

No Health Threat From Smart Meters

by

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**Comments by Cindy Sage, Sage Associates
November 16, 2010**

Summary

In this article, we defined the concept of the smart grid and the benefits to society. We also highlighted the importance of radio networks to the successful deployment of the smart grid. We discuss the important concepts of RF energy and the impact on humans. Specifically, there is no demonstrated longterm impact of low level non ionizing energy on humans.

Note: Italicized text quoted from Mr. Bender's statement for UTC.

The author ignores decades of published scientific work that delineates bioeffects and adverse health effects due to long-term, low-intensity ELF and RF exposures. This statement that there is no demonstrated impact is false and unsupportable.

Ionizing energy, beginning with the ultraviolet component of sunlight, has been demonstrated to have long term impact, but the frequencies citing in this report are hundreds of orders of magnitude below that of sunlight. Therefore, this shows that the often quoted sources in the media expressing concern about the RF safety from smart meters are shown to be based on faulty logic, or faulty "facts" and misrepresentations.

Bender's assertion that only ionizing radiation has adverse effects on humans shows either an intention to mislead, or gross ignorance of the scientific literature and scientific controversy over the inadequacy of existing FCC and ICNIRP public safety limits for non-ionizing radiation. Further it ignores scientific evidence that anyone in a position of leadership should take into account before issuing industry-position articles.

We show that a specific analysis of the component used in this smart grid deployment are significantly below general population MPE and note, again, that FCC limits for MPE of general population are already at least 50 times lower than levels that can cause tissue heating.

This statement justifies smart meter exposures on the basis of clearly outdated and inadequate FCC public safety limits. Tissue heating is of no relevance. Health harm from chronic, low-intensity exposure to smart meters in the manner installed and operated in hundreds of thousands (if not millions) of residences would be due to non-thermal (low-intensity) exposures that are chronic – not acute exposures that are very short term. Bender also ignores the evidence that FCC MPEs for localized exposure (peak exposure) are also likely violated since there is no adequate way to mandate separation distances for the public.

An examination of a majority of smart meters being deployed today will show these devices use low power levels associated with unlicensed devices, on the equivalent magnitude as the devices that provide WiFi connectivity in the home. Millions of laptop computers are used in homes every day that transmit at levels similar to the smart meter and the transmitters from these devices are always “on”.

Exactly the point. The public already has significant exposures to RF/MW, from other sources. The cumulative exposure by adding on mandatory, smart meter exposures may place people over the existing FCC limits (which are inadequate) even in their own homes.

Some utilities are deploying meter reading systems that use commercial wireless providers to gather data. These meters have the same radio components as cell phones, the same phone consumers raise to their head every day.

This thinking highlights how industry is oblivious to the obvious. Cell phone exposures,

to which Bender compares smart meter emissions, are already showing a doubling of risk for malignant brain tumors at only 10 years and longer ipsilateral use, in adults and a five-fold increased risk for young people. Surely, a comparison of smart meter emissions to cell phone use is not reassuring. And, the combined exposures are even more likely to be harmful to health.

So when confronted with complaints that say smart meters cause a variety of health effects, ask the complainant to produce the science to support the claim. The conversation should end shortly thereafter.

The author is cheerfully referred to the ‘classroom corner’ to read and report back on the references listed below.

Who is UTC?

From their website at: <http://www.utc.org/utc/about-utc>

“The Utilities Telecom Council (UTC) is a global trade association dedicated to creating a favorable business, regulatory, and technological environment for companies that own, manage, or provide critical telecommunications systems in support of their core business. Founded in 1948 to advocate for the allocation of additional radio spectrum for power utilities, UTC has evolved into a dynamic organization that represents electric, gas, and water utilities; natural gas pipelines; critical infrastructure companies; and other industry stakeholders.”

What do you expect? This rebuttal by Bender on behalf of an industry trade group should be considered in light of UTCs stated mission “to create a favorable business, regulatory and technological environment for the telecom industry”— to promote the industry rather than to provide reliable, independent assessment of health problems associated with the industry’s products.

Required Reading for Mr. Bender

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