UNIVERSITY AT ALBANY
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Institute for Health and the Environment

WHO Collaborating Center in Environmental Health

For Public Comment

3 February 2017

Kentucky Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

2016-00394

Re: Case files 2012-00428, 2016-00370, 2016-00187, 2016-00152 and all other Utility Company Case Files regarding Wireless Utility Meters (ie., AMI, AMR, AMS, ERT, Wireless, Smart Meters, etc.)

Dear Kentucky Public Service Commission, All Electric, Gas and Water Utility Companies, President, Agents, Officers, Employees, Contractors and Interested Parties:

We, the undersigned, are scientists and health professionals who together have co-authored many peer-reviewed studies on the health effects of radiofrequency radiation (RFR). We are aware that the Kentucky Public Service Commission is considering a proposed smart meter opt-out fee from Duke Energy. Smart meters, along with other wireless devices, have created significant public health problems caused by the radiofrequency radiation (RFR) they produce, and awareness and reported problems continue to grow. With Duke Energy being America's largest utility provider and, consequently, having the largest potential smart meter implementation reach, it is imperative that the Kentucky Public Service Commission be fully aware of the harm that RFR can cause and allow utility customers to opt out of smart meter installation with no penalty.

The majority of the scientific literature related to RFR stems from cell phone studies. There is strong evidence that people who use a cell phone held directly to their ear for more than ten years are at significantly increased risk of developing gliomas of the brain and acoustic neuromas of the auditory nerve. There is also evidence that the risk of developing these cancers is greater in younger than older people. The May 2016 report from the US National Toxicology Program showing that rats exposed to cell phone radiation for nine hours per day over their life-span develop gliomas of the brain and Schwannoma of the heart (the same kind of cancer as acoustic neuroma) adds proof to the conclusions from the human health studies that radiofrequency radiation increases risk of cancer.

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Smart meters and cell phones occupy similar frequency bands of the electromagnetic spectrum, meaning that cell phone research directly applies to smart meter RFR. Smart meter RFR consists of frequent, very intense but very brief pulses throughout the day. Because smart meter exposure over a 24 hour period can be very prolonged (pulses can average 9,600 times a day), and because there is building evidence that the sharp, high intensity pulses are particularly harmful, the cell phone study findings are applicable when discussing adverse health impacts from smart meters.

While the strongest evidence for hazards coming from RFR is for cancer, there is a growing body of evidence that some people develop a condition called electro-hypersensitivity (EHS). These individuals respond to being in the presence of RFR with a variety of symptoms, including headache, fatigue, memory loss, ringing in the ears, "brain fog" and burning, tingling and itchy skin. Some reports indicate that up to three percent of the population may develop these symptoms, and that exposure to smart meters is a trigger for development of EHS.

In short:

- Smart meters operate with much more frequent pulses than do cell phones, increasing the potential for adverse health impacts.
- Smart meter pulses can average 9,600 times a day, and up to 190,000 signals a day. Cell phones only pulse when they are on.
- Cell phone RFR is concentrated, affecting the head or the area where the phone stored, whereas smart meter RFR affects the entire body.
- An individual can choose whether or not to use a cell phone and for what period of time. When smart meters are placed on a home the occupants have no option but to be continuously exposed to RFR.

The Public Service Commission should not be relying on industry representatives for assistance, due to their obvious conflict of interest. Too often they rely on biased research and hold opinions that are not consistent with medical evidence. The symptoms and illnesses experienced from wireless utility meters are related to length and accumulation of exposure and therefore not everyone will exhibit symptoms immediately. In addition, as with many other diseases, not everyone is equally susceptible. There are a number of double-blind studies which clearly show that some people with EHS will develop symptoms when exposure to RFR is studied in a double blinded experimental protocol, in which the subject do not know whether or not the RFR is being applied. These individual are not suffering from a psychosomatic disease, but rather one that is induced by the exposure to RFR. Public health agencies that label these symptoms as being only psychosomatic are ignoring this evidence and are not working to ensure fair treatment of and protection of the public.

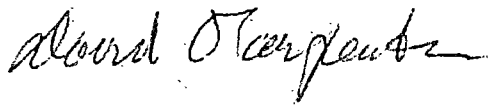
The adverse health impacts of low intensity RFR are real, significant and for some people debilitating. We want to stress three fundamentals as your agency proceeds to consider a smart meter opt-out:

- The Federal Communication Commission's safety standards do not apply to low intensity RFR.
- There is no safe level of exposure established for RFR.
- People around the world are suffering from low intensity RFR exposure, being at increased risk of developing both cancer and EHS.

Citizens rely on their government agencies for protection from harm. Accordingly, we urge the Kentucky Public Service Commission to reject any fees or tariffs associated with smart meter opt-out and allow citizens to opt out without penalty.

Thank you for your attention and consideration. What you do in this instance affects the lives of many in Kentucky and beyond.

Yours sincerely,



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