

To:

Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 5th Floor
Boston, Massachusetts 02110

From:

William J. Rea, M.D.
Environmental Health Center
8345 Walnut Hill Lane, Suite 220
Dallas, Texas 75231

RE:

DPU docket 12-76-A, December 23, 2013
Investigation by the Department of Public Utilities on
its own Motion into Modernization of the Electric Grid

Date: 1/21/2014

Comments (Please note: This comment submission is under the umbrella of the January 24th extension granted by Alison Lackey, Hearing Officer on January 15, 2014):

My name is Dr. William Rea. I currently serve as President of the Environmental Health Center, in Dallas, Texas. I am president of the American Environmental Health Foundation, a nonprofit organization founded to provide research and education into Environmental Sensitivity, and vice president of the American Board of Environmental Medicine and past board member of the Academy of Environmental Medicine. (AAEM) (See curriculum vitae, page 3 & 4)

There has been an upswing of Electro-Magnetic Frequency (EMF) and Radio Frequency (RF) sensitivity in the last 10 years. Part of this is because the total pollutant load of molds and chemicals has increased greatly. The other part is that the electromagnetic environment of computers, TV and all wireless technology has climbed astronomically.

The American Academy of Environmental Medicine issued a position paper on Electromagnetic and Radiofrequency Fields Effect on Human Health in April 20, 2012, with updates in June of 2012, August of 2013, and October 2013.

Numerous peer reviewed, published studies correlate radiofrequency exposure with a wide range of health conditions and diseases. These include neurological and neurodegenerative diseases such as Parkinson's Disease, ALS, paresthesia, dizziness, headaches and sleep disruption, as well as cardiac, gastrointestinal and immune disease, cancer, developmental and reproductive disorders, and electromagnetic sensitivity. The World Health Organization classified RF emissions as a group 2 B carcinogen in May of 2011. The scientific literature proves that non-thermal adverse effects of RF exposure exist and negatively impact health and physiology. New guidelines based on measurements of non-thermal effects and lower limits of exposure are needed and critical to protect public health.

Regarding smart meters, in April of 2012, the American Academy of Environmental Medicine issued a position statement calling for immediate caution regarding smart meter installation. Due to potentially harmful RF exposure, the Academy called for independent studies to further understand the health effects of

EMF and RF exposures. They recommended the use of safer technology, including fiber optics and hard-wiring. In October of 2013, the Academy upgraded their position statement from 'a call for caution' to a recommendation for an immediate moratorium on smart meters. The recommendation was based on a well-documented 92 case series that is scientifically valid, submitted by Dr. Federica Lamech, MBBS, entitled Self-Reporting of Symptom Development from Exposure to Wireless Smart Meters' Radiofrequency Fields in Victoria. AAEM supports this research. The case series clearly demonstrates adverse health effects in the human population from smart meter emissions.

The symptoms reported in this case series closely correlate not only with the clinical findings of environmental physicians, but also with the scientific literature. Many of these symptoms have been shown to be triggered by electromagnetic field exposure under double blind, placebo controlled conditions. Many of the symptoms correlate with the Austrian Medical Association's Guidelines for the Diagnosis and Treatment of EMF Related Health Problem. It is critically important to note that the data in this case series indicates that the "vast majority of cases" were not electromagnetically hypersensitive until after exposure to smart meter radiofrequencies. Dr. Lamech's case studies concluded that smart meters "may have unique characteristics that lower people's threshold for symptom development." Many of my patients who come to my clinic became symptomatic after the smart meters had been installed. Reported symptoms are wide-ranging from fibromyalgia to pain syndromes and confusion, difficult thinking, short-term memory loss and severe fatigue. Some patients experience an increase in heart arrhythmias, muscle spasms, severe numbness and tingling in peripheral nerves. Other patients

report that they began experiencing symptoms before they were aware that a smart meter had been installed.

The Environmental Health Center in Dallas is equipped to conduct EMF challenge testing with patients through exposure to a spectrum of electromagnetic fields to confirm that patients' symptoms are related to EMF sensitivity. The technique was developed in our 1991 double blind study of electromagnetic fields and radio frequency waves in the 30 MHz to 300 GHz range ("RF") and their potential effects on humans. In most patients, a consistent sensitivity to certain specific frequencies can be found and quantified through objective measures of the activity of the autonomic nervous system. There is a scientific basis for concluding that exposure to the emissions from smart meters over time could contribute to the development of EHS and other adverse health effects, especially for children, the elderly and immune compromised individuals.

Electromagnetic hypersensitivity is a growing worldwide problem. As stated in the AAEM statement on Electromagnetic and Radiofrequency Fields Effect on Human Health, "In an era when all society relies on the benefits of electronics, we must find ideas and technologies that do not disturb bodily function. It is clear that the human body uses electricity from the chemical bond to the nerve impulse and obviously this orderly sequence can be disturbed by an individual-specific electromagnetic frequency environment. Neighbors and whole communities are already exercising precaution, demanding abstention from wireless in their homes and businesses."

In conclusion, it is imperative that neither smart meters nor their microwave radiofrequency emitting infrastructure be mandated by the Commonwealth of Massachusetts.

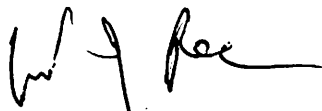
Sincerely,

A handwritten signature in black ink, appearing to read 'W J Rea', written in a cursive style.

William J. Rea, M.D., F.A.C.S., F.A.A.E.M.

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