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Bio

BIO

Lane D. Smith is a research scientist working with the Climate and Energy Policy Program at Stanford University. His research interests include energy policy, electricity rate design, energy affordability, and macro-energy systems (with a particular focus on the electric grid). Lane holds a Ph.D. and M.S. in Electrical Engineering from the University of Washington and a B.S. in Electrical Engineering from the University of Denver.

EDUCATION AND CERTIFICATIONS

- Ph.D., University of Washington , Electrical Engineering (2024)
- M.S., University of Washington , Electrical Engineering (2019)
- B.S., University of Denver , Electrical Engineering (2018)

LINKS

- Google Scholar: https://scholar.google.com/citations?hl=en&user=8viFXEUAAAAJ&view_op=list_works&sortby=pubdate
- LinkedIn: https://www.linkedin.com/in/lane-d-smith/
- GitHub: https://github.com/lanesmith
- Climate and Energy Policy Program: https://cepp.stanford.edu/

Publications

PUBLICATIONS

- **Effects of Net Metering Policies on Distributed Energy Resource Valuation and Operation** *2025 IEEE Power & Energy Society General Meeting (PESGM)*
  Smith, L. D., Kirschen, D. S.
  2025

- **Improving Electricity Bill Affordability for Low-Income Customers Using the California Climate Credit**
  Smith, L. D., Macomber, E., Mastrandrea, M., Wara, M.
  Climate & Energy Policy Program, Woods Institute for the Environment, Stanford University. Stanford, CA.
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- **Reallocating the Residential California Climate Credit to Low-Income Customers**
  Smith, L. D., Mastrandrea, M., Wara, M.
  Climate & Energy Policy Program, Woods Institute for the Environment, Stanford University. Stanford, CA.
  2024

- **Should Storage-Centric Tariffs be Extended to Commercial Flexible Demand?** *2022 IEEE Power & Energy Society General Meeting (PESGM)*
  Smith, L. D., Kirschen, D. S.

2022

- **How much demand flexibility could have spared Texas from the 2021 outage?** *Advances in Applied Energy*
  Wu, D., Zheng, X., Menati, A., Smith, L., Xia, B., Xu, Y., Singh, C., Xie, L.
  2022; 7

- **A 2030 United States Macro Grid: Unlocking Geographical Diversity to Accomplish Clean Energy Goals**
  Xu, Y., Olsen, D., Xia, B., Livengood, D., Hunt, V., Li, Y., Smith, L.
  Breakthrough Energy Sciences. Seattle, WA.
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- **Impacts of Time-of-Use Rate Changes on the Electricity Bills of Commercial Consumers** *2021 IEEE Power & Energy Society General Meeting (PESGM)*
  Smith, L. D., Kirschen, D. S.
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- **Remote Assessment of Battery Degradation-Related Service Interruptions in an Energy Kiosk** *2020 IEEE Global Humanitarian Technology Conference (GHTC)*
  Smith, L. D., Louie, H., Szablya, S., Goldsmith, D.
  2020

- **Coordination of Behind-the-Meter Energy Storage and Building Loads: Optimization with Deep Learning Model** *Proceedings of the Tenth ACM International Conference on Future Energy Systems*
  Chen, Y., Chandan, V., Huang, Y., Alam, M., Ahmed, O., Smith, L.
  2019