

MA DPU 21-90, 21-91, and 21-92 Comment of Patricia Burke

Comment re: EV Charging, Nighttime RF Exposures, Peak Demand, and Health

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Please enter the attached for the record for DPU 21-90, 21-91, and 21-92. Thank you. Patricia Burke

Inadequate Scrutiny, EV Charging, Nighttime RF Exposures, Peak Demand, and Health: "There are times when this house feels like it is hooked up to a high powered electric fence."¹

A number of earnest, sincere, public testifiers have included the following recommendation in their testimony regarding MA 21-90, 21-91, and 21-92.

"Moreover, to maximize the benefits of EV adoption, Eversource should be required to include in their plans incentives for off-peak charging, which will reduce the draw on the electric grid during peak times and thereby reduce the need to bring the dirtiest coal power plants online due to peak demands exceeding what the grid can typically supply."

In theory, the idea of balancing supply and demand using price points to modify behavior seems to be a reasonable proposal, and is being promoted by many individuals opposed to increased gas infrastructure, for example.

The reality has been that blanketing of communities with wireless signals (thousands of times per day) has proven to be *not reasonable*, with unintended consequences that have not been recognized, quantified, or addressed by the clean energy community.

Massachusetts is in a unique position to do its due diligence, and investigate further, before approving any addition expenditures on the basis of incomplete information and inaccurate assumptions.

Ngrid and Eversource Night-time Sleep Interruption is Already Occurring: 12:15 am, 2:15 am, 6:15 am, and 7:15 am

In Eversource territory where I now live, but also in Ngrid Territory, I continue to experience a discordant frequency that wakes me from a dead sleep multiple times per night, because I am being induced by artificial frequencies.

I awaken abruptly with a racing heart and feeling of being artificially electrified. This disturbance spills over to disrupt healthy biorhythms that should form the foundation of a healthy lifestyle.

¹ Public comment submitted to MA DPU for 20-69

Most recently, the sudden jolt to my physiology occurs at around 12:15 am, 2:15 am, 6:15 am, and 7:15 am, accompanied by a high pitched hum (microwave hearing, *which is not tinnitus of unknown origin*)² that also persists over much of the day, sometimes louder than others.

My impression/perception is that these artificial frequencies are being gradually introduced into the environment for longer periods of time, and more often, throughout the Commonwealth, without the knowledge and consent of communities, and without the knowledge of health care practitioners.

It is Possible to Test for Physiological Effects, Easily, With Standard Medical Protocols

This dynamic of interrupted sleep can be easily tested and verified with currently available standard medical protocols.

By monitoring sleep and physiological markers including heart rate, and measuring the corresponding artificial electromagnetic frequencies, it would be a very simple experiment to determine whether or not smart grid transmissions and/or some other source of frequencies is altering physiology, and causing the health risks associated with poor quality sleep.

² THE WORK OF ALLAN H. FREY In 1960, biologist Allan Frey, then 25, was working at General Electric's Advanced Electronics Center at Cornell University when he was contacted by a technician whose job was to measure the signals emitted by radar stations. The technician claimed that he could "hear" radar.

Frey traveled to the facility where the man worked and stood at the edge of the radar beam. "And sure enough, I could hear it, too," he said. "I could hear the radar going 'zip, zip, zip'." Frey went on to establish that the effect was real—microwave radiation from radar (and other source) could somehow be heard by human beings. The "hearing," however, didn't happen via normal sound waves perceived through the ear. It apparently occurred somewhere in the brain itself, as microwaves interacted with the brain's cells, which generate tiny electrical fields. Frey proved also that many deaf people and animals could hear microwave radiation. This phenomenon came to be known as the Frey effect, or simply "**microwave hearing.**"

At that time the U.S. military, which was interested in greatly expanding its use of radar around populated areas, had substantial funding available to investigate the effects of such radiation on health. For the next two decades Frey, funded by the Office of Naval Research and the U.S. Army, was the most active researcher on the bioeffects of microwave radiation in the country. Frey caused rats to become docile by exposing them to radiation at an average power level of only 50 microwatts per square centimeter. He altered specific behaviors of rats at 8 microwatts per square centimeter. He altered the heart rate of live frogs at 3 microwatts per square centimeter. At only 0.6 microwatts per square centimeter, he caused isolated frogs' hearts to stop beating by timing the microwave pulses at a precise point during the heart's rhythm. 0.6 microwatts per square centimeter is about 10,000 times less than the amount of radiation an active cell phone would expose a man's heart to if he carried it in his shirt pocket.

In a study published in **1975 in the Annals of the New York Academy of Sciences, Frey reported that microwaves could induce "leakage" in the barrier between the circulatory system and the brain. Breaching the blood-brain barrier is a serious matter. It means that bacteria, viruses and toxins from the blood can enter the brain. It means the brain's environment, which needs to be extremely stable for nerve cells to function properly, can be perturbed in other dangerous ways.** Frey's method was rather simple: He injected a fluorescent dye into the circulatory system of white rats, then swept the ~microwave frequencies across their bodies. In a matter of minutes, the dye had leached into the confines of the rats' brains. Dr. Leif Salford, whose work is also highlighted here, is currently the most active researcher continuing Frey's pioneering work on the blood-brain barrier. <https://www.cellphonetaskforce.org/the-work-of-allan-h-frey/>

Regarding poor quality sleep, the [CDC notes](#), “As chronic diseases have assumed an increasingly common role in premature death and illness, interest in the role of sleep health in the development and management of chronic diseases has grown.

Notably, insufficient sleep has been linked to the development and management of a number of chronic diseases and conditions, including type 2 diabetes, cardiovascular disease, obesity, and depression.”

Much attention has been placed recently on the need to address the challenges of the covid health crisis.

At the same time, decision-makers have not investigated the relationship between wireless exposures and sleep. They have not considered the opportunity to protect the natural sleep cycle and its link to immune function.

This oversight has persisted despite documented reports of harm caused by the introduction of smart grid infrastructure.

I cannot verify the source of the invisible wireless transmissions, whether they are from a weather or traffic satellite, or from the grid itself, and/or whether or not the grid is acting as an unintentional antenna for some part of the noise.

What is so very troublesome is that decision-makers have assumed that the complaints are without merit, and have failed to investigate.

In fact, those reporting harm from wireless exposures currently face profound and unacknowledged marginalization, ridicule, accessibility issues, and active discrimination.

Awareness of the impact of RF exposures and poor power quality and sleep and health is in its infancy. Like many previous harmful paradigms of industrialization, like adding lead to paint and gasoline, there are countless examples of failure to respond to late lessons from early warnings.

What has been so difficult about the current challenge is that the regulators themselves have become active partners in the suppression of evidence of harm, and promotion of compromised experts and their “science.”

In 2014, during a previous administration, the DPU engaged the services of a mercenary tobacco scientist to override citizen health complaints.

Prior to proceeding without correcting the misrepresentation, the MA DPU should notify all those directly impacted, including vendors, utilities, and the public, that while the FCC standards are still in effect, they can no longer provide assurance of safety, in accordance with the recent court ruling against the FCC.

As noted by the authors of the study, [Surg Neurol Int Neurological deaths of American adults \(55-74\) and the over 75's by sex compared with 20 Western countries 1989-2010: Cause for concern](#), “Every

country's neurological deaths rose relative to the controls, especially in the USA, which is a cause for concern and suggests possible **environmental influences.**"

As the study notes, "While increases in Alzheimer disease is recognized in many Western countries, there have also been rises in other neurological diseases that need to be brought to national attention. Indeed, there are lessons to be drawn from reduced cancer mortality as every government has made major additional investments in cancer services to respond to wider public concern, which led to major research and treatment resources. This level of commitment, investment, and research needs to be matched in the field of neurology to meet the new challenge, especially in the USA, as with their disproportionate increases in neurological morbidity and mortality, this must be a major cause for concern."

Many individuals may not be aware that chronic, cumulative EMF/RF exposure is eroding their health, for example, in regard to fertility.

Those who are able to report accurately what is occurring in the case of microwave illness are crucial links in the evolution of unfolding scientific expertise.

Prior to proceeding with incomplete and unsafe ideals about energy conservation, sustainability, and "economic justice," questions regarding the adverse neurological impacts of the smart grid require the attention of every ethical public servant, and the public at large.

Thank you, Patricia Burke