

Lucy Metz, Senior Associate

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PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. *Senior Associate* Apr. 2025–Present; *Associate* Apr. 2023–Apr. 2025; *Research Associate*, Jul. 2022–Apr. 2023

- Provides expert research, analysis, and deliverables on energy-sector issues, including electric utility resource planning and power plant economics, building decarbonization, industrial sector emissions, and state and local climate policy
- Develops testimony and comments in integrated resource planning dockets, rate cases, certificates of need, and environmental compliance investment dockets across the country
- Conducts analysis using Synapse’s Building Decarbonization Calculator (BDC), a stock turnover model that calculates the emissions and energy impacts of heat pump adoption
- Produces data visualization tools in R, including interactive webtool of U.S. industrial emitters
- Assists with power sector dispatch modeling using EnCompass

Laboratory of Dr. Alexander Barron, Department of Environmental Science and Policy, Smith College, Northampton, MA. *Research Assistant*, Jun. 2020–May 2022

- Co-authored paper on carbon neutrality initiatives in higher education
- Designed data visualization and analysis for USREP-ReEDS modeling of Clean Air Act policy
- Calculated CO₂ emissions reductions achievable under Massachusetts climate legislation and drafted white paper with results

Co-Equal, Washington, D.C. *Policy Intern*, Feb. 2021–Mar. 2022

- Performed analysis on a wide range of policy topics requested by members of Congress
- Finalized economic modeling study for public release and presented results

EDUCATION

Smith College, Northampton, MA

Bachelor of Science in Engineering Science, *Magna Cum Laude with Highest Honors*, 2022

SKILLS

Computer: Excel, R, EnCompass, MATLAB, Mathematica, ENERGY STAR Portfolio Manager

Languages: Spanish (proficient)

TESTIMONY

Kentucky Public Service Commission (Docket No. 2026-00001): Direct testimony of Lucy Metz in the matter of the Electronic Application of Kentucky Power Company For 1) A Certificate of Public Convenience and Necessity to Construct a Mechanical Draft Cooling Tower at the Mitchell Plant, 2) Approval of Certain Regulatory and Accounting Treatments, and 3) All Other Required Approvals and Relief. On behalf of Sierra Club. May 15, 2026.

Public Service Commission of South Carolina (Docket No. 2025-323-E): Surrebuttal testimony of Lucy Metz in the matter of the Joint Application of South Carolina Public Service Authority and Dominion Energy South Carolina, Inc. for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of an Advanced Class Combined Cycle Generating Plant and Associated Facilities in Colleton County, South Carolina. On behalf of Sierra Club. Mar. 17, 2026.

Public Service Commission of South Carolina (Docket No. 2025-323-E): Direct testimony of Lucy Metz in the matter of the Joint Application of South Carolina Public Service Authority and Dominion Energy South Carolina, Inc. for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of an Advanced Class Combined Cycle Generating Plant and Associated Facilities in Colleton County, South Carolina. On behalf of Sierra Club. Feb. 17, 2026.

Georgia Public Service Commission (Docket Nos. 56298 and 56310): Direct testimony of Lucy Metz in the matter of Georgia Power Company's Application for Certification of the 2029–2031 All-Source Capacity RFP and Georgia Power Company's Application for the Certification of Supplemental Resources for 2028–2031 Capacity. On behalf of Sierra Club and the Southern Alliance for Clean Energy (SACE). Nov. 12, 2025.

North Carolina Utilities Commission (Docket Nos. E-2, Sub 1349 and EC-67, Sub 57): Direct testimony of Lucy Metz in the matter of the Joint Application of Duke Energy Progress, LLC, and North Carolina Electric Membership Corporation for a Certificate of Public Convenience and Necessity to Construct a 1,360 MW Natural Gas-Fired Combined Cycle Electric Generating Facility in Person County, North Carolina. On behalf of the Southern Alliance for Clean Energy (SACE). Jun. 9, 2025.

Kansas Corporation Commission (Docket No. 25-EKCE-207-PRE): Settlement testimony of Lucy Metz in Support of Unanimous Partial Settlement on Solar Facility and Testimony in Opposition to Non-Unanimous Partial Settlement on Natural Gas Facilities. On behalf of Citizens' Utility Ratepayer Board (CURB). Apr. 17, 2025.

Kansas Corporation Commission (Docket No. 25-EKCE-207-PRE): Direct testimony of Lucy Metz in the matter of the Petition of Evergy Kansas Central, Inc., Evergy Kansas South, Inc., and Evergy Metro, Inc. for Determination of the Ratemaking Principles and Treatment that Will Apply to the Recovery in Rates of the Costs to Be Incurred for Certain Electric Generation Facilities under K.S.A. 66-1239. On behalf of Citizens' Utility Ratepayer Board (CURB). Mar. 14, 2025.

Public Service Commission of Wisconsin (Docket No. 6690-UR-128): Surrebuttal testimony of Lucy Metz in the matter of the Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates. On behalf of Sierra Club. Sept. 18, 2024.

Public Service Commission of Wisconsin (Docket No. 6690-UR-128): Direct testimony of Lucy Metz in the matter of the Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates. On behalf of Sierra Club. Aug. 19, 2024.

Georgia Public Service Commission (Docket No. 55378): Direct Testimony of Devi Glick and Lucy Metz in re: Georgia Power Company's 2023 Integrated Resource Plan Update. On behalf of Sierra Club. Feb. 15, 2024.

PUBLICATIONS

Eash-Gates, P., S. Koester, L. Metz, J. Hittinger, A. Hopkins, I. Weiss. 2025. *Recasting the Future: Policy Approaches to Drive Cement Decarbonization*. Synapse Energy Economics for Clean Air Task Force.

Glick, D., T. Gyalmo, D. Karabakal, L. Metz, C. Resor. 2024. *Review of Tennessee Valley Authority's Draft 2025 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.

DeLeon, S., K. Takahashi, E. Carlson, A. S. Hopkins, S. Kwok, J. Litynski, C. Mattioda, L. Metz. 2024. *Minnesota Building Decarbonization Analysis: Equitable and cost-effective pathways toward net-zero emissions for homes and businesses*. Synapse Energy Economics for Clean Heat Minnesota.

Shenstone-Harris, S., A. Zeng, L. Metz, M. Whited. 2024. *On the Road to Fleet Electrification: A Framework for Estimating Distribution System Impacts of Medium- and Heavy-Duty Vehicle Electrification*. Synapse Energy Economics for Advanced Energy United.

Metz, L., E. Carlson, O. Griot. 2023. *Methane Waste and Pollution State Factsheets*. Synapse Energy Economics for the Environmental Defense Fund.

Eash-Gates, P., O. Griot, A. Hopkins, L. Metz, E. Sinclair, J. Smith. 2023. *Coming Clean on Industrial Emissions: Challenges, Inequities, and Opportunities in U.S. Steel, Aluminum, Cement, and Coke*. Prepared by Synapse Energy Economics for Sierra Club.

Frost, J., P. Knight, S. Sharaf, L. Metz, and S. Kwok. 2023. *RGGI's Economic Benefits for Pennsylvania: Exploring the benefits of the Regional Greenhouse Gas Initiative*. Prepared by Synapse Energy Economics for Evergreen Collaborative.

Metz, L., M. Whited, P. Rhodes, E. Carlson. 2023. *Distribution System Investments to Enable Medium- and Heavy-Duty Vehicle Electrification*. Synapse Energy Economics for the Environmental Defense Fund.

Knight, P., J. Frost, T. Fitch, E. Sinclair, J. Taberner, O. Griot, B. Havumaki, J. Smith, L. Metz, S. Chavin. 2023. *TVA's Clean Energy Future: Charting a course to decarbonization in the Tennessee Valley*. Synapse Energy Economics for GridLab and Center for Biological Diversity.

Yuan, M., A. Barron, N. Selin, P. Picciano, L. Metz, J. Reilly, and H. Jacoby. 2022. "Meeting U.S. greenhouse gas emissions goals with the international air pollution provision of the Clean Air Act." *Environmental Research Letters* 17 (5): 054019.

Barron, A., M. Domeshek, L. Metz, L. Draucker, and A. Strong. 2021. "Carbon neutrality should not be the end goal: Lessons for institutional climate action from U.S. higher education." *One Earth* 4 (9): 1248–1258.

Longnecker, E., L. Metz, R. Miller, and A. Berke. 2021. "Probing Liquid–Liquid Phase Separation in Secondary Organic Aerosol Mimicking Solutions Using Articulated Straws." *ACS Omega* 6 (49): 33436–33442.

Figuroa, L., M. Blinder, C. Grincavitch, A. Jelinek, E. Mann, L. Merva, L. Metz, A. Zhao, R. Irwin, S. McArt, and L. Adler. 2019. "Bee pathogen transmission dynamics: Deposition, persistence and acquisition on flowers." *Proceedings of the Royal Society B*, 286: 20190603.

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