

AN OVERVIEW OF "SMART" METER HAZARDS

Why We Must Take Immediate Action to Protect
the Health, Safety and Privacy of All New Yorkers

Introduction

New York State recently embarked on an ambitious initiative to examine and reform its energy vision. For this to be successful, New York State must first enact utility consumer-protective legislation that includes an end to the forced installation of digital "smart" meters.

The New York State Public Service Commission (NYSPSC) approved "smart" meters for use in the early 2000s. The approval was based on ignorance and misleading information from the utility industry. This decision is now adversely affecting millions of people.

By early 2007-08, utilities began to replace functioning mechanical analog meters with "smart" meters. By 2009-10, "smart" meter health complaints were reported to government agencies and utilities. Today, there are thousands of reported "smart" meter injuries world-wide, yet utilities in New York State have continued to force unsafe, privacy-invading and expensive "smart" meters on residents. New York State elected officials and the NYSPSC are complicit in this misconduct.

Utility corporations wield excessive influence over government agencies and elected officials. This unbalanced power structure restricts our energy choices and must be reined in before New York State can be truly dedicated to fostering an independent, sustainable and safe energy future.

What is Wrong with "Smart" Meters?

HEALTH - "Smart" meters are energy-intensive digital electronic devices that collect, record and transmit private utility usage data. These meters emit

dangerous non-stop pulsed microwave and/or electrical radiation. This exposure is making some people very ill. Symptoms include insomnia, heart palpitations, heart ailments, tinnitus, anxiety, depression, inflammation, intestinal ailments, headaches, skin rashes, high blood pressure, strokes, cancer, worsening of previous illnesses and more.

Because utility companies have refused to accommodate customer requests for safe analog meters, residents have taken it upon themselves to remove "smart" meters. Some New Yorkers have been forced to live without electricity rather than be sickened by the radiation emitted from "smart" meters.

See the links below for information about "smart" meter health risks:

[Dr. Ronald Powell: Symptoms After Exposure To Smart Meter Radiation](#)

[American Academy of Environmental Medicine opposes the installation of "smart" meters](#)

[Study Uncovers How Electromagnetic Fields Amplify Pain in Amputees](#)

[Video: Dr. Dietrich Klinghardt: "Smart" Meters & EMR: The Crisis of Our Time](#)

[Video: 200 International scientists sign an appeal to the United Nations to protect human health and wildlife from electromagnetic fields and wireless technology](#)

[Video: MSMA: Woman Suffers Acute Radiation Exposure from "Smart" Meters](#)

SAFETY - In addition to health risks, "smart" meters are causing fires, explosions and equipment failures across the United States and around the world.

Utilities and government agencies overlooked evaluating the dangers of retrofitting a complicated electronic microwave "smart" meter into a socket and electrical system that was designed for a mechanical analog meter. Furthermore, electrical engineers have found that "smart" meters lack surge protection, whereas analog meters are built with substantial surge protection. Power surges can cause fires, explosions and equipment failures. Perhaps the utility industry knew about these problems and, as a result, never obtained Underwriters Laboratories (UL) approval for "smart" meters. It is generally accepted that all electronic devices should be UL approved. In fact, utility

companies' own "safety" pamphlets strongly recommend using only electronic devices that are UL approved. Why has the NYSPSC allowed utilities to install electronic-intensive "smart" meters that are not UL approved? This oversight is perilous and inexcusable.

Thousands of "smart" meters have been recalled for various failures, at consumer expense, through tax dollars and raised utility rates. These failures include over-billing, faulty operation, unreliable signals, overheating, melting circuit boards, fires, explosions and other safety concerns.

See the links below for Con Edison UL safety recommendations:

[Con Edison "Safety" Tips Include UL Approval](#)

[More Tips From Con Edison For UL Approved Electronics](#)

See the links below for information about "smart" meter fires and explosions:

[EMF Safety Network: Smart Meter Fires and Explosions](#)

[Stop Smart Meters: "Smart" Meter Fire News Round Up](#)

[Smart Grid Awareness: Domino Effect "Smart" Meter Fires Video - Smart Meter Fires Explained](#)

[Video: Brian Thiesen - Smart Meter Fires Explained](#)

See the links below to articles about "smart" meter recalls:

[Article: 2016-Hydro One pulls plug on wonky smart meters in rural areas](#)

[Article: More Smart Meters Removed Due to Fire Hazard](#)

PRIVACY - Along with posing health, safety and fire risks, "smart" meters invade utility consumers' privacy. "Smart" meters allow utility companies to extract utility consumers' private utility usage data without permission. We pay utilities to deliver electricity, water and gas. We have not given them the right to violate our privacy by stealing our personal data.

Security experts warn that "smart" meters are a major cyber-security threat because they can be electronically hacked. In its rush to profit, the utility industry failed to calculate the vulnerability of wireless "smart" meter networks to terrorist attacks that could shut down essential parts of local and national utility operations.

Likewise, the transmission of private utility usage data is vulnerable to hackers who have the ability to determine when residents are not at home. This makes individuals susceptible to crime through "smart" meter wireless networks.

See the link below for information about "smart" meter privacy breaches:

[Smart Meter Awareness: "Smart" Meters Generate a 'Gold Mine of Data' for Utilities](#)

See the links below for information about "smart" meter cyber-security risks:

[Smart Grid Awareness: Puppet Attack: Newly Discovered Cyber Threat For Smart Meters](#)

[Video: CIA Director calls Smart Grid Really Stupid - Security - Smart Meters](#)

Utilities Spread Misinformation About "Smart" Meters

When corporations spread misinformation about their products, it is important for government agencies, elected officials, environmental groups and the public to take notice and learn the facts. Utility providers in New York State have made the following false claims about "smart" meters:

1. Since 2010, utility companies in New York State have claimed their meters are not "smart" meters.

FACT: Today, when concerned customers contact utility providers about meters, the companies insist that their digital meters are not "smart" meters. This name game must stop. "Smart" is the word the industry chose to sell digital meters. Because so many problems were reported after the installation of "smart" meters, the word "smart" became synonymous with the dangers of this technology. Instead of changing out their ill-conceived meters, the utilities simply changed the names of these digital meters to "AMR," "ERT," "non-transmitting digital opt-out," etc. These are all "smart" meters, regardless of the labels with which the utilities attempt to mask them.

See the links below for proof about utility industry meter name games:

[SEEI-AEIC-UTC: Smart Meters and Smart Meter Systems... 2011](#)

[GE Digital Meters \("Smart" Meter - NY State - Fortis Central Hudson\)](#)

Smart Infrastructure Fortis Central Hudson

2. The utility industry claims “smart” meters are safe and have been tested for health and safety.

FACT: The industry bases its "smart" meter health and safety claims on flawed Federal Communication Commission (FCC) testing for electrical interference. In the only test that the FCC conducted, the "smart" meter was not connected to, nor did it interact with, realistic conditions found within electrical systems, electronic and wireless equipment, building materials and biological systems. This test failed to include unpredictable conditions within buildings. These variables are what determines how fast individuals become ill after "smart" meters are installed. The FCC never tested “smart” meters for health and safety. The FCC, it is not a health agency.

In 2010, Hastings-on-Hudson residents reported illnesses after Con Edison installed “smart” meters. In response, Stop Smart Meters NY hired Isotrope, an expert engineering firm, to investigate the microwave radiation emissions caused by "smart" meters. Using basic microwave detecting equipment, Isotrope confirmed that “smart” meters transmit non-stop pulsed microwave signals.

Using more sophisticated microwave detecting equipment, Isotrope also determined that “smart” meters cause conducted pulsed microwave radiation (CPMR) to travel into and contaminate home electrical wiring systems. A “smart” meter unleashes CPMR through the electric circuit breaker panel, which then transforms an entire electrical wiring system into a massive pulsed microwave antenna. Once CPMR corrupts the electrical system, it can radiate at unpredictable levels and locations within a building. This “antenna effect” is an unprecedented whole body microwave radiation exposure. Microwave radiation is designated by the World Health Organization (WHO) as a Class 2B possible carcinogen.

On page 16 of the Isotrope report, a photograph depicts the "FCC Part 15.247" testing of a "smart" meter. The meter was altered to fit the test modality. The photograph shows that the FCC laboratory attached a power cord to the bottom of the meter. A utility meter does not employ a power cord. By adding a power cord, the test bypassed consumer and utility wiring that would typically pass through a "smart" meter in real-life conditions. The Isotrope report states: "Using a power cord instead of setting up the power wiring the way the device is actually used may not reveal how the house circuit wiring through the meter may act. The actual *in-situ* wiring may be more like an antenna that may pick unwanted RF energy and noise within the meter and conduct it into the

residence." The Isotrope report further explains that, in a proper test, the "smart" meter would have failed. (see page 12 of Isotrope report below)

In its testing procedure, the FCC also failed to detect unsafe and unacceptable levels of conducted high frequency voltage transients, known as "dirty electricity". "Dirty electricity" is triggered by electronic components inside "smart" meters, including the switch mode power supply. (Analog utility meters contain no electronic components, and therefore cause no "dirty electricity" or CPMR.)

Unleashing this technology on an unknowing public before it was tested correctly has resulted in thousands of reported injuries, fires, explosions and equipment failures. Elected officials and government agencies have allowed the utility industry to force a hazardous electronic device on its customers, based on a fatally flawed test that was never intended to assess health and safety.

In addition, utility workers who drive through neighborhoods collecting microwave signals from thousands of "smart" meters are at risk from radiation exposure. These risks are intensified by the electronic and microwave "smart" meter equipment inside the utility vehicle. This exposure was never tested for health and safety.

See Myth #2 in link below for information about WHO Class 2B carcinogens:

[NACST: 10 Myths - We Need the Facts](#)

See the link to Isotrope report below:

[Isotrope: Report on Examination of Selected Sources of Electromagnetic Fields at Selected Residences in Hastings on Hudson](#)

3. Utilities in New York State claim mechanical analog meters are no longer available.

FACT: Analog meters are available. Utilities are relying on this myth as an excuse to maximize their profits from the roll-out of "smart" meters. Supply meets demand. If there is a demand for analog meters, there will be a supply. Utility companies and consumers in New York and across the United States can easily obtain analog meters.

4. Utilities in New York State claim analog meters do not work with solar power arrays.

FACT: In New York State, there are functioning analog meters that simply spin backwards when connected to grid-tied solar systems. Some New Yorkers are afraid to install grid-tied solar because their utilities have told them -- falsely -- that they will need to have a "smart" meter. This deception is inexcusable, and is impeding progress toward increased use of renewable energy sources.

5. Utilities in New York State claim “smart” meters lower energy costs.

FACT: Since 2007, when “smart” meters became widely distributed throughout New York State, utility rates have skyrocketed. There is no evidence that “smart” meters are cost effective. Replacing and destroying reliable analog meters with "smart" meters yields a cost, not a savings. If the utility industry has its way, the failed one-way "smart" meter program will soon need to be replaced with a more expensive, untested two-way "smart" meter program. This will impose further costs on utility customers, while "smart" meters have no proven benefits.

6. Utilities in New York State claim “smart” meters are similar to and as “safe” as other electronic appliances and devices in homes.

FACT: With NYSPSC approval, utility companies in New York State force “smart” meters on consumers. There are no other electronic appliances or devices that everyone is required to have. With other electronic equipment, we have a choice.

"Smart" meters cannot be compared to other devices because these meters are attached at the electric circuit breaker panel. Thus, they are connected to all electrical wiring throughout private property. No other device, other than a "smart" meter, is connected to an entire building's electrical system and contaminates it with transmitted and conducted non-stop, pulsing electrical and microwave radiation that cannot be turned off. “Smart” meters have a dangerous and unique design. No wireless or electronic device can be compared to a "smart" meter.

7. Utilities in New York State claim and have convinced the public, lawmakers and environmentalists, that “smart” meters offer benefits for both consumers and the environment. They say that "smart" meters are necessary to manage energy consumption and integrate renewable energy resources into the power grid, therefore addressing the climate crisis.

FACT: In 2009, \$11 billion in Federal stimulus funds were allocated for "green" technology. Utility companies in New York State grabbed hundreds of millions of these funds, our tax dollars, for "smart" meters they claimed were “green.” This money grab continues today. In the last eight years, New Yorkers have

seen no proof of any environmental benefits from "smart" meters.

The utility industry was not considering the environment when it first began installing "smart" meters, but instead intended to increase its profits by eliminating jobs for meter readers, raising rates and collecting data to sell to third parties.

Replacing analog meters with electronic "smart" meters does not save energy. Are millions of pulsing microwave "smart" meters, installed on every house and building in New York State, going to save energy? Is it sustainable to set up an energy-intensive electronic "smart" meter infrastructure? Will it help the climate crisis to build giant temperature controlled buildings to house massive utility data collection centers? Is it benefiting the environment to use excessive amounts of energy to steal and sell our private utility usage data? No, all of these undertakings are excessive and wasteful. The push by the utility industry to green-wash "smart" meters is motivated by profit alone, rather than a sincere concern for combatting the climate crisis or saving energy.

8. Utilities in New York State claim that a time-of-use rate system facilitated by "smart" meters is essential for energy savings.

FACT: Time-of-use rates are an excuse for the utility industry to install "smart" meters, charge higher rates and make more money. Time-of-use charges are unjust. For example, it is unfair to impose higher rates for daytime usage when an individual works at night and is only home during the day. "Smart" meters and time-of-use rates are not needed in order to level peak demand when there are proven educational and non-invasive conservation methods that are successful.

See the links below for information about energy conservation measures:

[SARE: Energy Conservation & Renewable Energy](#)

9. Utilities in New York State claim "smart" meters do not collect personal utility usage data.

FACT: "Smart" meters are designed to collect granular personal utility usage data. If a more intensive two-way "smart" meter infrastructure is approved in New York State, personal data will not only continue to be collected, it will also be sold by utilities to third parties, without consumers' permission. Utilities have no right to obtain or sell customers' personal utility information. This is electronic trespassing.

10. Some utilities in New York State are charging fees for a "non-transmitting digital opt-out meter" they claim is not a "smart" meter and is safe.

FACT: All digital utility meters, including the so-called "opt-out," are technically "smart" meters. Both transmitting and non-transmitting digital "smart" meters are unsafe because they cause "dirty electricity" to conduct into buildings on electrical wiring. Many health complaints have been reported after the installation of transmitting as well as non-transmitting "smart" meters. To continue to force New Yorkers to use digital meters, whether transmitting or not, is unsafe, privacy invading and a violation of human rights.

An "opt-out" is not a solution and is dangerous to everyone. Those who do not have "smart" meters will still be exposed to hazardous radiation from surrounding meters. How do people who live in apartments "opt-out" when everyone else around them has "smart" meters? How do families who live above hundreds of electric, water and gas "smart" meters "opt-out" if they want to protect themselves? How do individuals who live on the other side of a bank of "smart" meters "opt-out" from transmitted microwave radiation coming through their walls? How do parents who know nothing about meters protect a baby who is sleeping on the other side of a bank of "smart" meters? How do building superintendents living in basement apartments next to rooms full of "smart" meters protect themselves? No one can "opt-out" of CPMR or "dirty electricity".

It is nonsensical for utilities to make New York State residents pay costly fees to "opt-out" of a "smart" meter, only to have another "smart" meter imposed on them, especially when safer analog meters are already approved by the NYSPSC. This deceitful utility "opt-out" offer is yet another way for companies to raise rates and confuse the public about "smart" meters. The only safe solution is the complete elimination of "smart" meters and the return of safe analog meters.

Using False Information to Justify "Smart" Meters

The justification for the utility industry's entire roll-out of "smart" meters is based on erroneous claims. The public is not being protected. How many more complaints about the hazards of "smart" meters do we need before something is done about this? How many more people will have to be injured before elected officials and government agencies take this seriously? Who is responsible for the harm this has caused? These problems must be investigated. In the meantime, every single "smart" meter in New York State must be removed in order to protect human health and the environment.

“Smart” Meters Should Never Have Been Approved in New York

It was a terrible and costly mistake for the NYSPSC to approve the deployment of "smart" meters before assessing their health, safety, fire, privacy, cyber-security and financial risks. There have never been any plausible justifications for using "smart" meters. Analog meters should have been left in place for the following reasons:

- Analog meters have been used safely for decades with no complaints. "Smart" meters have been used for less than a decade with many thousands of reported complaints.
- Analog meters are durable, accurate, cost-effective and have a life-span of 20 to 40 years. "Smart" meters are flawed, ill-conceived plastic devices that need to be replaced often.
- Analog meters have proper surge protection. “Smart” meters do not have surge protection.
- Analog meters protect the privacy of utility consumers. "Smart" meters harvest private utility usage data.
- Analog meters are not a safety threat. "Smart" meters cause fires, explosions and equipment failures.
- Analog meters are well-designed mechanical devices that contain no electronic components or antennas, waste no electricity and do not need batteries. "Smart" meters contain poorly designed electronic components and microwave antennas that waste electricity.
- Analog meters do not cause "dirty electricity" or microwave radiation to conduct onto electrical wiring. "Smart" meters cause unprecedented "dirty electricity" and microwave radiation to conduct onto electrical wiring, thus contaminating entire electrical systems.

Local Municipalities Address the Dangers of "Smart" Meters

To date, the Towns of Woodstock and Olive and the City of Kingston have passed resolutions asking the New York State Legislature to investigate the health, safety, privacy and financial risks of "smart" meters. They have done this in response to escalating complaints from residents about the hazards of

"smart" meters. Each of these communities has affirmed the immediate right of utility customers to retain or recover analog meters.

Conclusion

Safe and Sustainable Energy Goals with Analog Meters

New Yorkers have made it clear that they want to conserve energy and address the climate crisis, as evidenced by numerous comments submitted to the NYSPSC. Those who have taken the time to research and educate themselves about the hazards of "smart" meters have made it clear that we cannot ignore the facts or waste money on a failed technology.

For over seven years, the NYSPSC and elected officials have ignored public concerns and mounting scientific evidence about the dangers of "smart" meters. Since 2009, scientists, doctors, fire prevention experts, privacy and cyber security experts and engineers have warned that "smart" meters expose us all to intolerable risks. It is now time to heed these warnings and focus the powerful collective energy of New Yorkers on public safety and sound energy conservation, rather than surrendering to corporate greed.

Contrary to utility industry claims, "smart" meters were never tested for health, safety, privacy, fire hazards or radiation emissions. "Smart" meters have no proven consumer benefits. The risks are too high to allow this failed initiative to continue. To protect public health, safety and the environment, New York State residents and elected officials must take immediate action to stop "smart" meters.

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