

Electric and Magnetic Fields and Radio-Frequency Health Assessment and Safety





Program 60

RESEARCH VALUE

- Address high-priority EMF and RF exposure concerns like childhood leukemia, HVDC, and 5G.
- Enhance safety for utility workers and the public.
- Inform safety programs and policies with high-quality scientific data.
- Optimize exposure management programs with advanced tools and technologies.

MEMBER VALUE

- Data to inform stakeholder communications.
- Optimize project costs while addressing public concern.
- Avoid costly project delays, reroutes, or undergrounding.
- Access to archival EMF knowledge base and industry experiences.

Environmental health and safety issues related to electric and magnetic field (EMF) and radio frequency (RF) exposure are evolving. The <u>Electric</u> and <u>Magnetic Fields and Radio-Frequency Health Assessment and Safety</u> research program provides high quality research results and tools to inform EMF and RF management and help the communication of issues.

EMF are present whenever and wherever 50/60 Hz electricity is generated, transmitted, and used. RF emissions are prevalent due to the adoption of wireless communication devices, smart meters, and inverters associated with renewable sources, such as photovoltaic cells and power electronics. This program focuses on addressing the potential health effects of EMF and RF on humans and non-human biota and provides exposure management tools and resources to address impacts to workers and the public.

The electric grid, with its associated technologies, is experiencing a phase of rapid evolution and expansion to meet increasing demands for low carbon electrification. Environmental health and safety issues related to these EMF and RF exposures are evolving as the need for electrification and grid resiliency increases. Utility EMF professionals must address these concerns as part of managing a robust public health and worker safety program and ensuring timely development and application of a more modern grid.

It was invaluable to have your expertise on this topic and be able to share your knowledge with so many different professions...

Key Activities for 2022

60A: HEALTH STUDIES AND RISK COMMUNICATION PROJECTS



Multi-country, childhood leukemia study of children living in apartment buildings with transformers.





Answers to the most commonly asked questions on key topics of concern (e.g. electro hypersensitivity, 5G) to inform utility risk communication plans.

Exposure measurements will be

of the expected range of

exposures.

conducted at 5G test facilities to

provide a baseline understanding

60B: EXPOSURE CHARACTERIZATION AND MANAGEMENT PROJECTS

Updated content will be

transitioned to a web-based

platform for easier access.



This guide will propose an EMF evaluation criteria for submarine cables and provide a calculation methodology for assessing EMF.

field measurement data for typical equipment and job categories in the electricity industry.

Database informs survey protocols and return-to-work evaluations for workers with implanted medical devices.

KEY SUPPLEMENTAL PROJECTS



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