Electromagnetic

Health & Safety

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To the Australian Energy Market Commission (AEMC),

I am writing to you to voice my opposition to the accelerated smart meter deployment.

As an experienced EMF testing professional, I am extremely concerned about the Intellihub-led accelerated smart meter deployment. All new Intellihub smart meter installations I have measured since 2022 have been constantly transmitting, despite what the retailers might claim. No other brand or model of smart meter I have come across transmits as often as the Intellihubs do.

Installers are now having their options taken away and are only being given one option, which is Intellihub. This is unacceptable. It should be up to the occupier of the premises firstly if they want a smart meter or not, and the installer should have the discretion to choose the most appropriate meter for the occupant. All occupants of premises who want to keep their analogue meter must have their choice respected and no meter change forced upon them.

Having worked with a number of EMF injured clients, some are no longer able to use the part of their home where the smart meter has been installed. EMF testing colleagues of mine have also found the same issue. Some of their clients, particularly in Victoria where smart meters were first rolled out en masse, were no longer able to live in their homes. Already, there is a homelessness crisis, and this will become even worse when many people are unable to occupy their homes due to the smart meter having been installed.

Tasmania has recently announced 100% smart meters by 2026

In press releases from the Tasmanian Government on 27 Apr 2021 and 29 Jan 2024, the Tasmanian Government has committed to a 100% advanced (smart) meter roll out being completed by 2026.[1,2]

Higher cost for negligible benefit

The replacement of mechanical meters with smart meters cannot be justified from a business perspective.[3] Assertions that smart meters lead to a reduction in peak energy demand remain unproven. The roll out thus far has made little impact on either peak demand or necessity for new power generation.[18] Despite claiming to be green, experts say that smart meters are anything but. They may actually increase energy usage.[15]

Excessive power consumption to run wireless smart meters

The power consumption required to run the communications modules alone would exceed a million watts, taking into account all occupied residences in Tasmania.[4,5,6,7,8,9,10,11]

Higher power bills

Unlike analogue meters that measure real power only (that is power that is actually used by the Consumer), smart meters in addition measure "useless" or reactive power, which is power that does no work but for which the customer is charged anyway.[12,13,14]

Any appliance with a motor, transformer or capacitor in it will have reactive power.[16,17] This could result in a surprising rise in electricity bills for customers changing over to a smart meter from an analogue meter.

Frequent radiofrequency radiation exposure to residents and neighbours

Despite retailer's claims that the meters being installed only transmit once per day[19], measurements of the brand and model of smart meter being installed by new metering businesses, formed on behalf of the retailer and Intellihub, has found constant radiofrequency emissions. Research into various other brands of smart meters also found smart meters are transmitting frequently throughout the day, one study found transmissions up to 30 times per minute, another study up to 240,000 times per day.[20,21,22]

Unacceptable health risk

While most electricity retailers claim that the emissions from smart meters are very low, studies have found the opposite. Hirsch in 2011 published a study that found that one smart meter can provide up to the full body radiation exposure of 160 cell phones.[23]

An international survey found that in the majority of the 210 respondents surveyed, electromagnetic hypersensitivity was initiated or exacerbated immediately following exposure to a residential smart meter. Symptoms experienced included ear ringing, headaches, difficulty concentrating, insomnia and heart arrhythmias. Most of the respondents were in good health before the smart meter was installed.[29]

Victorians have been heavily impacted by the health effects of smart meters.[25] A study undertaken by a medical doctor on the health consequences of the roll out in Victoria found many residents experienced significant health symptoms after a smart meter was installed.[24] Symptoms included insomnia, headaches, tinnitus, fatigue, cognitive disturbances, dysesthesias and dizziness.

The effects of the Victorian smart meter roll out on peoples' lives included:
• Not being able to use part of one's house eg needing to relocate one's bedroom or even sleep in a hallway if that is the only low-exposure area
• Spending a lot of money on shielding products and having to temporarily move out of one's home while it was being shielded
• Decreased performance at work, being unable to work and having to go on a disability pension
• Causing financial problems and relationship problems
• Having to undergo otherwise unnecessary medical and psychological investigations
• Needing to restrict time spent using a computer
• Needing to avoid all EMR emitting devices
• Being unable to drive
• Health implications central to normal functioning, such as lethargy, cognitive impairment
• Needing to move into a caravan several km out of town or relocate to another state

Privacy and security risk

Smart meters collect and store personal energy consumption data. This data can be accessed remotely and can provide detailed insight into a household's daily routine, habits, and lifestyle, which could be used by third parties for various purposes such as targeted marketing or even criminal activities like burglary. There are concerns about the unauthorised sharing or selling of this data to third parties, including energy suppliers, marketers, and government agencies, which can raise issues about the misuse of personal data and erosion of privacy rights.

Smart meters could be used as a vector for cyber attacks on other connected devices connected to the same network as the smart meter eg laptops, smartphones, and other IoT devices A successful cyber attack on a smart meter could give an attacker access to all the devices on the network, potentially compromising sensitive personal or business data.[26,27,28]

Stop the roll out

Taking into account the negligible benefits, likely cost increases and serious health consequences, I ask that you please respect the health, privacy and security concerns of residents throughout Australia. Stop the smart meter roll out and allow residents to revert to an analogue meter if they choose.

Kind Regards,
Dave Bourke
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10 Power consumption for all transmitters may consume 3.3 V x (0.140 A (Microchip Zigbee) + 0.025 A (Microchip ISM HAN) + 0.287 A (Microchip Wi-Fi) + 0.03 A + 0.4 A + 0.005 (Mi-crochip AVR Cellular Mini)) + 0.672 A (Microchip PIC32) = 1.559 A max = 5.1447 Watts max per transmitting smart meter, just for the comms section alone. Multiply by 229,000 occupied private dwellings (ABS 2021) x 5.1447 = 1178136.3 (over a million watts)
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