Call for Contributions

1. Inform the Chair: with the title of your contribution

2. Submission URL:

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ENERGY+2025+Special

Please select Track Preference as WMP

3. Note: For 2025, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.

Special track

WMP: Wildfire Mitigation and Utilities' Asset Management

Chair

Prof. Dr. Vivian Sultan, California State University, USA <u>vsultan3@calstatela.edu</u>

along with

ENERGY 2025: The Fifteenth International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies

https://www.iaria.org/conferences2025/ENERGY25.html

March 9 - 13, 2025 - Lisbon, Portugal

The increasing frequency and severity of wildfires pose significant challenges to utility companies worldwide. In California alone, recent years have seen devastating wildfires that have not only caused extensive property damage but also led to tragic loss of life. Effective wildfire mitigation strategies and robust asset management are critical to enhancing grid resilience and ensuring public safety. For instance, the California Public Utilities Commission (CPUC) has been instrumental in overseeing comprehensive wildfire mitigation plans, which include advanced sensor technology and automated power shutoff systems to prevent ignitions.

This special track aims to bring together researchers, practitioners, and policymakers to discuss innovative approaches, share best practices, and explore the latest advancements in wildfire mitigation and utilities' asset management. By leveraging cutting-edge technologies such as artificial intelligence, remote sensing, and IoT sensors, we can develop proactive strategies that protect lives, property, and ecosystems. Additionally, advanced analytics in asset management can optimize capital expenditures and improve overall reliability and performance of utility networks.

Prospective authors are invited to submit original papers on topics including, but not limited to,

- **Technology and Situational Awareness**: Advanced monitoring systems, real-time data analytics, and forecasting tools for wildfire risk assessment.
- Risk Assessment and Mapping: Techniques for identifying high-risk areas and prioritizing mitigation efforts.
- **Public Safety Power Shutoff (PSPS):** Strategies for implementing and managing PSPS events to minimize wildfire risk.
- Grid Design and System Hardening: Innovations in grid infrastructure to withstand wildfire impacts.
- **Vegetation Management**: Effective practices for reducing vegetation-related fire hazards.
- Governance and Coordination: Collaborative frameworks between utilities, regulators, and other stakeholders.
- Applied Science, Technology, and Data: Leveraging scientific research and technological advancements for improved asset management.
- Workforce Development: Training and equipping the workforce to handle wildfire mitigation and asset management challenges.

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California Examples and CPUC Efforts: California has been at the forefront of wildfire mitigation efforts, implementing various strategies to enhance community resilience and utility safety. Notable examples include:

- California Wildfire Mitigation Program: This initiative focuses on home hardening, vegetation management, and creating defensible spaces, particularly in high-risk areas.
- **Utility Wildfire Mitigation Plans (WMP)**: The California Public Utilities Commission (CPUC) oversees comprehensive wildfire mitigation plans developed by utilities like PG&E, SCE, and SDG&E. These plans include advanced sensor technology to detect disturbances on energized lines and automatically shut off power to prevent ignitions.
- Community Wildfire Prevention and Mitigation: Projects such as hazardous dead tree removal, vegetation clearing, and creation of fuel breaks and safer ingress and egress corridors.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Deadlines

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: Jan 18, 2025 Notification: Feb 7, 2025 Registration: Feb 20, 2025 Camera-ready: Feb 20, 2025

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chairs.

Paper Format

- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules:

http://www.iaria.org/editorialrules.html

Publications

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the Open Access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ENERGY+2025+Special Please select Track Preference as **WMP**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

Contact

Chair

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