



OPINION &gt; ENERGY AND ENVIRONMENT

## Wildfire and electric grid: Crisis requires long-term planning rather than rapid response

BY CASSIE KOERNER, OPINION CONTRIBUTOR - 08/11/22 9:30 AM ET

THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL



Flames consume a house near Old Oregon Trail as the Fawn Fire burns about 10 miles north of Redding in Shasta County, Calif., on Thursday, Sep. 23, 2021. (AP Photo/Ethan Swope)

Wildfires are a top priority for land management agencies and utilities, as the number, size and intensity have increased along with the cost to battle these mega-blazes. While not all wildfires are caused by the power grid, the two are closely linked. New tactics need to be adopted to protect infrastructure, principally by investing in prevention strategies and secondarily by coordinating interagency approaches and community participation.



damage to energy infrastructure, threatening the health and safety of communities. Climate change has been impacting the frequency of wildfires as temperatures have been rising, forests and soils are staying dryer longer, meanwhile moisture is more variable.

There are a number of methods to address the risk to the grid from wildfire. Federal, state and local governments as well as utilities are currently maximizing local budgets to identify high-risk areas and to manage vegetation. Unfortunately, the cost to fight fires has been cutting into budgets, nearly tripling for the Forest Service since the 1990s and inducing reactive, rather than proactive strategies. A more systematic approach is needed, to focus increased funding on planning and prevention for both natural resource management agencies and for infrastructural improvements. Fuel concentration, especially at the wildland-urban interface, poses a risk to communities and may fall under the jurisdiction of several agencies — thus coordinated planning and funding to manage vegetation over the long term is a key strategy.

Recent passage of the 2021 [Infrastructure Investment and Jobs Act](#) authorizes planning and spending to enhance resilience of the electric grid, which could result in installing line sensors and other early detection technology on a broad scale. This new law authorized the Department of Energy to jump-start accelerated projects focused on protecting the grid and communities from wildfires. These projects team utilities, industry and national laboratories to advance existing technologies and employ artificial intelligence to identify vulnerable or damaged energy infrastructure. To enhance the modernized grid, the Infrastructure Investment and Jobs Act promotes construction of remote grids to mitigate the effects of extreme weather events. Recent wildfire and hurricane events have accentuated the need for utility systems to isolate when conditions become unstable, and provide critical power during emergencies through islanding or microgrid capabilities. When a power line is damaged by high winds or downed trees, power outages can last hours or days while crews repair the system. Scaling real-world solutions in at-risk areas will benefit communities, protect economies and likely save lives.



developed regional transmission organizations (RTOs), which ensure regional electrical reliability, create wholesale power markets and bring together a variety of stakeholders that report to federal regulators. These RTOs could be the foundation to move forward regional infrastructure planning, as they already include important utility stakeholders and connect local, state and federal entities.

Current procedures will need to dramatically shift in order to update infrastructure — requiring faster and more inclusive processes with streamlined environmental evaluations. First, diverse teams of specialists will need to prioritize risks with the input of local and technical experts. The process will need to integrate stakeholder input throughout the process and following the comment period, but bypass unnecessary, time-consuming and financially burdensome litigation that can encumber federal projects. This may necessitate a new process input (feedback loop), following traditional comments, where a neutral facilitator allows each side to present and discuss how comments may be incorporated into the plan.

**The ‘other’ issue in the midterms — the one that could hurt the GOP**  
**Gavin Newsom’s uncanny resemblance to Michael Dukakis**

Decision-makers and stakeholders will need to work together in this process to set stringent timelines and milestones for the creation of necessary infrastructure and upgrades. Collaborative discussions must articulate that disruptions to the timeline could result in the loss of system reliability, brown-outs and blackouts. Cooperation in developing and implementing infrastructure plans and garnering private investor funding is required to move projects forward. The final approach must also include a quick and fair mechanism to adjudicate financial valuations for projects that cross state lines, so as to not unduly burden one state while providing financial benefits to another. Public and private partnerships with the aim of protecting the grid from further climate



# THE HILL

There is a critical need to systematically and financially reduce the risk of wildfire to energy infrastructure, as scientists predict climate-driven fire vulnerabilities to increase in coming decades.

*Cassie Koerner is assistant director of research, communications and development at the Energy Policy Institute at Boise State University. Koerner’s current research focuses on policy change at the wildfire-electric grid interface and resilience as a key factor to effective energy transitions. As a social scientist with experience in the public electric utility sector, her previous research experience in policy and public administration has covered a range of topics including: renewable energy in the West, nuclear perceptions, energy efficiency, carbon sequestration, international carbon markets, as well as general energy and environmental issues.*

**TAGS** CLIMATE CHANGE EXTREME HEAT EXTREME WEATHER FIRE GLOBAL WARMING INFLATION REDUCTION ACT WILDFIRE

 **SHARE**  **TWEET**  **MORE**

## More Energy and Environment News