



SMART METERS

VIRGINIANS FOR SAFE TECHNOLOGY, LLC

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VA4ST'S MISSION

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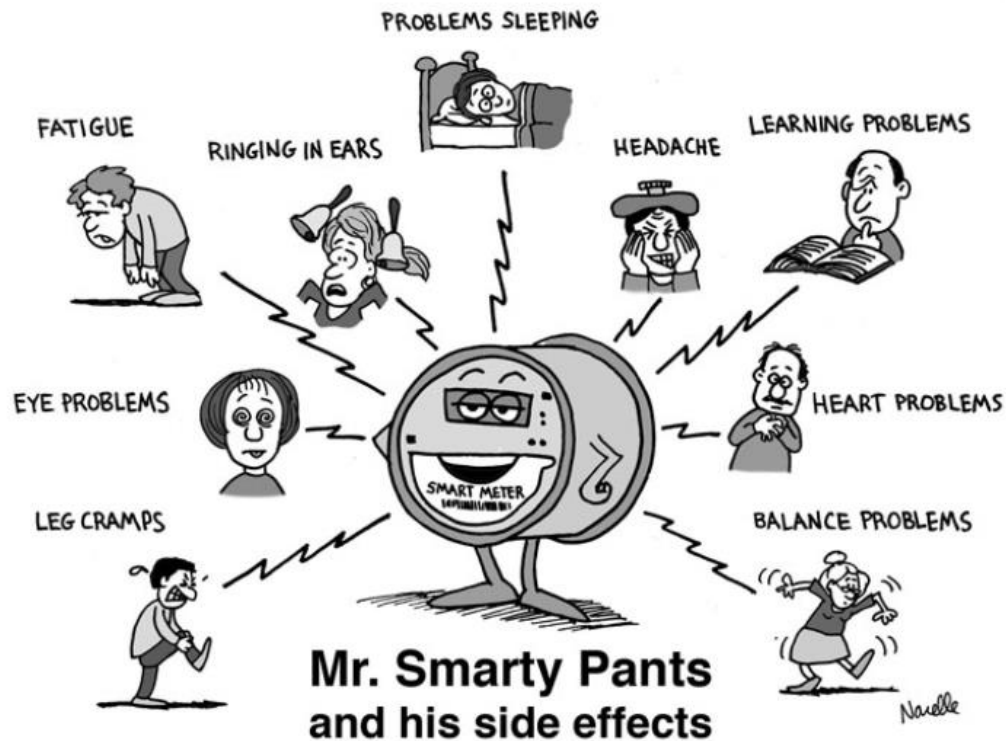
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AGENDA

- **COMMON SMART METER BIOEFFECTS**
- **SMART METER RESOURCES**
- **SMART METER TECH PROBLEMS**
- **SMART METER PICTURES**
- **ACTION PLAN**
- **REFERENCES**

COMMON RF/WIFI BIOEFFECTS



<http://emfsafetynetwork.org/wp-content/uploads/2015/04/Overview-of-PGECPUc-emails-on-smart-meters.pdf>

SMART METER RESOURCES

- www.emfsafetynetwork.org
 - Sebastopol's local ordinance 1057 banned smart meters since 2013 and recently got overturned in December 2021 due to **"climate washing" and is a marketing spin to claim that energy is being saved and reducing green house gases, a green initiative**
 - Smart meter fires and explosions are common. See <http://emfsafetynetwork.org/smart-meters/smart-meter-fires-and-explosions>
 - Nina Beety's Smart Meter Overview white paper (July, 2019) <https://smartmeterharm.files.wordpress.com/2019/07/fire-and-electrical-hazards-report.pdf> (*Fire and Electrical Hazards from 'Smart', Wireless, PLC, and Digital Utility Meters*)
 - *EMFsafetynetwork is filing a lawsuit and is hiring Ariel Strauss to represent them*
- <https://gettingsmarteraboutthesmartgrid.org>
 - *Tim Schoechle's paper "Getting Smarter about the Smart Grid" contains 9 key points that are problems with current electricity approach. Download here: <https://gettingsmarteraboutthesmartgrid.org/pdf/Smart%20Grid%20Report%203-15-13.pdf>*

SMART METER PROBLEMS

- **Lack of surge protection**
- No direct path to ground
- National Electrical Code 240 violation
- No Protective Device Coordination Study
- “Catastrophic failure” – a new meter failure mode
- **Overheating • Inferior materials (resin insulator on switch contact melts!)**
- Burned meter-to-meter-box contacts
- **Faulty remote disconnect switch**
- **Arcing**
- Circuit boards in electric meters
- Melting solder can create new circuit board pathways
- Meters don’t fit sockets • Thinner blades • Pitting
- Malfunctioning temperature alarms and sensors
- Switching mode power supply (SMPS) surges and appliance damage
- RF signal and SMPS transients routed onto building wiring
- **Interference with AFCIs/GFCIs (disables them with a ‘false trip event’)**
- **Moisture, heat, and flammable Lithium batteries (can leak too)**

SMART METER PROBLEMS

- Risks from AMI/AMR water meters
- **UL certification of meter models that cause fires**
- Flawed FCC requirements and testing
- Inadequate worker qualifications and training, poor installation quality
- **Vulnerability to hacking**
- Danger due to meter location • Vibration and heat in building materials from RF emissions
- Accelerated corrosion
- Violation of FCC Grants of Equipment Authorization

FCC's ROLE

47 USC 151

- ✓ To promote national defense
- ✓ To promote the safety of life and property
- ✓ Smart meters are an FCC part 15B device, **unlicensed frequencies**
- ✓ Jurisdiction as to who should mitigate RF Interference is unresolved, Federal, state and/or local?
- ✓ Smart meters violate FCC Rules **47 CFR 15.15 and 15.5**

“ ... the FCC requires that Part 15 devices be operated in such a way that they not cause harmful interference [RFI]. The operator of the Part 15 device is responsible for correcting the interference or to stop using the device if so ordered by the FCC.” Continued use is in violation of federal law.
<http://arrl.org/part-15-radio-frequency-devices> (harmful interference)

FCC's has the capability to confiscate every smart meter if the RFI was not resolved by the operator or energy company, but would be an overburdensome and unrealistic public solution. Alternately, all states and local governments have the capability to enforce fire codes to mitigate RFI as well residents themselves, if they were made aware of the problem.

FCC RULE 47 CFR 15.5

47 CFR 15.5. General Conditions of Operations

<https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-15/subpart-A/section-15.5>

- (a) Persons operating intentional or unintentional radiators shall not be deemed to have any vested or recognizable right to continued use of any given frequency by virtue of prior registration or certification of equipment, or, for power line carrier systems, on the basis of prior notification of use pursuant to [§ 90.35\(g\) of this chapter](#).
- (b) Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an incidental radiator.
- (c) The operator of a radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.
- (d) Intentional radiators that produce Class B emissions (damped wave) are prohibited.

FCC RULE 47 CFR 15.15

47 CFR § 15.15 General Technical Requirements.

<https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-15/subpart-A/section-15.15>

(a) An intentional or unintentional radiator **shall be constructed in accordance with good engineering design and manufacturing practice.** Emanations from the device shall be suppressed as much as practicable, but in no case shall the emanations exceed the levels specified in these rules.

(c) Parties responsible for equipment compliance should note that the limits specified in this part will not prevent harmful interference under all circumstances. Since the operators of part 15 devices are required to cease operation should harmful interference occur to authorized users of the radio frequency spectrum, the parties responsible for equipment compliance are encouraged to employ **the minimum field strength necessary for communications**, to provide greater attenuation of unwanted emissions than required by these regulations, **and to advise the user as to how to resolve harmful interference problems**

STATE AND LOCAL ACTIONS

- Complaint filed on May 17, 2022 to **DPOR**, Department of Professional and Occupational Regulation (on hold pending findings of any fire hazard and/or OSHA violations filed by *other* regulating authorities)
- Initial complaint is that workers are causing fire hazards to residents by installing smart meters 'hot' in violation of the national electric code. Power companies follow National Electric Safety Code which is a paid subscription service!!
- **OSHA** will not accept any worker complaints unless there is physical harm or even a death before they will investigate !!!!! DPOR case no. 2021-02119, pg. 28.
- **Local building inspectors** are hands- off and do not claim any joint jurisdiction over electric utility meter inspections even though smart meters are hook up to 5g IoT telecommunications towers, not just the power grid, and is permissible for them to 'take jurisdiction' vs. being delegated it by the state public utility
- Pending additional filings as deemed necessary depending on resolution of ongoing investigations of fire hazard findings or citations and opt-out form deficiencies
- Nina Beety got additional options added to the CA Opt Out form for wired and analog utility meters. This is the goal too for Virginia!!