

## **GUEST COLUMN: Health, safety fears over Smart Meters**



### **Cancer researcher from OK Falls**

Malcolm Paterson PhD (molecular oncologist) of Okanagan Falls is internationally acclaimed for his innovative research into how human cells sense and respond to environmental (ionizing radiation) stress and the breakdown of the underlying mechanisms as the frequent initiating and rate-limiting event in cancer development. In his career spanning 40 years in five countries on three continents, Dr. Paterson authored 168 scientific articles; spoke at 120 scientific meetings; and delivered 200 lectures at various medical centres and universities in 18 countries.

#### **Dr. Malcolm Paterson**

Recently, Regional District of Okanagan-Similkameen Board of Directors voted for an “immediate halt to mandatory installation of advanced (wireless) utility meters on all private residences within the jurisdiction of RDOS; and further, that all such meters recently installed within Electoral Area ‘D’ be removed immediately, at full cost to FortisBC.

ITRON’s OpenWay wireless electricity meters being installed by FortisBC are neither UL nor CSA certified.

According to the BC Safety Standards Act, utilities are exempted from having their equipment certified by these agencies on condition that a registered professional engineer licensed in B.C. tests and certifies in writing its safety.

Why then is FortisBC unwilling or unable to provide the mandatory fire safety certification required under BC law?

Its provision is crucial, given that electrical experts have identified many design flaws in the Itron meter that may help explain numerous smart meter fires in Summerland and other areas of B.C., and in Saskatchewan, Ontario and the U.S.

There is another aspect of wireless smart meters that also poses grave concerns: their massive rollout, along with the proliferation of cell towers and WIMAX services, has produced unprecedented levels of radiofrequency (RF) radiation in urban areas, currently at 3000 times background (1980) levels and rising rapidly.

Many biomedical scientists regard smart meter grid technology as risky and would vigorously challenge any utility's claim that RF radiation from smart meters is far less harmful than that from cellphones and other wireless devices.

The meter emits rapid, short and high-intensity bursts of microwave radiation, sporadically transmitting 350 or more such 'spikes' per day over distances up to 3.5 km. The pulsating, amplitude-modulating nature of the signal is foreign to all life forms and has been found to cause serious biological effects including DNA damage, depressed melatonin levels, altered heart rate, opiate-dopamine neurotransmitter disruptions and leakage of the protective blood-brain barrier.

RF radiation, regardless of the wireless source, has been implicated in an alarming array of adverse health effects. These include: Alzheimer's disorder, memory and attention deficits, male infertility, immune dysfunction, impaired learning in children and compromised general well-being.

Notably, a 3-to-5 fold increased risk for fatal brain tumours has been strongly linked to long-term, next-to-ear use of cellphones (e.g., 20 min/day for a decade or more), prompting the International Agency for Research on Cancer (IARC) in 2011 to classify all RF-emitting wireless devices as Group 2B ("possibly cancer-causing") agents.

Two weeks ago more than 200 distinguished scientists and cancer specialists from 39 nations petitioned the United Nations member states "to adopt more protective exposure guidelines for wireless technology in the face of increasing evidence of risk."

These experts also urged the IARC to reclassify RF-emitting wireless devices as Group 2A ("probably cancer-causing") agents. Their expressed urgency for the reclassification

stems primarily from the recent startling revelation that RF radiation can not only cause cancer but can also promote the growth of latent cancers.

Similarly, international experts, recently appearing before Parliament's Standing Committee on Health, decried Health Canada's Safety Code 6 guidelines for protection against wireless devices as "out-dated, incomplete and invalid", warning that the microwave levels permitted in Canadian classrooms, residences and workplaces constitute a "disaster to public health".

The Agency, by considering only acute thermal (tissue heating) effects while systematically discounting the potential risks of cumulative, long-term, biologically based effects, is placing all Canadians, especially vulnerable children, at unjustified risk. This is because many non-thermal effects are seen at intensity levels well below those required to produce the thermal effects.

FortisBC's radio-off option is flawed on at least three counts. First, in a common situation involving adjacent houses with face-to-face meters mounted on opposite outside walls, exercising the option is ineffective if your neighbour does not also comply. Simply put, most of the signal you receive is from your neighbour's meter as the meter's faceplate reflects much of the signal being sent inwardly to your own residence.

Second, the radio-off option is unfair, penalizing those who would benefit the most but least able to pay the exorbitant fee: young families; the disabled and the elderly; and electro-hypersensitive persons.

Third, and not least, it does not alleviate the overarching fire safety concerns as the meter with its many design flaws is still mounted on the residential wall.

In conclusion, critical concerns regarding either the safety or health issue alone would be more than sufficient to warrant the RDOS vote. These two issues, taken together, make the precautionary-based RDOS motion, a slam-dunk.

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