

16th May 2018

Water Team
Essential Services Commission
Level 37, 2 Lonsdale Street
Melbourne VIC 3000

Dear Sir/Madam

Response to ESC draft decision

I am grateful that the ESC has taken into account in its draft decision issues flagged by Deloitte Access Economics and members of the community in regard to Coliban Water's 'digital' customer metering roll-out.

However, I would appreciate the opportunity to make further comment, in consequence of Coliban Water's response, which was published 14 May.

'Safe' technology

It is a relief that Coliban Water has re-visited its opt-out policy and is developing a policy for conditional opt-outs.

Nonetheless, this fails to address a number of core concerns about its rollout of smart water metering.

Coliban Water references, under the heading of 'safe technology', the Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) webpage on smart meters and health. But Coliban Water has omitted to address the requirements of the corollary to this webpage: ARPANSA's Radiation Protection Standard for [Maximum Exposure Levels to Radiofrequency Fields —3 kHz to 300 GHz](#), Radiation Protection Series Publication No. 3.

This standard, as well as setting out fundamental requirements for safety, promotes practices which protect human health and the environment from the possible harmful effects of radiation. Clause 5.7 (e) stipulates that **unnecessary radiofrequency radiation should be minimised**, provided this can be achieved at reasonable expense (my emphasis).

The effect of this precautionary clause is that, despite Australian companies being able to irradiate the population and environment at levels considerably higher than is permitted in a number of other countries, they are still required to show cause as to why the additional burden of radiofrequency radiation is necessary to deliver service objectives.

Coliban Water's response fails to achieve this.

It is unfortunate that the public is not privy to all of the documents which Coliban Water has submitted to the ESC in support of re-inclusion of the full \$5.0 capital budget sought for its

smart meter rollout¹. This makes it difficult for customers to give Coliban Water's response the degree of scrutiny that it deserves. Nevertheless, some brief comments follow.

'Zero' additional costs to customers

Coliban Water makes the claim that the project imposes "zero additional cost to customers". This is disingenuous. Obviously, if people's health is adversely impacted, this carries significant cost for themselves, their family and the community. I know a number of people who have had their careers brought to an abrupt end or who have been forced to move their family interstate or overseas, due to adverse health effects experienced in consequence of emissions from electricity smart meters (which were not necessarily located on their own property).

The reality is that people may be affected by emissions from nearby smart meters and not just from emissions from their own smart meter; in addition, due to Coliban Water's lack of transparency, most customers will not be aware that Coliban Water has installed a radiofrequency transmitter on their property; furthermore, the majority of Australians have little understanding of the effects of exposure to radiofrequency electromagnetic radiation and are unlikely to connect adverse effects with the source.

The siting of Coliban Water's network gateways is especially worrying, as there will be a concentration of pulsed radiofrequency emissions at these locations. For instance, one of Trentham's gateways is located directly opposite a children's playground and swimming pool. Another one was planned to be located on the grounds of a major sportsground.

In addition, although perhaps not a direct cost to customers, Coliban Water has made no allowance for adverse repercussions on bees, birds, amphibians, wildlife, plants or trees in consequence of its expanded environmental footprint.

'Deep' customer engagement shows nearly two-thirds of respondents want the ability to check and monitor their water usage

I fail to see how weight can be given to this claim in light of the wording of questions contained in its [Pricing Submission 2018 Community Draft](#). The number of responses has little value if the questions have been formulated in such a manner as to elicit a pre-determined outcome. It would have been interesting to have seen what the outcome had been if Coliban Water had explained to respondents that they currently could check their water usage 24/7 by simply walking over to their water meter! Similarly, its belief that customers want Time of Use pricing does not accord with reality. I also wonder what the responses would have been if it had been explained to respondents that, as part and parcel of this option, their property and the environment would receive hourly doses of a Group 2B

¹ For instance, Deloitte's 2011 cost benefit analysis of Victoria's rollout of electricity smart meters – which concluded the rollout would result in net costs to customers of \$319 million (NPV at 2008) over 2008-28 despite far more optimistic earlier estimates – provided considerably more detail: http://www.smartmeters.vic.gov.au/__data/assets/pdf_file/0003/1175574/Deloitte-Final-CBA-2-August.pdf

possible human carcinogen. Certainly, if someone told me that our property was to be sprayed with DDT (which is accorded the same rating by the World Health Organization) once per hour, I would view any supposed 'benefits' in an entirely different light!

Digital water meters are a 'mature' technology

It is difficult to see how it can be claimed that the costs of digital water metering and anticipated benefits are well known and can be predicted with high confidence. This is certainly not the case with electricity smart meters!

For instance, a [2016 to 2020 determination](#) from the Australian Energy Regulator revealed that AusNet Services' existing smart meter technology was failing, and in consequence AusNet Services was seeking \$100.7 million (\$2015) in capex to conduct a systematic replacement of its smart meter communications technology. This, despite the fact that the rollout of smart meters to Victorian households and small businesses had only come to its conclusion in 2014!

My own view, borne out by past employment in the IT industry, is that Coliban Water has unwarranted confidence in the assumptions it has formulated in regard to its digital metering project.

'Data loggers'

It is challenging keeping abreast of Coliban Water's changing terminology for smart meters. In the copy of its webpage that I downloaded on 27 February 2018, there is no mention of data loggers. Its current [Digital Meters](#) webpage has no less than six usages of this term, replacing previous references to 'digital meters' (or digital device). Similarly, its May response to the ESC's draft decision has introduced this new term. Whilst it is understandable that Coliban Water is seeking to distance itself from the Victorian electricity smart meter debacle, this fluid use of terminology, for what is regarded elsewhere in Australia (Western Australia and Queensland) as a water smart meter, only serves to obfuscate its customers.

Conclusion

Coliban Water's response about the costs and benefits of its proposed smart meter rollout has done little to assuage my concerns, albeit it intends to show a degree of compassion towards people with demonstrated health grounds.

Yours sincerely

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