

## Sarah Shenstone-Harris, Senior Associate

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### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. *Senior Associate*, October 2022 – Present.

- Provides research, analysis, and consulting services on various energy-sector issues, including integrated resource planning, rate design, electric vehicles and electrification, and clean energy
- Forecasts load changes and their impacts on rates from future electric vehicle adoption
- Assesses the economic viability of generation resources (legacy coal plants, new solar projects) as opposed to alternative resources and market purchases
- Writes expert testimony and reports related to power plant economics, wholesale electricity markets, and beneficial electrification

**Reading Municipal Light Department (RMLD)**, Reading, MA. *Integrated Resource Analyst I*, January – September 2022; *Integrated Resource Specialist*, October 2020 – December 2021.

#### *Integrated Resource Analyst I:*

- Planned the Department's wholesale power supply strategy, including developing and running economic models to evaluate power supply decisions. Consistently working to achieve RMLD's goals of delivering reliable, low-cost, and emission-free power
- Led the rate increase process and the design of new rate structures, such as a residential electric vehicle time-of-use rate.
- Managed the retirement and sales of RMLD's Renewable Energy Certificates (RECs) and Emission-Free Certificates (EFECs) to ensure compliance with MA Climate Law and the achievement of RMLD's grid decarbonization goals, while keeping rates affordable for all classes
- Developed and maintained forecasting tools of retail load, energy purchases and hedging, power supply costs (energy, transmission, and capacity), and RECS/EFECs
- Prepared annual and monthly power supply budgets for energy, transmission, and capacity costs
- Adjusted monthly rates for all classes, based on expected costs and revenues
- Designed and implemented significant process improvements to track budgeted and actual costs, and manage the \$65 million power supply budget

#### *Integrated Resource Specialist:*

- Administered, promoted, coordinated, and reported on utility energy efficiency and electrification programs, including Air Source Heat Pumps, Electric Vehicle Chargers, Commercial Lighting, Solar and Distributed Generation, Energy Audits, Appliance Rebates, and other energy management programs
- Designed and developed economic and analytical tools to help achieve RMLD's power supply and retail goals and objectives, such as a rate analysis models

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- Developed and expanded utility load forecasts, to inform both power supply strategy and program management
  - Implemented significant program process improvements, resulting in a >50% reduction in customer rebate application turnaround time
  - Established systems to track program performance, including measure adoption, cost-effectiveness, energy savings, and environmental impacts
  - Responsible for reporting to external agencies, such as the ISO-NE and US Energy Information Administration (EIA), as well as to board members and key stakeholders on all retail program activities
  - Provided technical support to the Customer Service team, including administering training on new programs, a customer portal for rebate applications, and new program processes
  - Coordinated with other RMLD departments, vendors, program partners, and other utilities to support RMLD programs and goals

**ICLEI Canada – Local Governments for Sustainability**, Toronto, Ontario, Canada. *Climate & Energy Planner Project Assistant*, October 2018 – March 2020; *Climate & Energy Project Assistant*, October 2017 – October 2018.

- Coordinated ICLEI’s climate and energy consulting work for municipalities, including:
  - Stakeholder engagement (stakeholder identification, establishment of working groups, facilitating dialogue, collecting feedback and incorporating stakeholder input)
  - Identifying and developing programs and policies to improve environmental sustainability across multiple sectors (buildings, transportation, waste, land use, resource use, etc.)
  - Quantifying environmental and financial impacts of emission and energy reduction measures, identifying and collecting data sources, modelling energy and emissions with different policy options
  - Clearly and succinctly summarizing technical concepts to clients and stakeholders
  - Presenting recommendations and final plans to City Councils
- Coordinated and delivered capacity-building programs that support Canadian municipalities in greenhouse gas emissions mitigation activities and community energy planning
- Created resources and tools for climate action plan development and implementation (best practice guidelines, communication materials, emission measurement tools, decision-support tools, etc.)
- Developed and delivered workshops, webinars and training services to local governments participating in ICLEI programs and projects

**Sustainable Development Technology Canada**, Ottawa, Ontario, Canada. *Research and Technology Analyst* (8-month Co-op position), September 2016 – April 2017.

- Wrote and prepared briefing packages for the Board of Director’s Investment Committee, detailing the technological, business, intellectual property, and financial merits of clean tech projects seeking funding

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- Conducted research to assess and inform SDTC's clean tech investment priorities

## EDUCATION

**University of Ottawa**, Ottawa, Ontario

Master of Science in Environmental Sustainability, Institute of the Environment, 2017

**Queen's University**, Kingston, Ontario

Bachelor of Science in Biology, 2013

## PUBLICATIONS AND PRESENTATIONS

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.

Shenstone-Harris, S. P. Rhodes, J. Frost, E. Carlson, E. Borden, C. Lane, M. Whited. Electric Vehicles Are Driving Rates Down for All Customers: National Update. Synapse Energy Economics for Natural Resources Defense Council.

Knight, P., S. Shenstone-Harris, J. Frost, S. Chavin, A. Hopkins, E. Borden, S. deLeon, D. White, P. Rhodes, L. Metz, J. Taberner, A. Zeng, E. Ashley, W. Dejeanlouis. 2024. *Avoided Energy Supply Components in New England: 2024 Report*. Synapse Energy Economics for AESC 2024 Study Group.

Shenstone-Harris, S. 2023. "Kansas City BPU 2023 Electric Revenue Requirements." Presentation at BPU Rate Case Public Hearing Technical Sessions on behalf of Sierra Club, June 15, 2023.

Whited, M., Fitch, T., Frost, J., Borden, E., Lane, C., Havumaki, B., Shenstone-Harris, S., Sinclair, E. 2023. Electric Vehicles are Driving Rates Down. Synapse Energy Economics for National Research Defense Council.

Whited, M., S. Shenstone-Harris, A. Lawton, O. Griot, J. Frost. 2023. *Maximizing the Benefits of Transportation Electrification in Pennsylvania*. Synapse Energy Economics for Pennsylvania Department of Environmental Protection.

ICLEI Canada and Wood PLC. 2021. *Town of Aurora (Ontario) Community Energy Plan*.

ICLEI Canada and Wood PLC. 2020. *Township of Huron-Kinloss (Ontario) Climate Change and Energy Plan*.

LURA Consulting and ICLEI Canada. 2019. City of Kawartha Lakes (Ontario), Healthy Environment Plan.

ICLEI Canada and the Federation of Canadian Municipalities. 2020. *Guidebook on Quantifying Greenhouse Gas Reductions at the Project Level*.

Shenstone-Harris, S., Cai, Y., and Dean, M. 2019. *On the Money: Financing Tools for Local Climate Action, 2019*. Prepared for Partners for Climate Protection.

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ICLEI Canada and the Federation of Canadian Municipalities. 2018 and 2019. *Partners for Climate Protection National Measures Report 2018, Partners for Climate Protection National Measures Report 2019*.

Rivers, N., S. Shenstone-Harris, N. Young. 2017. *Using nudges to reduce waste? The case of Toronto's plastic bag levy*. *Journal of Environmental Management*, Volume 188. ISSN 0301-4797.

## **TESTIMONY**

**Federal Energy Regulatory Commission** (Docket No. EL15-70-003 and Docket No. EL15-71-003): Affidavit of Sarah Shenstone-Harris regarding Dynegy's potential market manipulation of MISO's 2015/2016 Planning Resource Auction. On behalf of the Illinois Attorney General's Office and Public Citizen, Inc. June 1, 2023.

**Kansas City Board of Public Utilities:** Direct Testimony of Sarah Shenstone-Harris regarding Electric Revenue Requirements and Risks for Nearman Creek Power Station (Unit 1). On behalf of Sierra Club. May 15, 2023.

**Public Service Commission for the Commonwealth of Kentucky (Case No. 2022-00372):** Direct Testimony of Sarah Shenstone-Harris in the matter of Electronic Application of Duke Energy Kentucky, Inc. for an adjustment of electric rates, approval of new tariffs and approval of accounting practices to establish regulatory assets, liabilities and all-over required approvals and relief. On behalf of Sierra Club. March 10, 2023.

**Public Service Commission of the State of Missouri (File No. EA 2022-0245):** Surrebuttal testimony of Sarah Shenstone-Harris regarding Ameren Missouri's Application for a Certificate of Convenience and Necessity of a Solar Facility. January 18, 2023.

*Resume updated August 2023*