'Smart' Meters Causing Fires and Explosions

► Unheard of with the analog meters

See the **forensic research**, "The Discovery and Science of Smart Meter Fires" (2021): <u>https://ehtrust.org/wp-content/</u><u>uploads/The-Discovery-and-Science-of-Smart-Meter-Fires.pdf</u>.



And see Neena Beety's "Overview: Fire and Electrical Hazards from 'Smart', Wireless, PLC, and Digital Utility Meters":

https://smartmeterharm.org/wp-content/uploads/2019/07/fireand-electrical-hazards-report.pdf.

On page 5 of this overview, William S. Bathgate explained about the varistors that are used instead of surge protectors in these meters: "This small electronic part [the varister] cannot withstand more than a 300 Volts AC surge. The part will explode when a line voltage surge exceeds this limit, such as when a tree branch touches the high voltage lines or lightning strike occurs nearby. Once this Varistor explosion has occurred it permits high voltage transfer to the other circuit board components and the circuit board substrate. This results in the AMI meter literally exploding from the meter socket or in a severe melting of the plastic components, likely leading to a fire and/or severe home damage."





A burned up smart meter on a home in Reno. (Photo: Provided by the Reno Fire Department)

"Overview: Fire and Electrical Hazards from 'Smart', Wireless, PLC, and Digital Utility Meters"

Neena Beety, <u>https://smartmeterharm.org/wp-content/uploads/2019/07/fire-and-electrical-hazards-report.pdf</u>.

INCLUDES: all wireless transmitting 'smart' meters, AMI (Advanced Metering Infrastructure), AMR (Automated Meter Reading), ERT (Encoder Receiver Transmitter), PLC (Power Line Communication) and BPL (Broadband over Power Line metering).

This overview covers wide-ranging 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 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 [Arc Fault Circuit Interrupters/Ground Fault Circuit Interrupters] Moisture, heat, and flammable Lithium batteries Risks from AMI/AMR water meters UL Certification of meter models that cause fires [lack of] 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

And related serious issues:

Removal of meters from fire scenes Hampered investigations Non-specific and inadequate fire coding Punished whistleblowers Problems undercounted due to lack of proper investigation Elimination of monthly inspections by meter readers Increasing terpenes in surrounding trees due to stress

[TERPENES ARE FLAMMABLE]

Inaction from fire safety administrators Inaction from regulatory agencies; exemptions and loopholes News media censorship and failure to investigate Regulatory commission defense of Smart Meter programs Unsafe time-of-use rates Utility company lack of transparency and misinformation Insurance industry silence