

Conso : 55 m3

Date : 18/07/2013 11:03 AM

MIU Type : Cyble RF

SN : 120555748

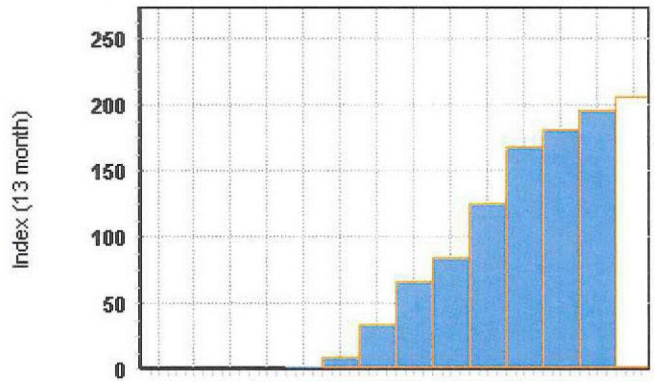
Batt. life time : 135 Month(s)

Observations

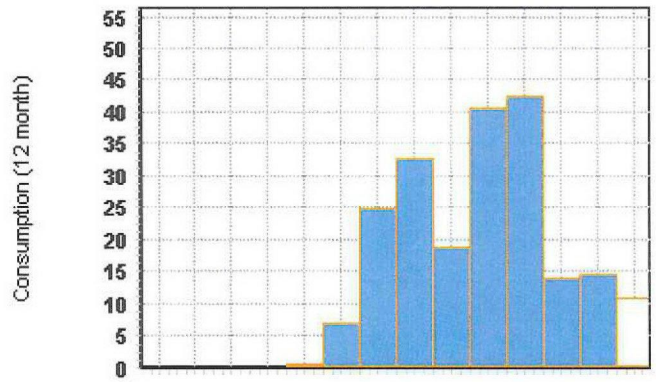
Alarms

Leakage

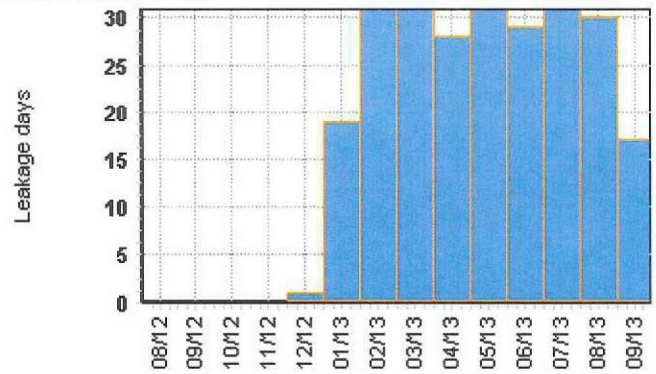
Index



Consumption



Leakage



Backflow

Index : 0 m3