Special Track

WMP: Wildfire Mitigation and Utilities' Asset Management

ENERGY2025: The Fifteenth International Conference on Smart Grids, Green Communications and IT Energy-efficient Technologies

Chair

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Wildfires are becoming an increasingly pressing global concern, with California at the forefront of this challenge.

In recent years, devastating wildfires, such as the Los Angeles firestorms of 2025, have led to significant damage to property, loss of lives, and major disruptions to energy infrastructure.

This focused track explores innovative strategies for managing wildfires and utility assets, aiming to enhance grid resilience, protect ecosystems, and ensure public safety.

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Los Angeles Firestorms (2025): Highlighted the urgency of addressing fast-growing fires fueled by invasive vegetation and climate change.

Palisades and Eaton Fires (2025): Demonstrated the need for improved community preparedness and rapid response systems.

Health Impacts: Toxic smoke from wildfires has raised concerns about long-term respiratory and cardiovascular health risks.

Insurance Challenges: Rising wildfire risks have led to increased insurance premiums and reduced coverage availability in high-risk areas.

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Climate Change: Hotter, drier conditions are expected to increase the frequency and intensity of wildfires.

Urban Expansion: Development in wildland-urban interface areas continues to grow, placing more communities at risk.

Fast Fires: Rapidly spreading wildfires, driven by invasive grasses and high winds, pose significant challenges for containment.

Resource Allocation: Balancing investments in prevention, response, and recovery will require innovative funding and governance models.

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Foster Collaboration: Unite researchers, practitioners, and policymakers to address wildfire challenges.

Explore Innovations: Showcase cutting-edge technologies such as AI, IoT sensors, and advanced analytics.

Enhance Grid Resilience: Develop strategies to improve utility networks' reliability and safety.

Promote Best Practices: Share success stories and methodologies for effective wildfire risk management.

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Wildfire Mitigation Plans (WMP): Overseen by the California Public Utilities Commission (CPUC), integrating advanced technologies like automated power shutoff systems to prevent ignitions.

Community Wildfire Prevention Initiatives: Hazardous tree removal, vegetation clearing, and creation of defensible spaces.

Utility Contributions: PG&E, SCE, and SDG&E have pioneered efforts to implement predictive technologies for grid safety.

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We invite researchers, industry professionals, and policymakers to participate in this crucial dialogue:

- Contribute original research papers to introduce innovative ideas and solutions.

- Take part in discussions focused on shaping the future of wildfire resilience and asset management.

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