Dear Editor,

We enthusiastically submit our manuscript “Power outages and cardiovascular and respiratory hospitalizations among US older adults” for consideration for publication in *Nature Energy*.

Our study represents, to our knowledge, the first nationwide study of power outage exposure and health and includes nearly 24 million 2018 Medicare beneficiaries. We found that power outages increased same-day respiratory hospitalizations by 3% (95% CI: 1, 4) and next-day cardiovascular hospitalizations by 2% (95% CI: 1, 3), with the increase in risk rising to 6% for larger power outages. Older adults in our study lived in counties that experienced, on average, seven 8+ hour power outages during the year-long study period, a number anticipated to grow with our aging electric grid and climate change.

Our team recently developed national hourly, county-level power outage exposure estimates[[1]](#endnote-1), which enabled this investigation. We also conducted a simulation study to test the quality of these data which is under review and attached with our submission.

We believe that readers of Nature Energy will find these results of interest, as climate change-driven severe weather and temperature changes have increased power outage frequency and duration. As electricity demand increases with electrification, advances in artificial intelligence, and extreme temperatures, we must understand the potential health consequences of power outages to aid in developing energy policy.

All authors have reviewed the manuscript, which has not been published elsewhere and is not under consideration for other journals.

Sincerely,  
Heather McBrien  
Joan A. Casey

**Contact:**

Heather McBrien  
[hm2913@cumc.columbia.edu](mailto:hm2913@cumc.columbia.edu)  
Department of Environmental Health Sciences  
Columbia Mailman School of Public Health  
722 W 168th St  
New York, NY 10032-3727

1. https://www.nature.com/articles/s41467-023-38084-6 [↑](#endnote-ref-1)