

ENDING CATASTROPHIC WILDFIRE TOGETHER

Utilities face the urgent challenge of preventing catastrophic wildfires sparked by electric infrastructure. Current efforts are significant, however lessons from other high-risk industries suggest better outcomes are possible. Over nine months, a Gridworks brain trust of former regulators, industry experts, and a utility executive reviewed lessons from other high-risk industries to consider the electric utility/wildfire challenge anew.

What can other sectors teach the electric utility industry?

The aviation and nuclear industries as well as Victoria, Australia, have tackled catastrophic risk through collaborative, outcome-focused approaches, demonstrating that:

- **Voluntary, collaborative engagement** enables transparent reporting and shared learning.
- **Regulatory frameworks** that blend incentives and accountability foster continuous improvement.
- **Whole-of-society approaches** recognize that industry, regulators, government, and communities must work together to manage risk effectively.

AVIATION

reducing fatal accidents through collaboration

Problem: U.S. passenger airlines faced plateauing fatal accident rates in the 1990s, with projected ridership growth threatening increasing fatalities.

Solution: Creation of the Commercial Aviation Safety Team (CAST) in 1997, bringing together regulators, airlines, and other stakeholders.

Impact: Within a decade, fatal accident rates dropped by 80%.

NUCLEAR

peer review, self-regulation, and continuous improvement

Problem: The 1979 Three Mile Island accident exposed systemic safety vulnerabilities in U.S. nuclear plants.

Solution: Formation of the Institute of Nuclear Power Operations (INPO) and adoption of risk-informed regulatory oversight.

Impact: For decades, U.S. nuclear operations have maintained exceptional safety records, with no major accidents.

VICTORIA, AUSTRALIA

government-led regulatory transformation

Problem: 2009 Black Saturday bushfires killed 173 people and destroyed thousands of homes.

Solution: Faced with an urgent challenge, government took action to improve future safety outcomes.

Impact: Victoria utilities operate under an outcome-based, data-centric framework that emphasizes accountability, public trust, and public education.

While these industry sectors have worked to reduce catastrophic events, others also have recognized the social responsibility of addressing catastrophic outcomes by creating funds to compensate victims, creating shared liability frameworks, and introducing liability caps. Examples include the nuclear industry's Price-Anderson Framework; vaccine manufacturer liability protections and vaccine injury compensation funds; a settlement to compensate victims after the 2023 fire in Lahaina, Hawaii; and more.



GRIDWORKS

Hard truths about wildfire, electric utilities, government accountability, and social pacts

- 1 | **People are dying.** Entire towns have burned to the ground, devastating communities.
- 2 | **“Wildfire” is a misnomer.** Fires can be urban and wild; the Wildfire-Urban Interface is in our cities and towns.
- 3 | **Our homes fuel fires, and we’ve underestimated fire risk.** Embers spread between structures, and fire progression models are learning to account for fire spread between structures, meaning that risk to urban areas is significantly understated.
- 4 | **Electric systems will continue to ignite fires.** We can reduce system failures and spark events, but it’s unrealistic to believe we can reduce powerline failure to zero.
- 5 | **We need to avoid catastrophic fire consequences, not fire itself.** Good fire makes our ecosystems healthy and strong.
- 6 | **Addressing utility caused wildfires requires a whole of society response.** Outside of rights of way, utilities have no control over land management practices or building design, which contribute to fire consequences.
- 7 | **Electric rates are rising fast** and will only increase if wildfire liability is not addressed.
- 8 | **Effective wildfire solutions require voluntary collaboration, but our existing frameworks promote the opposite.** Litigious regulatory processes create an “us versus them” mentality.
- 9 | **Wildfire victims are treated differently depending on fire causes.** If utility infrastructure causes a wildfire, victims typically receive higher levels of compensation than victims of a fire sparked by a car or an errant firework.
- 10 | **Changing industry safety culture is as important as updating infrastructure** to reduce spark events and improve wildfire response.

Recommendations

Reducing wildfire risk from utility infrastructure demands bold, proactive approaches.

- 1 | **Regulators and utilities should emulate the Commercial Aviation Safety Team model to end catastrophic wildfire caused by electric infrastructure.** Enabling actions include: States should grant temporary relief from public information requests, or require confidentiality in collaborative process information sharing. Participants should create centralized data repositories to inform collaborative discussions. Regulators should suspend penalties for self-reported near-misses/risk events and protect information from admittance to other commission proceedings, though not from litigation discovery.
- 2 | **Legislatures, commissions, and utilities should ensure a shared, whole-of-society response to wildfire risk.** State and local governments should develop and mandate: interagency collaborative planning and response to wildfires, including state-based wildfire and resilience taskforces; the consideration of cost recovery for utility investment in community and wildland resilience; development and enforcement of wildfire-safe building codes; and integration of utilities into emergency planning frameworks.
- 3 | **State legislatures should reframe utility wildfire liability.** Uncapped monetary damages associated with wildfire threaten rate affordability and utility solvency. New frameworks should recognize shared responsibility for wildfire outcomes. Hawaii’s global settlement for the Lahaina wildfire provides an example.
- 4 | **State or federal government should develop victim compensation funds to address wildfire damages, streamline payments to victims, and avoid costly litigation.** Recognizing society’s shared responsibility for wildfire outcomes, states should develop pooled no-fault victim compensation funds from taxpayer-backed bond funding. Bond funding recognizes that catastrophic wildfire risk extends beyond electric utilities.
- 5 | **Utilities should create a Utility Wildfire Mitigation Forum—an industry-led, member-funded entity modeled on the success of other experiments in self-regulation.** The forum would elevate wildfire mitigation strategies through confidential peer reviews, technical training, accreditation programs, and the proactive sharing of lessons. Collaboration between regulators and utilities will be essential in shaping the scope, standards, and success metrics for the forum.
- 6 | **States should develop a common wildfire risk framework, measure maturity to right-size wildfire responses, and assist other states and smaller utilities throughout the country.** A common risk framework could provide the foundation for regulators and governance bodies and utilities to develop consistent wildfire risk models. Similarly, utilities and regulators should create a common maturity model to measure utility progress in addressing wildfire risk and undertake an assessment of existing wildfire mitigation plans to understand current best practices.
- 7 | **States and commissions should address wildfire as a top priority, with government driving swift action.** After repeated catastrophic wildfires, the public is increasingly fearful that powerlines may cost them their lives, homes, and livelihoods. Legislatures and commissions should publicly pledge to address utility wildfire risks rapidly while balancing other utility priorities.