Hot Topic: How to inform stakeholders of science-based solutions to fires at wind turbines.

Human Considerations at Wind Generation Facility Fires

As advancements in technology make wind generation more common, it is essential to assess and minimize the



Most Common Cause of Fire at Turbines

potential negative impacts associated with the projects. As the second most frequent cause of catastrophic wind turbine accidents, fire accidents are a hot topic on stakeholders' minds and frequently referenced as a concern in rural community outreach. While studies on the financial impact of these accidents are available, there is little accessible information in the United States on what safety considerations are implemented to protect human life and property during operations and maintenance of a wind project.

NFPA 850 is the National Fire Protection Association's recommended practice for protection of electric generating plants and high-voltage direct current converter stations and includes engineering design considerations for technician and operator safety but can be difficult to translate to the everyday person. Below are some illustrations of talking points in community outreach.





Images Courtesy of Oklahoma Forestry *Service (2018)*

Passive Fire Protection

1. Lightning Detection System

Active Fire Protection

1. Fire Detection and Alarm Systems



- 2. Use of Non-Combustible Oils
- 3. Radiant Barriers and Use of Flame Retardants
- 4. Applying Condition Monitoring Systems
- 2. Smoke Management
- 3. Suppression Systems





Contact Amanda Miller to learn more about this topic.

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References

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