

Telecom Fires & Federal Wireless Bills

*arc flashes
up to
35,000°F*

*broken
messenger and lashing
wires*

*lightning
discharge*

*up to
60 minutes
to cut power*

*electrical
arcing*

Few would dispute that an electrical device failure can cause a fire. Yet what eludes those promoting more than 50 federal wireless bills is that **each cell tower is an electrical device**. Cell towers and their related telecommunications equipment can cause devastating fires. Worse, these fires cannot be extinguished through conventional means.

Except to protect the perimeter, firefighters can do nothing to extinguish the fire until the **utility cuts the power — which can take up to 60 minutes**.¹ In fact, anyone putting water on a cell tower fire before the electricity is cut may be electrocuted.^{2,3} Imagine a cell tower fire in a neighborhood or next to a school amidst a high wind event. The time it takes to cut power does not change — no matter the risk to people and property.

Legislators supporting these bills are overlooking that cell towers should NOT be placed near homes, day care centers, or schools for this simple reason — **people need time to escape**.

Here are **just a few examples** of telecommunications-initiated fires in the last 15 years.

- **Four major fires in Southern California 2007–2020** were caused (or contributed to) by telecom equipment. Collectively, these fires killed 5 people, injured dozens of others (including firefighters), and led to well more than \$6 billion in damages:
 - Guejito Fire (2007) in San Diego (which merged into the Witch Creek Fire)
 - Malibu Canyon Fire (2007)
 - Woolsey Fire (2018)
 - Silverado Fire in Irvine (2020)
- The **2007 Malibu Canyon Fire** started when SCE utility poles overloaded with telecom equipment snapped in the wind. The California Public Utilities Commission (CPUC) found that AT&T, NextG (now Crown Castle), Southern California Edison (SCE), Sprint (now T-Mobile), and Verizon were contributorily negligent and then impeded the investigation of the fire.⁴
- The **Woolsey Fire started on November 8, 2018**. It burned nearly 100,000 acres of land, caused three fatalities, and prompted the evacuation of more than 295,000 people — and caused more than \$6 billion in damages.⁵ SCE’s own telecommunications company played a major role in the inferno. The Safety and Enforcement Division (SED) found that SCE conducted a May 2018 telecommunications inspection and found a broken SCE **telecom messenger wire and a broken lashing wire**. SCE did not assign an urgent level to the repair — a fatal error. Six months later, the broken equipment was energized, and the Woolsey inferno ignited.⁶

- A **March 2021 Chula Vista, California fire** was caused by an AT&T cell tower that was partially concealed in a light fixture around a track at Otay Ranch High School. The tower burst into flames at 7:30 PM on a Tuesday evening. The Fire Incident Report was obtained through a **CPRA** request. The area of origin was within the equipment; the heat source was “**electrical arcing**.” When the fire department arrived, the 100-ft pole appeared to have an internal fire that traveled up the pole to the cell phone equipment and stadium lighting at the top of the pole. Firefighters maintained a safe distance until they could verify all power supply to the pole had been secured. As they were waiting for the representative from SDG&E to arrive to confirm the power had been cut, the heat of the fire due to **arcing caused the steel pole to become molten plasma**. It collapsed onto the bleachers near the football field, burning the track, and destroying the bleachers.⁷ **Temperatures of an arc flash can reach as much 35,000 °F — three times the estimated temperature of the sun’s surface.**⁸
- In **June 2023, the First Congregational Church in Spencer, Massachusetts** burned to the ground as a result of lightning hitting a Verizon tower in the church steeple. There is an increased incidence of lightning strikes where cell towers are located. Lightning mitigation systems are not always required and even when included as part of construction, they do not guarantee a cell tower can escape a direct lightning incident. In spite of swift response by six area fire departments, the church (originally built in 1743) was completely destroyed by the rapidly moving inferno. The stated cause of the fire was “**lightning discharge**.”⁹

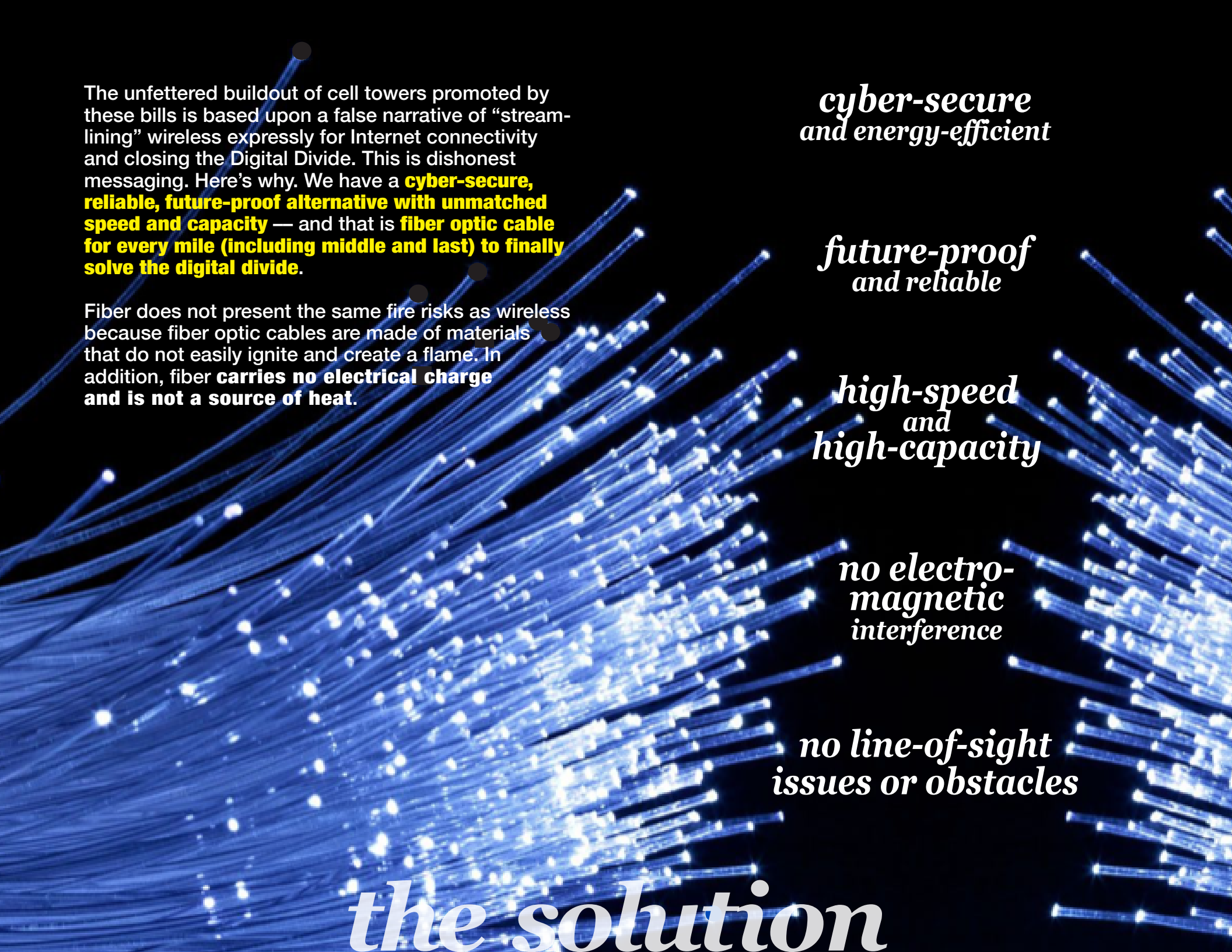
the risks

The US Congress has witnessed an unprecedented avalanche of **telecom-written wireless bills**. These **bills grant telecom maximum control by preempting local zoning laws, taking away state and municipal rights to oversee placement — and most of all — safety**. Collectively, these bills override the 1996 Telecommunications Act, a volume of amendments to the Constitution, the National Historic Preservation Act (NHPA), and the National Environmental Policy Act.

These bills **pretend to preserve local governments' enforcement of local building codes** — yet here's the catch. So long as those codes are not inconsistent with FCC regulations. **The FCC can overrule local safety requirements** — a form of preemption. Code enforcement, a purely state function under existing safety codes, has a route to appeal that stays at the state level. These bills would **federalize safety codes** — jeopardizing community authority at the local level where local issues are best known. If the carriers want less stringent fire and building codes, they merely lobby the FCC Commissioners to change the rules so **telecom** once again **gets to police telecom** when it comes to fire safety. The carriers bolster their bottom line while local jurisdictions and citizens are silenced and pay the price in safety and health.

When we stop evaluating how wireless technology impacts the environment in its entirety — *from our front yards and school yards to our national parks* — we cease to evaluate the **risk each cell tower carries with it — FIRE.**

If legislators, local officials, agencies, and citizens fail to express strong opposition to these bills, the unstoppable proliferation of cell towers would be such risky business, it would be no different than striking a match in the middle of a bone-dry forest just to see if there is a fire.



The unfettered buildout of cell towers promoted by these bills is based upon a false narrative of “streamlining” wireless expressly for Internet connectivity and closing the Digital Divide. This is dishonest messaging. Here’s why. We have a **cyber-secure, reliable, future-proof alternative with unmatched speed and capacity** — and that is **fiber optic cable for every mile (including middle and last) to finally solve the digital divide.**

Fiber does not present the same fire risks as wireless because fiber optic cables are made of materials that do not easily ignite and create a flame. In addition, fiber **carries no electrical charge and is not a source of heat.**

*cyber-secure
and energy-efficient*

*future-proof
and reliable*

*high-speed
and
high-capacity*

*no electro-
magnetic
interference*

*no line-of-sight
issues or obstacles*

the solution

Telecom has a dark and deceptive secret. **We already paid for fiber.** Telecom has cross-subsidized a wired-to-wireless **bait 'n' switch** that took place throughout the **last three decades**. We as ratepayers already paid for wires multiple times, but telecom keeps giving us wireless instead. Given a lack of state and federal oversight, **hyper-inflated and bogus charges** have ended up on ratepayers' phone bills. **Diverted fees, taxes, and charges** have been deceptively maneuvered to pay for telecom's **corporate expenses** and to replace the copper wires with fiber to cell towers *instead of* fiber to the premises (FTTP).

Telecom's market power has been allowed to dictate deeply-rooted overcharging of consumers — funds adding up to billions per state that must be recovered. This massive corruption continues unabated because Congress has never **investigated** telecom's cross-subsidies resulting in more **fraud and waste**, more cell towers, greater fire risk, and **increased radiation**.

Telecom greed fuels industry's **betrayal of a commitment to a promised buildout** to bring fiber optic to/through our schools, businesses, and homes — every home (not just the privileged). These **profits** then reward and drive telecom's agenda via a **false narrative** that more wireless will solve a **Digital Divide** — *even though* **wireless has already failed to deliver**.

To **combat** telecom's usual **wireless "fix"** for broadband access, in 2022, the **National Telecommunications and Information Administration (NTIA)** issued the **first federal government proposal** that seeks to promote infrastructure policies focused on the public interest. The NTIA stated that **fiber-to-the-premises is the preferred technology platform** for meeting coverage goals. The **future of Internet access is fiber**.

*the dark telecom secrets
that nobody knew*

*fiber networks
already paid
with customer monies diverted
in a cross-subsidy scheme*

*states are freed
from FCC accounting rules*

*states must force
telecom
to return billions owed*

*5G can NOT
sustain itself
if it has to pay
its own wireless way*

the secrets

Look who else agrees with **prioritizing fiber.**

Dr. Timothy Schoechle, author of **“Re-Inventing Wires: The Future of Landlines and Networks,”** and Senior Research Fellow at the National Institute for Science, Law & Public Policy (NISLAPP) in Washington, D.C. states that **“Government officials have been misled about the adequacy of wireless communications.** Legislators should stop enabling the wireless industry’s plans for massive new deployments of 4G LTE and soon 5G millimeter wave antennas throughout American neighborhoods, and instead commit to supporting reliable, energy-efficient and enduring hard-wired telecommunications infrastructure that meets the nation’s immediate and long-term needs.”

Vantage Point filed a March 2017 report with the FCC that **“5G...will be a mediocre if not very poor solution for tomorrow’s fixed broadband.”** **“Even if we were to consider 5G wireless in a sort of Wireless to the Premises (WTTP) deployment for rural communities, and, even if 5G capacity somehow could be achieved that could render small cells sufficient for meeting multiple households’ projected demands, it is unclear why, when one is putting fiber so deep into the network to enable such speeds and to overcome the capacity constraints identified previously, one would stop at the small cell rather than just delivering fiber to the premises a few hundred feet away — and ... deliver the promise of much higher speeds and availability without the same kinds of capacity limitations.”**

President and CEO of Fiber Broadband Association, Gary Bolton, announced at Fiber Connect 2022 that **“...fiber broadband is the only communication infrastructure capable of supporting the long-term connectivity goals of the nation’s communities and the capacity-intensive services and applications consumers want and need in their daily lives.”**

Former FCC Chairman, Tom Wheeler, stated in 2021 to the Committee on Energy and Commerce that **FCC’s \$40 billion of expenditures in high-cost subsidies over the last decade failed to deliver the goal of universal access to high-speed broadband “because it failed to insist on futureproof technology (wired broadband)...and focused more on the companies being subsidized than the technology being used or the people who were supposed to be served.”**

NTCA-The Rural Broadband Association wrote the following in an 2018 Ex Parte Notice to the FCC: **“[A densification of fiber] is particularly true in rural areas where densities are low. In rural areas where potential service locations and users are often much further apart, fiber is ... the linchpin to effective connectivity — and barriers to the deployment of fiber will undermine, if not defeat, access by rural Americans to next-generation broadband services and speeds of the kind contemplated by the FCC.”**

The **Benton Institute for Broadband & Society** published a June 2022 report entitled **“Fixed Wireless Technologies and their Sustainability for Broadband Delivery.”** **“Fiber is sustainable, scalable, and renewable ... offer[ing] greater capacity, predictable performance, lower maintenance costs, and a longer technological lifetime than fixed wireless technologies.** Fiber service is not degraded by line-of-sight issues and is not affected by the capacity issues that constrain fixed wireless networks.” In addition, **“...the existing and potential bandwidth of fiber is thousands of times higher than wireless...”** The report concluded that **“fiber represents the most fiscally prudent expenditure of public funds in most circumstances because of its longevity and technical advantages.”**

the voices

“My entire life, my family and I have lived in the Digital Divide, Los Angeles. Finally in 2023, availability of fiber in my East LA community allowed my entire family to work and learn from home. Fiber bridged the Divide with reliable, fast and affordable Internet — and with no fire risks.”



Brenda Martinez

It's a **FALSE PROMISE** that more cell towers are needed to close the Digital Divide. Brenda Martinez, Founding Member of Fiber First LA, VP of Boyle Heights Neighborhood Council, and Children's Health Defense Fellow, wants those supporting wireless bills to know her neighborhood is proof of that falsehood.

Environmental injustice abounds. There's a giant macro tower in Brenda's underprivileged neighborhood's community garden. Residents can no longer grow fresh vegetables for the entire neighborhood since a major carrier took over garden property more than 5 years ago. Everywhere in her East LA neighborhood, one sees cell towers. Yet none of this infrastructure connected residents to the Internet despite an extremely expensive service price. Ultimately, fiber gave reliable capacity and speed at a lower price.

Cell towers radiate us, but don't serve us for broadband. In a 3-mile radius, Antenna Search finds 284 cell towers and 2,737 antennas exposing the people of Brenda's neighborhood 24/7. Residents are tired of being a pincushion for cell towers radiating them while failing to provide connectivity. Thousands of peer-reviewed studies link RF radiation from towers to cardiac arrhythmia, tinnitus, cognitive impairment, seizures, headache, sleep disruption, anxiety, depression, and reduced immune function — to name a few.

Telecom's promises are empty. For 30 years, telecom has been introducing bills and getting them passed under the guise of “closing the Digital Divide.” **None of the bills before Congress mandate that telecoms connect underprivileged neighborhoods to the Internet.** Federal programs putting a priority on fiber to the premises (FTTP) this past year finally connected Brenda's neighborhood. **Only fiber is future-proof** — with no harms or added fire risk to Brenda's family.

the truth

Footnotes

¹ Protecting LA County's Future: How Fire Risks from Telecommunications Equipment Climate Challenges & a Dangerous Shift Away from Environmental Review Threaten Los Angeles County's Future, Susan Foster, Co-Founder California Fires and Firefighters, Nov 15, 2022

² FirefighterNOW

³ 6 Reasons Why Firefighters Are at High Risk of Getting Electrocuted, Safeguard – Electrical Safety, August 2, 2021

⁴ Decision Conditionally Approving the Southern California Edison Company Settlement Agreement Regarding the Malibu Canyon Fire, Before the Public Utilities Commission of the State of California, Decision 13-09-028 September 19, 2013

⁵ Investigation Report of the Woolsey Fire; Safety and Enforcement Division; Electric Safety and Reliability Branch, Los Angeles

⁶ [Proposed] Administrative Consent Order and Agreement, Issued pursuant to Commission Resolution M-4846 (adopting Commission Enforcement Policy on November 5, 2020), October 21, 2021

⁷ Fire Incident Report, Capt. Kenneth Stovall, Primary Jurisdiction: Chula Vista; CAD Incident Number: CV21005483, March 9, 2021 [Obtained through FOIA]

⁸ Arc flash vs arc blast, Fluke

⁹ Spencer Fire and Emergency Services, Incident Number 23-00585, Incident Date: 06/02/2023 [Obtained through FOIA]

Credits

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hyperlinks in blue type

*breakers that
overheat*

*mismatches
between
sources, conductors,
and load*

*unsafe design
defects*

*no overcurrent
protections*

*faulty
telecommunications
equipment*