

**Before the
Federal Communications Commission
Washington D.C. 20554**

In the Matter of)	
)	
Notice of Proposed Rulemaking)	
18 FCC Rcd 13187, 13188 ¶1 (2003))	ET Docket No. 03-137
)	
And)	
)	
Service Rules for the Advanced Wireless Services)	WT Docket No. 12-357
H Block---Implementing Section 6401 of the)	
Middle Class Tax Relief and Job Creation Act of)	
2012 Related to the 1915-1920 MHz and)	
1995-2000 MHz Bands ¶53 footnote 95)	

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by: The EM Radiation Policy Institute
P.O. Box 117
Marshfield VT 05658

e-mail: info@emrpolicy.org
Telephone: (802) 426-3035

Attorney: Whitney North Seymour, Jr.
455 Lexington Avenue, Room 1721
New York, New York 10017
email: wseymour@stblaw.com
Telephone: (212) 455-7640

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I. INTRODUCTION

1. The EMRadiation Policy Institute ("EMRPI") is a 501(c)(3) non-profit citizens organization based in Marshfield, Vermont engaged in public education concerning the adverse effects of radiofrequency (RF) radiation and electromagnetic radiation.

II. BACKGROUND

2. From EMRPI's inception and before through the EMR Network and Canyon Area Residents for the Environment, (CARE) EMRPI or its present officers have attempted to educate the FCC with scientific reports, affidavits and numerous demonstrations of health harm from the current FCC electromagnetic radiation guidelines.

3. Despite EMRPI's filing repeated Public Comments, visiting with FCC staff, putting on Congressional Staff briefings and seminars, and even filing complaints to get the FCC to adopt electromagnetic radiation safety limits that actually protect people, the FCC continues to disregard the problem – meanwhile authorizing thousands of new licenses to radiate increasing numbers of frequencies over a huge geographic area.

III. DISCUSSION

4. Citizens and localities that attempt to protect themselves by local zoning control and redress in the courts are thwarted by the FCC's "Federal Preemption". Meanwhile the courts accept the FCC's pronouncements of what is "safe" and deny legal redress to citizens.

5. The EMRadiation Policy Institute urges that realistic RF safety limits be set to protect citizens from continuous exposure to electromagnetic radiation, ranging from low-frequency to RF radiation, and to protect the public from the biological harms demonstrated in the thousands of studies set forth in the 2007 *BioInitiative Report: A Rationale for a Biologically-based Public Exposure Standard for Electromagnetic Fields (ELF and RF)*; and the *BioInitiative 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation*. (See: www.bioinitiative.org Complete texts incorporated herein by reference).

6. *BioInitiative 2012* analyzes the nearly 1,800 new studies published since 2006. These studies, published in peer-reviewed scientific and public health journals, report health damage at levels far below the existing FCC public safety limits such as:

- leukemia
- brain tumors

- increased risk of the neurodegenerative diseases, Alzheimer’s and amyotrophic lateral sclerosis (ALS – Lou Gehrig’s Disease)
- increased risk of breast and other cancers
- genotoxic effects (DNA damage, chromatin condensation, micronucleation, impaired repair of DNA damage in human stem cells)
- pathological leakage of the blood–brain barrier
- altered immune function including increased allergic and inflammatory responses
- miscarriage
- decreased sperm production
- cardiovascular effects
- insomnia
- short-term effects on cognition, memory and learning, behavior, reaction time, attention and concentration
- altered brainwave activity (altered EEG) and
- altered fetal brain development.

7. “EMF and RFR exposures cause bioeffects and adverse health effects consistent with those identified in children with autism spectrum disorders (ASDs)” (Section 20, *BioInitiative Report 2012*) and Sage Affidavit to FCC at:

<http://apps.fcc.gov/ecfs/comment/view?id=6017161958>

8. New RF safety limits also need to be adopted that genuinely protect people from biological harm - from extremely low-frequency ELF-EMF from power frequency sources, such as power lines and appliances, up through the electromagnetic spectrum including RF radiation.

9. The present FCC RF safety guidelines are deeply flawed, do not address chronic exposure, or vast numbers of studies showing biological harm at levels below what the FCC allows. The FCC has ignored the 2011 WHO IARC classification of RF radiation, and the earlier 2001 IARC ELF-EMF (Extremely Low Frequency Electromagnetic Fields) classification, as Group 2B Possible Human Carcinogens. Robert Baan MD, author of the IARC statement on RF, in response to an e-mail request from Dr. Connie Hudson of California wrote:

Although the key information came from mobile telephone use, the [IARC] Working Group considered that the three types of exposure entail basically the same type of radiation, and decided to make an overall evaluation on RF-EMF, covering the whole radiofrequency region of the electromagnetic spectrum.

In support of this, information from studies with experimental animals showed that effects on cancer incidence and cancer latency were seen with exposures to different frequencies within the RF region.

So the classification 2B, possibly carcinogenic, holds for all types of radiation within the radiofrequency part of the electromagnetic spectrum, including the radiation emitted by base-station antennas, radio/TV towers, radar, Wi-Fi, smart meters, etc.

10. According to CNN News, "The agency now lists mobile phone use in the same 'carcinogenic hazard' category as lead, engine exhaust and chloroform." (http://www.cnn.com/2011/HEALTH/05/31/who.cell.phones/index.html?hpt=hp_bn7) (Last accessed 2/3/13.)

11. Over four years ago, the National Academies of Science (NAS) documented 20 parameters lacking in the research upon which the current US RF radiation safety guidelines are based. National Academy of Sciences Report, *Identification of Research Needs Relating to Adverse Health Effects of Wireless Communication*, 2008, (www.nap.edu/catalog.php?record_id=12036)

1. Exposure of juveniles, children, pregnant women, and fetuses both for personal wireless devices (e.g., cell phones, wireless personal computers [PCs] and for RF fields from base station antennas.)
2. Variability of exposures to the actual use of the device, the environment in which it is used, and exposures from other sources.
3. Multilateral exposures.
4. Multiple frequency exposures.
5. Exposure to pulsed radiofrequency radiation.
6. Location of use (both geographic location and whether a device is primarily used indoors or outdoors).
7. Models for men and women of various heights and for children of various ages.
8. Exposure to others sources of RF radiation such as cordless phones, wireless computer communications, and other communications systems.
9. Exposure to the eyes, hand or the human lap or parts of the body close to the device.
10. RF exposure in close proximity to metallic adornments and implanted medical devices (IMDs) including metal rim glasses, earrings, and various prostheses (e.g., hearing aids, cochlear implants, cardiac pacemakers, insulin pumps, Deep Brain Stimulators S(DBSs)).

11. Sufficiently long exposure and follow-up to allow for detection of effects that occur with a latency of several years.
12. Lack of information concerning the health effects associated with living in close proximity to base stations.
13. Research that includes children, the elderly, and people with underlying diseases.
14. Research on possible adverse RF effects identified by changes in EEG (electroencephalogram) activity.
15. Lack of information on possible neurophysiologic effects developing during long-term exposure to RF fields.
16. Studies focusing on possible adverse RF effects identified by changes in cognitive performance functions.
17. Effects of RF exposure to the sensitive biological targets of neural networks.
18. Possible effects of RF exposure on fetal and neonatal development.
19. Possible influences of exposure on the structure and function of the immune system, including prenatal, neonatal, and juvenile exposures.
20. Possible influences of RF exposures on the structure and function of the central nervous system, including prenatal, neonatal, and juvenile exposures.

IV. RECENT EXPERT COMMENTS

12. De-Kin Li, MD, PhD Senior Reproductive and Perinatal Epidemiologist at the Kaiser Foundation Research Institute states, “when it comes to non-thermal effects of RF, which is the most relevant effect for public concerns, FCC guidelines are irrelevant and can not be used for any claims of SmartMeter safety unless we are addressing heat damage.” He concludes, “The bottom line is that the safety level for RF exposure related to non-thermal effect is unknown at present and whoever claims that their device is safe regarding non-thermal effect is either ignorant or misleading.” See: http://www.ccst.us/projects/smart/documents/li_response.pdf¹

13. Raymond Richard Neutra MD, Dr. PH, former Director of the California EMF Program, CCST Comment states, “There is lots of evidence that would suggest that RF and ELF exposures well below the current standards may be capable of causing added lifetime risk that exceeds the benchmark which triggers health based regulation.” He criticized the CCST, stating that the CCST was perpetuating a pattern of, “language use, hidden assumptions and making the uncertain seem certain so as to provide cover for policy.” See:

<http://www.ccst.us/projects/smart2/documents/letter21neutra.pdf>

¹ At the request of elected state assemblymen, the California Council on Science and Technology (CCST) issued its March 2011 *Health Impacts of Radio Frequency from Smart Meters*. Dr. Li submitted Comment in this process at the request of CCST.

14. On January 19, 2012, The American Academy of Environmental Medicine (AAEM), an international association of physicians and other professionals that provides research and education in the recognition, treatment and prevention of illnesses induced by environmental exposures, called for the California Public Utility Commission (CPUC) to place an immediate moratorium on Smart Meter installation and to hold hearings on Smart Meter health impacts, stating that:

As representatives of physician specialists in the field of environmental medicine we have an **obligation to urge precaution when sufficient scientific and medical evidence suggests health risks which can potentially affect large populations. The literature raises serious concerns . . .**

15. AAEM's statement also called for CPUC to provide immediate relief to those requesting it and to restore the analog meters. It states that FCC RF guidelines are "inadequate for use in establishing public health standards." See:

<http://aaemonline.org/images/CaliforniaPublicUtilitiesCommission.pdf>

16. The AAEM's comments mirror the sworn testimony of numerous scientists and physicians in the Jefferson County Colorado public zoning hearing over the zoning of high-powered HDTV antennas and broadcast towers. See EMRPI's Comment and May 2011 Reply Comment in FCC 11-13 - the Landline proceeding at:

<http://apps.fcc.gov/ecfs/document/view?id=7021649808> (last accessed 2/3/2013)

V. THE FCC'S VIOLATION OF SUPREME COURT RULINGS

17. The FCC's failure to protect the health and safety of citizens by providing updated biologically-based RF safety limits on electromagnetic radiation exposure goes to the heart of the *Chevron* and *Massachusetts v. EPA* rulings on an agency's authority to disregard its Congressional mandate. Such agency action and inaction are "arbitrary and capricious...[and] otherwise not in accordance with law." (*Massachusetts v. EPA*, 549 U.S. 497, 534-535 (2007))

18. The statute requiring the FCC to adopt and update RF safety regulations is not ambiguous, and therefore the clear intent of Congress applies. (*Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc. et al.*, 467 U.S. 837, 842-843 (1984))

19. The FCC may not side step its statutory responsibilities by shifting them to other agencies. The statute makes no provision for other agencies to instruct the FCC when its RF regulations need revision -- that duty rests squarely in the first instance with the FCC itself.

20. The statute is not ambiguous as to the FCC's jurisdiction and duty to establish and maintain effective RF safety regulations. *Chevron* deference to the agency's interpretation of its jurisdiction has no application here, where the statute is clear. (*Massachusetts v. EPA*, 549 U.S. 497, 533-534 (2007)) This is a statutory duty that cannot be evaded by the FCC at whim.

A. THE FCC'S REJECTION OF ITS STATUTORY DUTY TO UPDATE RF SAFETY REGULATIONS VIOLATES THE *CHEVRON* RULE

21. The Telecom Act of 1996 was passed by Congress during a frenzy of campaign contributions from the telecom industry. The Act prohibits state and local governments from considering the RF radiation environmental effects of Personal Wireless Services Facilities (PWSF) siting decisions.

22. Instead, Congress directed the FCC to set its own RF safety regulations for emissions from PWSF. The House Committee on Commerce said it was the Commission's responsibility to adopt uniform RF regulations "with adequate safeguards of the public health and safety." (H.R. Report No. 104-204, p. 94)

23. In 1996, the FCC set RF radiation safety regulations for PWSF emissions based on the "thermal effects" (i.e., the distance at which flesh is heated -- just like a microwave oven).

24. Since 1996, scientific studies in other countries around the world have repeatedly revealed harmful non-thermal, biological effects from various electromagnetic radiation exposure as earlier described, including destruction of DNA, which causes mutations in cells.

1. The NEPA Mandate

25. The National Environmental Policy Act declares national environmental policy in 42 U.S.C. §4331. In relevant part, that section provides the following declaration of responsibility for Federal Government agencies:

(b) In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may –

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;

3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; * * *

26. The Telecommunications Act of 1996 gave the FCC total and absolute preemptive control over the question of environmental harm from RF radiation exposure. The impact of that legislation, and the FCC's response, was summarized succinctly by the Second Circuit in *Cellular Phone Taskforce v. FCC*, 205 F.3d 82, at 88 (2d Cir. 2000):

While the FCC was considering the proposed guidelines, Congress passed the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (the "Act"), several provisions of which affected the FCC's ongoing proceedings. In particular, the Act preempted state and local governments from regulating the placement, construction or modification of personal wireless service facilities on the basis of the health effects of RF radiation where the facilities would operate within levels determined by the FCC to be safe. See 47 U.S.C. § 332(c)(7)(B)(iv). In the Second Order that is at issue in this case, the FCC announced, *inter alia*, a rule that prohibited state and local governments from regulating any personal wireless service facilities based upon perceived health risks posed by RF emissions as long as the facilities conformed to the FCC Guidelines regarding such emissions.

27. The Second Circuit emphasized the significance of the Telecommunications Act of 1996 at pages 95-96:

IV. The FCC's Preemption of Certain State Regulation

As noted earlier, while the rule-making process was underway, Congress passed the Telecommunications Act of 1996, providing, *inter alia*, that:

No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions. 47 U.S.C. § 332(c)(7)(B)(iv).

The FCC, as part of its rulemaking, issued a comparable interpretive ruling preempting state and local governments from regulating, based on RF emissions, the operation of personal wireless service facilities that are in compliance with the FCC regulations concerning such emissions.

28. The Commission's regulations governing RF emissions therefore totally block any and all citizen and governmental challenges to the placement of transmission facilities based on environmental harm so long as the FCC refuses to act. The hands of town, city and state officials

are completely tied on the question of potential harmful environmental effects because of this Congressional vesting of power and authority in the FCC.

29. Although the Commissioners and FCC staff state they are not qualified to perform this responsibility (see Point B, *infra*), they have no choice in the matter. It is their duty to inform themselves. The law of the land requires that they issue and maintain regulations governing radiofrequency emissions to guard the human health of every citizen. It is a duty that cannot be brushed aside.

B. THE FCC MISCONSTRUES THE SUPREME COURT'S RULING IN *MASSACHUSETTS v. EPA* THAT REQUIRES THE AGENCY TO COMPLY WITH CONGRESSIONAL MANDATES

30. Ten years ago, in 2003, the FCC dismissed a petition for inquiry filed by EMR Network (a predecessor to the present EMR Policy Institute). In its decision, the Commission expressly disowned its RF safety regulation statutory obligations under the Telecom Act, and justified its continuing inaction:

In its petition for inquiry, EMR requested that the Commission initiate a proceeding to gather information and opinion about the need to revise our regulations regarding human exposure to RF radiation. It further requested that the Commission use the information obtained in such an inquiry to revisit the guidelines currently established for evaluating human exposure to RF emissions from FCC-regulated transmitters. EMR observed that the Commission's current RF limits are several years old, and asserted that there are a number of studies which purport to demonstrate a health hazard from RF radiation that is not contemplated in our rules. In particular, EMR argued that non-thermal effects and the effects of long-term low-level exposure were not taken into consideration in setting the Commission's RF exposure guidelines. EMR supported its request by reference to a letter written by members of the Radiofrequency Interagency Working Group (IWG), an *ad hoc* group of scientific professionals from various federal agencies that have jurisdiction over or interest in various radiofrequency issues, to the Risk Assessment Working Group of the IEEE. [FN9: Letter from W. Gregory Lotz, Ph.D. to Mr. Richard Tell, June 17, 1999 (Lotz letter).] In that letter, at the request of the IEEE, the members of the IWG identified issues which they suggested should be addressed in considering revisions to IEEE's RF exposure guidelines.

4. OET [Office of Engineering and Technology at the FCC] dismissed EMR's petition, noting that in developing rules to implement health and safety related concerns, this Commission has historically relied on agencies

with primary expertise and responsibility for ensuring health and safety, such as the Environmental Protection Agency ("EPA) and the Food and Drug Administration (FDA). It observed that the current exposure guidelines are derived from criteria established by the National Council on Radiation Protection and Measurements (NCRP) and the IEEE, as further informed by the advice of the EPA, FDA, and other health and safety agencies. It noted that the adequacy of the Commission's RF exposure guidelines had recently been upheld, in the face of arguments similar to those advanced here by EMR, by the Second Circuit Court of Appeals. [FN10: See Cellular Phone Task Force v. FCC, 205 F.3d 82 (2d Cir., 2000).] OET concluded that a determination of whether the RF safety limits should be revised is, at least initially, more properly the jurisdiction of such agencies, and accordingly dismissed the petition.

(In the matter of EMR Network Petition for Inquiry to Consider Amendment of Parts 1 and 2 Regarding Environmental Effects of Radiofrequency Radiation, FCC 03-191. Order adopted July 28, 2003 and released August 14, 2003.)

(http://transition.fcc.gov/Document_Indexes/Engineering_Technology/2003_index_OET_Order.html)

31. This continuing policy of FCC inaction except at the bidding of other agencies is a violation of the letter and spirit of §4331 of NEPA, defying the protests of local citizens and organizations that continue to question and protest the FCC's failure to update its RF safety regulations to address the non-thermal biological health effects of continuous cell tower emissions on human beings and wildlife. (See e.g. "Schools Are No Place for Cell Towers" *Washington Post*, November 18, 2004, <http://www.washingtonpost.com/wp-dyn/articles/A57511-2004Nov17.html> (last accessed 2/3/13); "Overflow Crowd Battles Cell Tower," *CTPost.com*, December 7, 2011, <http://www.ctpost.com/news/article/Overflow-crowd-battles-cell-tower-2354263.php> (last accessed 2/3/13); "School Parents Oppose Cell Tower Project at Rancho Cucamonga Church," *Inland Valley Daily Bulletin*, December 13, 2012, http://www.dailybulletin.com/breakingnews/ci_22188966/school-parents-oppose-cell-tower-project-at-rancho (last accessed 2/3/13)).

32. The FCC states that it keeps current with RF exposure studies, but takes no action on them unless initiated by a different Federal agency -- plainly not what Congress

intended when assigning Federal preemption to the FCC RF Regulations, and plainly in violation of this Court's holding in *Massachusetts v. EPA*. (See par. 8 of FCC 03-191)

1. Studies Disregarded by the FCC

33. Legions of studies demonstrating harmful non-thermal RF biological effects now exist. The agency acknowledges its failure to act: "[r]elatively more research is being carried out overseas, particularly in Europe." ("**WHAT RESEARCH IS BEING DONE ON RF BIOLOGICAL EFFECTS?**" (http://transition.fcc.gov/oet/rfsafety/rf_faqs.html#Q8 (Last accessed 2/3/13))).

2. Impacts on Wildlife

34. Astounding and troubling catastrophic RF exposure effects on wildlife are being observed in European studies, e.g. Alfonso Balmori's "Possible Effects of Electromagnetic Fields from Phone Masts on a Population of White Stork (*Ciconia ciconia*)" (*Electromagnetic Biology and Medicine*, 24: 109-119, 2005) (See: http://www.powerwatch.org.uk/news/20051006_storks.pdf (Last accessed 2/3/13)), demonstrating RF biological effects in marked mating behavioral changes and failed propagation in white storks nesting near transmission antennas; and Balmori's "Mobile Phone Mast Effects on Common Frog (*Rana temporaria*) Tadpoles: The City Turned into a Laboratory," (*Electromagnetic Biology and Medicine*, 29: 31-35, 2010) see abstracts at: <http://www.ncbi.nlm.nih.gov/pubmed/20560769> and <http://lib.bioinfo.pl/paper:20560769> (last viewed 1/5/13) demonstrating 90% mortality of tadpoles exposed to cell RF emissions.

35. Additional adverse impacts to animals are set forth in the affidavit of Cindy Sage, Co-Editor of *BioInitiative 2012: A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation*. (See: www.bioinitiative.org herein cited and included in its entirety by reference).

Animal studies have demonstrated oxidative and DNA damage, pathological changes in the testes of animals, decreased sperm mobility and viability, and other measures of deleterious damage to the male germ line (Dasdag et al, 1999; Yan et al, 2007; Otitoloju et al, 2010; Salama et al, 2008; Behari et al, 2006; Kumar et al, 2012). There are fewer animal studies that have studied effects of cell phone radiation on female fertility parameters. Panagopoulous et al. 2012 report decreased ovarian development and size of ovaries, and premature cell death of ovarian follicles and nurse cells in *Drosophila melanogaster*. Gul et al (2009) report rats exposed to stand-by level RFR (phones on but not transmitting calls) caused decrease in the number of ovarian follicles in pups born to

these exposed dams. Magras and Xenos (1997) reported irreversible infertility in mice after five (5) generations of exposure to RFR at cell phone tower exposure levels of less than one microwatt per centimeter squared ($1\mu\text{W}/\text{cm}^2$).

3. Impacts on Humans

36. Studies implicating human health effects include details of diverse adverse health effects experienced by persons in Germany who live close to cell site base stations. (See: Horst Eger and Manfred Jahn, "Specific Health Symptoms and Cell Phone Radiation in Selbitz (Bavaria, Germany) - Evidence of a Dose-Response Relationship, Umwelt-Medizin-Gesellschaft 23, 2/2010 (available at <http://www.scribd.com/doc/38565331/Specific-Health-Symptoms-and-Cell-Phone-Radiation-in-Selbitz-Bavaria-Germany-%E2%80%94-Evidence-of-a-Dose-Response-Relationship> (last accessed 2/3/13)). Another study from Germany states that persons living within 400 meters of cell transmission antennas have been found to contract cancer at a rate three times higher than persons living beyond that distance. (Horst Eger, et al., "The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer," Umwelt-Medizin-Gesellschaft 17, 4/2004 (available at: <http://www.tetrawatch.net/papers/naila.pdf> (last accessed 2/3/13)).

37. The studies pile up, while the FCC looks the other way, in violation of its express statutory obligations.

38. Since 1996, scientific studies around the world have found harmful non-thermal, biological effects from broadcast radiation, cell tower frequencies, affecting people living close to cell, TV and FM transmitters including destruction of DNA, which causes mutations in cells. Studies incorporated into the latest edition of *The BioInitiative Report* were compiled by 29 authors from ten countries including Sweden, USA, India, Italy, Greece, Canada, Denmark, Austria, Slovak Republic, and Russia; ten holding medical degrees (MDs), twenty-one holding PhDs, and three with MSc, MA or MPHs. (See <http://www.bioinitiative.org/> and <http://www.bioinitiative.org/table-of-contents/> (last accessed 2/3/13)). Despite this responsible and compelling scientific evidence, the FCC has totally failed to update its safety regulations for electromagnetic radiation emissions.

39. Why would a federal agency with exclusive jurisdiction and an express statutory obligation to set and keep safety regulations "adequate for public safety" refuse to act?

40. At the time of the enactment of the TCA, the House Committee on Commerce expressly stated that it is the Commission's responsibility to adopt "uniform, consistent requirements, with adequate safeguards of the public health and safety," and that these were, and are, to be "established as soon as possible." (H.R. Report No. 104-204, p. 94) (Emphasis added.)

4. "Adequate, Appropriate and Necessary"

41. The Congressional mandate to the FCC to maintain RF regulations "adequate" to safeguard public health and safety was reiterated for emphasis on page 95 of House Report 104-204:

"The Committee believes the Commission rulemaking on this issue (ET Docket 93-62) should contain adequate, appropriate and necessary levels of protection of the public, and needs to be completed expeditiously."

(Emphasis added.)

5. Where Congress's Intent Is Clear, That Is The End of the Matter

42. The Supreme Court's holding in *Chevron* leaves no room for agency mavericks imposing arbitrary deadlines in disregard of Congress's intent.

If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress....

Chevron U. S. A. Inc. v. Natural Resources Defense Council, Inc.,
[467 U. S. 837](#), 843 (1984)

C. THE FCC MAY NOT "AVOID ITS STATUTORY OBLIGATION" AS THE SUPREME COURT HELD IN *MASSACHUSETTS v. EPA*, TO ADOPT "ADEQUATE SAFEGUARDS OF THE PUBLIC HEALTH AND SAFETY" -- NOW SEVENTEEN YEARS OUT-OF-DATE -- NOR DISREGARD THE STATUTORY MANDATE TO "PROMOTE THE SAFETY OF LIFE AND PROPERTY" (47 USC §332(a)(1)) BY FURTHER DELAY

43. In *Massachusetts v. E.P.A.* (*Massachusetts v. EPA*, 549 U.S. 497 (2007)), several states petitioned the Supreme Court to review the mandate under The Clean Air Act to the EPA to regulate emissions of four greenhouse gases. Among the issues presented was whether the EPA had the authority to refuse to regulate the emissions based on political and other considerations unrelated to the endangerment to human health and welfare. Justice Stevens wrote for the majority that ignoring scientific findings and passing the responsibility on to others would not lift the Congressional command to regulate:

On October 20, 1999, a group of 19 private organizations [FN omitted] filed a rulemaking petition asking EPA to regulate “greenhouse gas emissions from new motor vehicles under §202 of the Clean Air Act.” App. 5. Petitioners maintained that 1998 was the “warmest year on record”; that carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are “heat trapping greenhouse gases”; that greenhouse gas emissions have significantly accelerated climate change; and that the IPCC’s 1995 report warned that “carbon dioxide remains the most important contributor to [man-made] forcing of climate change.” *Id.*, at 13 (internal quotation marks omitted). The petition further alleged that climate change will have serious adverse effects on human health and the environment. *Id.*, at 22–35. * * *

EPA [cannot] avoid its statutory obligation by noting the uncertainty surrounding various features of climate change and concluding that it would therefore be better not to regulate at this time. See 68 Fed. Reg. 52930–52931. If the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming, EPA must say so. That EPA would prefer not to regulate greenhouse gases because of some residual uncertainty * * * is irrelevant. The statutory question is whether sufficient information exists to make an endangerment finding.

In short, EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change. Its action was therefore “arbitrary, capricious, ... or otherwise not in accordance with law.” EPA must make an endangerment finding, or whether policy concerns can inform EPA’s actions in the event that it makes such a finding. Cf. *Chevron U. S. A. Inc. v. Natural Resources Defense Council, Inc.*, [467 U. S. 837](#), 843–844 (1984). We hold only that EPA must ground its reasons for action or inaction in the statute.

Massachusetts v. EPA, 549 U.S. 497, 534-535 (2007) (Emphasis added.)

1. Steps FCC Must Take to Address Current Regulatory Procedural Inadequacies

a) Modify Categorical Exclusion for Rooftop Antennas

44. FCC procedures provide for a categorical exclusion from required preparation of environmental assessments for rooftop antennas located more than 10 meters above ground level, and operating with an output of less than 1,000 Watts ERP (Effective Radiated Power).

45. OET Bulletin 65 explains that these categorical exclusions are based on the Commission's determination that "such RF sources offer little potential for causing exposures in excess of the guidelines." (OET Bulletin 65 at page 12)

46. The Commission's rationale fails to take into account the realities of modern city living. There are many rooftop antennas located higher than 30 feet above ground that are significantly closer than 30 feet to adjoining apartments, homes and schoolrooms.

47. Environmental assessments should be made mandatory for all rooftop antennas within a safe operating distance of other structures

b) Enforcement of FCC RF Power Output Safety Standards

48. The Commission relies almost entirely on an honor system to ensure that carriers comply with wireless transmitter power limits.

49. As an agency practice, the Commission only checks carrier compliance upon a specific formal fact-based complaint.

50. There are no routine enforcement visits by FCC personnel, and no required filings of actual RF power levels by carrier personnel.

51. The Commission's few reported enforcement proceedings often show that carriers can and do exceed FCC RF power limits by the simple device of increasing power output.

52. There is obviously strong economic incentive for carrier employees to conceal the RF power output independently and there is no risk that the public is able to determine actual antenna RF power output levels.

53. As a result, carrier personnel can increase the service coverage areas for existing antennas without the need to install expensive additional equipment.

54. Simple Mandatory RF Compliance Reports are one possible remedy for this weakness in protecting the public:

- a. Wireless carriers should be required to file publicly-available certified annual (or more frequent) reports setting forth actual measured RF power levels for each licensed wireless transmitter.
- b. The report should be signed by the responsible technician and his or her supervisor under penalty of perjury.
- c. These RF compliance reports should then be made available on the internet for review by individual citizens, environmental protection organizations, and local governments.

VI. CONCLUSION

55. The presence of wireless antenna facilities, wireless broadband and broadband over powerline (BPL) can have negative impacts on the value and utility of land, pose potential health risks, and result in loss of property value.

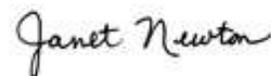
56. RF radiation in homes and other sensitive receptors (schools, daycare facilities, preschools, public libraries, hospitals, healthcare facilities, senior living centers) must be at levels below those associated with increased risk of cancer and neurological diseases that have been reported with chronic exposure to RF radiation.

57. Prudent public health actions are needed that are proportionate to the potential public health risks and enormous populations at risk.

58. For all of these reasons it is past time that the FCC adopt RF safety regulations that apply to today's real-life exposure environments and that incorporate current peer-reviewed published research findings on biological effects of low-intensity electromagnetic radiation exposure.

Respectfully submitted,

The EMRadiation Policy Institute



by Janet Newton, President

P.O. Box 117

Marshfield VT 05658

e-mail: info@emrpolicy.org

Telephone: (802) 426-3035