September 4, 2020

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

Re: Investigation by the Department of Public Utilities on its own Motion into the Modernization of the Electric Grid – Phase II, D.P.U. 20-69

Dear Secretary Marini and Colleagues,

I am Board Certified in Environmental Medicine as well as Emergency Medicine. I recovered from severe Environmental Illness which began in 2000. I lecture nationwide, and have spoken at congressional meetings and government agencies including EPA, CDC, NIEHS. My degrees are from University of Pennsylvania, B.A. – 1982; Cornell Medical College, M.D. – 1986; and I am Board Certified in Emergency Medicine and Environmental Medicine.

I am Vice Chair of the Integrative Medicine Consortium; a Member and Director of Communications with the American Academy of Environmental Medicine; President of the educational non-profit Preventive and Environmental Health Alliance (PEHA), and a Member of the NIH Health in Buildings Roundtable and the CDC National Conversation on Chemicals and Health.

I co-chaired the first large-scale U.S. CME-accredited EMF Conference 2019 where international experts convened to train doctors, nurses, first responders and other health care providers to recognize, diagnose, treat and prevent the rapidly growing incidence of microwave illnesses.

My practice is the Environmental Health Center of Martha's Vineyard. One of my specialties is environmental illnesses, including those injured by wireless radiation.

In 2014, I participated in the hearing hosted by the MA DPU with four other members of the public to present facts on the health impacts of radiofrequency exposures emitted by wireless smart utility meters.

Peter Valberg of Gradient also testified on behalf of the utilities for MA DPU docket 12-76. On the basis of that hearing, the MA DPU made a determination to proceed with its smart meter investigation, outlined in MA DPU 12-76-B.

In 2014, the DPU concluded, "In the absence of credible evidence of harm to human health from advanced meters, we will allow electric distribution companies to include the broad deployment of advanced meters in their plans to achieve advanced meter functionality. However, as discussed further below, companies will be required to provide customers with an option to decline the installation of an advanced meter." My understanding is the public was not given that option throughout the Commonwealth, and many are suffering today.

Six years after the Feb. 2014 hearing, now that the MA DPU is promoting the deployment of smart meters by investor-owned utilities in the Commonwealth, the issue of smart meter and wireless health effects should be revisited. The science, provided in part by the product defense firm Gradient, that formed the foundation of the MA DPU's claims that the meters do not cause harm, should be investigated against the body of non-industry funded peer-reviewed independent science.

Since that 2014 hearing, our own government, via the <u>U.S. National Toxicology</u> <u>Program's \$30M study</u>, in 2018 determined "clear evidence" of cancerous tumors and DNA damage.

Italy's Ramazzini Institute published <u>another large study in 2018</u> that corroborates what we found in the U.S.

This same type of hazardous radiation, radiofrequency, is emitted by utility "smart" meters, macro cell antennas, 5G small cell antennas, wi-fi systems, and all of our personal wireless devices.

The public should be educated to use their own devices safely. The <u>EMF page released</u> by the MA DPH on the State's Radiation Control website wrongfully states, "**Low-to mid-frequency** EMFs are in the non-ionizing radiation part of the electromagnetic spectrum and are **not known to damage DNA or cells directly**." (The bolding is theirs.)

This is both scientifically false and harmful to the public, and should be replaced with safe technology practices. The independent, peer-reviewed published studies above show "clear evidence" of damage to DNA and other biological systems. "Clear evidence" is the highest classification of assessment given by the NTP, the world's leading toxins research organization.

Ronald Kostoff, PhD, at the Georgia Institute of Technology in 2020 published a monograph titled "<u>The Largest Unethical Medical Experiment in Human History</u>". It is summarized as follows, and details not only the independent scientific literature, but how we came to be immersed in biologically hazardous radiofrequency radiation:

This monograph describes the largest unethical medical experiment in human history: the implementation and operation of non-ionizing non-visible EMF radiation (hereafter called wireless radiation) infrastructure for communications, surveillance, weaponry, and other applications. It is unethical because it violates the key ethical medical experiment requirement for "informed consent" by the overwhelming majority of the participants. The monograph provides background on unethical medical research/experimentation, and frames the implementation of wireless radiation within that context. The monograph then identifies a wide spectrum of adverse effects of wireless radiation as reported in the premier biomedical literature for over seven decades. Even though many of these reported adverse effects are extremely severe, the true extent of their severity has been grossly underestimated. Most of the reported laboratory experiments that produced these effects are not reflective of the real-life environment in which wireless radiation operates. Many experiments do not include pulsing and modulation of the carrier signal, and most do not account for synergistic effects of other toxic stimuli acting in concert with the wireless radiation. These two additions greatly exacerbate the severity of the adverse effects from wireless radiation, and their neglect in current (and past) experimentation results in substantial under-estimation of the breadth and severity of adverse effects to be expected in a real-life situation. This lack of credible safety testing, combined with depriving the public of the opportunity to provide informed consent, contextualizes the wireless radiation infrastructure operation as an unethical medical experiment.

Massachusetts' infrastructure plans, therefore, should disentangle the Commonwealth from radiofrequency-emitting technologies promoted by industry and focus instead on biologically safe, sustainable, energy efficient hard-wired technologies to the premises that do not transmit radiation emissions.

Please don't hesitate to contact me if I can provide additional information.

Respectfully,

Lisa Nagy, MD