



STOP SMART METERS AUSTRALIA INC

Reg. No. A0059190N ABN 14 717 028 504

30 September 2018

Hon. Lisa Neville
Minister for Water
Level 17, 8 Nicholson Street
East Melbourne
VIC 3002
By email: lisa.neville@parliament.vic.gov.au

Dear Minister

Rollout of smart water meters

Stop Smart Meters Australia (SSMA) is a volunteer-based consumer advocacy group which incorporated as an Association in April 2013 in response to widespread community objection to the Victorian State Government mandated rollout of electricity smart meters and infrastructure. Paramount within our legal purposes is to provide support and assistance to people who are opposed to smart meters on the grounds of health, privacy, security, safety and/or costs.

Information supplied by Victorian water businesses to the Essential Services Commission has revealed that nine utilities are contemplating, or have started, smart water meter rollouts.

Members and followers of Stop Smart Meters Australia (SSMA) do not consider that a rigorous assessment of the costs and benefits of smart water meter infrastructure would support such rollouts. We are also alarmed that transparent disclosure regarding these rollouts in Victoria is **not** being provided – instead water businesses are obscuring their intentions by omitting to use common terminology and failing to inform customers of the full ramifications of the technology that they have elected to use. For example, Coliban Water states on its website that it is “proposing a program to install digital technology on existing customers’ water meters” and that “data loggers” will be installed (Coliban Water 2018); South East Water states that it is “trailing digital water meters” (South East Water 2018).

Clearly, based on this level of divulgence, the majority of customers will not realise that ‘digital technology’, ‘data loggers’ and ‘digital meters’ are euphemisms for smart meters, and that this technology will necessitate a Group 2B possible human carcinogen being emitted from both their water meter **and** from local gateways 24/7. SSMA considers this to

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be a breach of the water businesses' duty of care. It is also an ethical aberration that customers are being denied the right to control the levels of radiofrequency radiation which they are exposed to on their properties and in their own homes.

Adverse health effects of wireless smart meters

Although one of Victoria's water utilities has, in response to public pressure regarding health issues, "sought to address these concerns by developing a policy for the conditional opt-out from digital meter installation for customers with genuine health concerns..." (Essential Services Commission 2018, p. 18), this concession falls severely short of a water business's duty of care towards the community and environment.

The deployment by utilities of wireless smart meters and smart meter infrastructure emitting electromagnetic fields (EMF) has harmed people around the world. In written evidence provided to the UK Parliament's Energy and Climate Change Committee, it was stated that more than 10,000 health-related complaints were submitted to the California Public Utilities Commission alone in consequence of the installation of electricity smart meters; this included personal testimonies from medical doctors, psychotherapists and nurses, regarding their own symptoms (Stop Smart Meters! 2013).

SSMA is in receipt of in excess of 400 (unsolicited) reports from Victorians alleging a variety of adverse symptoms, some of which have been life-threatening, as a result of exposure to electricity smart meters' pulsed microwave emissions. This cohort is viewed as being the 'tip of the iceberg'.

The majority of the population and medical fraternity in Australia have no previous experience, nor training, in identifying biological changes as a result of increased radiation exposure and are unlikely to link the rollout of smart meter technology with the symptoms which have been triggered. The brief, high-intensity emissions from smart meters appear to have caused the exacerbation of existing symptoms, as well as triggering new symptoms in parts of the population who had not previously exhibited sensitivities to wireless technology.

In some instances, the impact on people's health, as a result of exposure to smart meter emissions, has been profound, resulting in high personal costs (loss of career, loss of income, loss of place in society, loss of access to public facilities, loss of friends and family) for these people and their families as well as costs to the wider community. A number of our members and followers have been forced to move home and, in some cases, families have been split up (where one member is affected by exposure to emissions from smart meters). Others have resorted to outlaying considerable sums of money, in the tens of thousands of dollars, on electromagnetic field (EMF) shielding products for their homes in a bid to reduce emissions from smart meters; others are no longer able to access parts of their homes or gardens. **People have been harmed even in instances where they don't**

have their own transmitting smart meter, as a result of exposure to emissions from a neighbour's smart meter.

A PubMed-listed, peer-reviewed study, entitled *Self-reporting of Symptom Development from Exposure to Radiofrequency Fields of Wireless Smart Meters in Victoria, Australia: A Case Series*, offers the hypothesis that "some people can develop symptoms from exposure to the radiofrequency fields of wireless smart meters" (Lamech 2014, p. 38). The study's conclusions point to the "possibility that smart meters may have unique characteristics that lower people's threshold for symptom development." The most common symptoms were insomnia, headaches, tinnitus, fatigue and cognitive disturbances.

The American Academy of Environmental Medicine (AAEM) has endorsed the report, stating, "*It is a well documented 92 case series that is scientifically valid. It clearly demonstrates adverse health effects in the human population from smart meter emissions*" (AAEM 2014).

Although emissions from wireless smart meters have been shown to be a fraction of the limits outlined in Australia's radiofrequency (RF) standard, which is set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), this needs to be viewed both in the context of limits set elsewhere in the world and in light of the theory underlying current RF standards and guidelines.

Over forty percent of the world's population has the benefit of higher levels of protection

Radiofrequency exposure standards and guidelines in place in jurisdictions with more protective limits are ten to hundreds, and even thousands, of times more rigorous than Australia's standard, which is based on 1998 ICNIRP guidelines (Jamieson 2014, p. 4).

In addition to the weakness of Australia's RF standard, by comparison to a number of other standards and guidelines elsewhere, many scientists view the theory underpinning current radiofrequency standards – which only consider heating effects and not biological effects – as being deeply flawed. As of 30 August 2018, 244 EMF scientists from 41 nations had signed an International EMF Scientist Appeal calling for greater health protection on electromagnetic fields exposure (International EMF Scientist Appeal 2018). Smart meters receive specific mention in the appeal. The appeal states that:

"Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life."

Physicist Dr Ronald Powell analysed smart meter and smart appliance emissions in light of the conclusions reached by the BioInitiative 2012 Report, a report compiled by 29 experts from ten countries which reviewed 1800 new scientific studies on non-ionising radiation since the BioInitiative 2007 Report (which had, in turn, reviewed over 2,000 studies). His analysis demonstrates that one would need to be at least **50 metres** from a smart meter appliance with a RF power output of 0.1 watt in order to meet exposure limits proposed by the BioInitiative 2012 Report (Powell 2013, p. 10). LoRa-enabled smart meters, with a RF power output of 0.1 watt, are deployed by utilities such as Coliban Water and fall in the same risk category.

His analysis shows that the power density at **10 metres** from a smart appliance is higher than the power density that triggered biological effects in **10 of the 67** studies that found effects as a result of RF exposure (Powell 2013, p. 13). How many Victorians sleep within 10 metres of their water meter and are therefore going to be unwillingly and unknowingly exposed to an environmental pollutant during their sleeping hours?

Degradation of environment

Smart water meter rollouts also involve the installation of myriad network gateways, requiring pole, mast or tower-tops, as the intermediary point between smart water meters and telecommunication towers. This additional infrastructure, which will be operating 24/7, adds to the electro-pollution footprint in our neighbourhoods and communities. Increased levels of electro-smog also impact the environment.

Botanist Mark Broomhall, in a *Report for the United Nations Educational Scientific and Cultural Organization and International Union for the Conservation of Nature*, has meticulously documented, over a 15-year period, the exodus of species from NSW's World Heritage Area, Nightcap National Park, in consequence of increasing levels of electromagnetic radiation from the Mt. Nardi telecommunications tower complex (Broomhall 2017). Broomhall estimated that "from 70 to 90% of the wildlife has become rare or has disappeared from the Nightcap National Park within a 2-3 km radius of the Mt. Nardi tower complex". His data also revealed that:

- 3 bat species once common have become rare or gone
- 11 threatened and endangered bird species are gone
- 11 migratory bird species are gone
- 86 bird species are demonstrating unnatural behaviours
- 66 once common bird species are now rare or gone

Broomhall states in his report that "it is evident that pulsed microwaves are particularly toxic". He says that this matter "should be considered a National Emergency".

Forcing smart meters on to customers – leads to higher costs for little benefit

The mandated rollout of electricity smart meters in Victoria has been acknowledged as being a disaster. Victoria's Auditor General slammed the government for its role in the program in his 2015 report (Moncrief 2015).

The skewed cost-benefits of smart meters for customers is even more apparent in the case of water smart meters. Chiefs of the West Australian Water Corporation told the state's parliament "they will never see a return on investment from a roll-out of smart water meters..." (iTnews 2013). The Water CEO pointed out that, "One of the problems is that the water you save will never pay off the extra cost of the meter in the life of the meter. Water is a very low-price commodity." This, despite the rollout being in the Kalgoorlie-Boulder region, which is an area known for its lack of water resources!

Questions for the Minister for Water

1. What role is the government taking in the roll out of smart water meters and infrastructure?
2. What checks and balances does the current government have in place to monitor smart water meter rollouts?
3. What risk assessment procedures have been put in place to assess and manage technology risks, health risks to Victorians and the environment, and economic risks?
4. Will the government put in place a smart water meter post-rollout health surveillance program, as is routine with other agents to which a large proportion of the population will be exposed?
5. By what means is the government monitoring community engagement, given the potential for the rollout of smart water meters to cause significant harm to people and the environment, and considering the current lack of transparency?

SSMA would be grateful if the Minister would address the issues that we have raised on behalf of our members and followers. We look forward to your reply.

Yours sincerely



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