

1 To: Worcester City Council and Mark D. Marini, Secretary, Department of
2 Public Utilities, One South Station, 5th Floor, Boston, Massachusetts
3 02110 (mark.marini@state.ma.us and dpu.efiling@state.ma.us)
4 From: Dr Robert Gilmore Pontius Jr, 6 Judith Road, Worcester MA 01602
5 (rpontius@clarku.edu)
6 Regarding: Docket number DPU 12-76-A concerning the proposed electric utility
7 infrastructure in Massachusetts, particularly in Worcester MA
8 Date: 21 January 2014

9 Dear Massachusetts Decision Makers,

10 I urge you to take all the necessary time to practice the precautionary
11 principle concerning how to proceed with our electric utility's plan to implement
12 new electricity monitoring and control technologies in Massachusetts, particularly
13 in Worcester. In my opinion, the intended benefits of the plan are modest, and it
14 is uncertain whether those intended benefits will ever be realized for consumers.
15 The planned financial costs are high, while unintended additional possible costs
16 could be even higher concerning a variety of issues such as health and privacy. If
17 all information is well communicated and considered before any decision, then all
18 of us will be much better off. You are in an influential position, because I
19 anticipate that Massachusetts will lead as an example for much of the nation and
20 beyond. Your actions are important because the stakes are high. I endorse an
21 approach that maximizes learning as we proceed slowly. We must collect and
22 analyze data as the process moves forward.

23 The Clark University administration appointed me as one of four professors
24 to be on an Ad Hoc committee at Clark University concerning smart grid
25 technologies, and specifically the situation in Worcester. The Ad Hoc committee
26 organized a well-attended public event in November 2013 to discuss the
27 development of electricity infrastructure in Worcester. Clark University has
28 supplied space to National Grid to create a Sustainability Hub. I have toured the
29 Sustainability Hub. I base my opinion on what I have learned while teaching a
30 course on this topic during fall semester 2013 at Clark University. The course

31 included several guests, including a Vice President of National Grid. I write this
32 letter to express my own opinions. I do not speak for Clark University, the
33 Sustainability Hub, the Ad Hoc Committee, or students of my class. Those groups
34 have members that hold a wide range of opinions.

35 I envision many possible scenarios. Let me express two plausible scenarios.
36 The first is the scenario that describes the present trajectory. The second scenario
37 represents my hopes.

38 In the first scenario, National Grid uses its substantial financial and political
39 power to institute its present plan to install wireless communication technology
40 without much awareness on the part of the public. The Sustainability Hub at Clark
41 University continues to be used as a way to convince the Worcester community to
42 adopt the wireless plan that National Grid has already designed. Some citizens of
43 Worcester become sick, due to electromagnetic hypersensitivity (EHS), but the
44 citizens have no idea of why they are sick because the citizens are not properly
45 informed concerning their level of exposure and the health risks of the deployed
46 technology; furthermore medical professionals continue to be ignorant
47 concerning EHS. The pattern of the Worcester experiment is replicated
48 throughout the country. Eventually, so many people become sick that there is a
49 national investigation. The national investigation concludes that the issue is
50 complicated, so that there must be scientific investigations that require decades
51 of research because the initial trial in Worcester had no plan to collect data.
52 Eventually the data show that the health effects are a conglomeration of effects
53 due to WiMAX towers, cell phones, cordless phones, Wi-Fi systems, laptops, baby
54 monitors, smart meters, and several other devices that communicate wirelessly.
55 Each of the manufactures of each device accuses the other device of causing the
56 health harm, out of fear of legal lawsuit, while the public suffers. Eventually the
57 federal government has an overall policy after decades of research. During these
58 decades, opponents of National Grid continue to be a thorn in the side of National
59 Grid, while public officials attempt to digest a litany of complicated points and
60 counter-points in a confrontational manner.

61 A second scenario is that the Sustainability Hub at Clark University
62 facilitates a conversation concerning the proposed technologies. The Hub hosts a
63 discussion concerning National Grid's initial proposal and alternatives. Experts
64 come to the Hub at Clark University to converse concerning the various topics.
65 National Grid participates in a dialog that involves proponents and opponents of
66 the initial plan. The discussion produces a more desirable alternative plan. If
67 wireless technologies continue to be deployed, then there is a plan to monitor the
68 health of citizens. US Representatives, such as Jim McGovern, call on the National
69 Academy of Sciences to study the approach taken in Worcester. There is a plan to
70 raise awareness in both the public and medical community concerning EHS.
71 Worcester is a model for the entire country and beyond. The National Academy
72 of Sciences and others analyze the publically-available data and then we proceed
73 from there.

74 There could be many other scenarios. Your actions now will determine the
75 realized scenario. My main goals are that: 1) decision makers become informed as
76 they consider whether to approve new infrastructure, and 2) we obtain funding
77 for studies before any new infrastructure is installed. Worcester Councilor Gary
78 Rosen's proposal for a moratorium is a plan to learn before proceeding.

79 All decisions involve uncertainty. We must weigh the benefits and costs,
80 while considering uncertainty. In my opinion, the intended benefits are marginal,
81 the potential costs are high. The actual benefits and costs are uncertain. The
82 trajectory of the decisions in Worcester will influence the planet. I think you
83 should insist on the best available information as you consider the proposed
84 controversial insufficiently-tested technologies.

85 Sincerely,

86 *Robert Gilmore Pontius, Jr.*

87 Professor Robert Gilmore Pontius Jr, PhD