

Exhibit No.:
Issue(s): Use of Federal Funding
Witness: Caroline Palmer
Type Of Exhibit: Direct Testimony
(Revenue Requirement)
Sponsoring Party: Consumers Council
of Missouri

MISSOURI PUBLIC SERVICE COMMISSION

Case No.: ER-2024-0319

**Direct Testimony of Caroline Palmer
(Revenue Requirement)**

**On Behalf of
Consumers Council of Missouri**

December 3, 2024

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Attachment CP-1: Resume of Caroline Palmer

Attachment CP-2: Ameren Missouri’s Response to CCM-35

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q Please state your name, title, and employer.**

3 A My name is Caroline Palmer. I am a Principal Associate at Synapse Energy Economics,
4 Inc. (“Synapse”), located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.

5 **Q Please describe Synapse Energy Economics, Inc.**

6 A Synapse is a research and consulting firm specializing in electricity and gas industry
7 regulation, planning, and analysis. Our work covers a range of issues, including economic
8 and technical assessments of demand-side and supply-side energy resources; energy
9 efficiency policies and programs; integrated resource planning; electricity market
10 modeling and assessment; renewable resource technologies and policies; and climate
11 change strategies. Synapse works for a wide range of clients, including state attorneys
12 general, offices of consumer advocates, public utility commissions, environmental
13 advocates, the U.S. Environmental Protection Agency, U.S. Department of Energy, U.S.
14 Department of Justice, the Federal Trade Commission, and the National Association of
15 Regulatory Utility Commissioners. Synapse has over 40 professional staff with extensive
16 experience in the electricity industry.

17 **Q Please summarize your professional and educational experience.**

18 A I am a Principal Associate at Synapse where I provide expert witness and consulting
19 services on behalf of public interest clients in regulatory proceedings. The issues I cover
20 in these cases include marginal and embedded cost-of-service studies, revenue
21 apportionment, advanced rate design, load management, decoupling, distributed energy
22 resource (DER) interconnection and compensation, electric vehicle (EV) infrastructure
23 investments, and pilot frameworks. Prior to joining Synapse I worked at Strategen

1 Consulting for five years performing similar work. I have submitted expert testimony in
2 ten dockets across five jurisdictions.

3 I was awarded a Fulbright Research Fellowship in Greece in 2019 and supported clean
4 energy policy consulting at Meister Consultants Group (now Cadmus) before that. I hold
5 a Master of Public Policy from the Goldman School at UC Berkeley and a Bachelor of
6 Science from Georgetown University. I have 10 years of professional experience. My
7 resume is attached as Attachment CP-1.

8 **Q Have you previously testified before the Missouri Public Service Commission?**

9 A No. I have sponsored testimony before a number of other commissions, including the
10 New York Public Service Commission, the Massachusetts Department of Public Utilities,
11 Maine Public Utilities Commission, the Oklahoma Corporation Commission, the North
12 Carolina Utilities Commission, and the Nova Scotia Utility and Review Board. I have
13 also assisted with testimonies and regulatory analyses in numerous other jurisdictions.

14 **Q On whose behalf are you testifying in this case?**

15 A I am testifying on behalf of Consumers Council of Missouri (Consumers Council).

16 **Q What is the purpose of your testimony?**

17 A In this testimony I outline the benefits available to Missouri ratepayers and communities
18 if Ameren Missouri takes advantage of federal funding available under the *Inflation*
19 *Reduction Act* (IRA). I explain how this funding, available to Ameren Missouri and other
20 investor-owned utilities, can benefit both ratepayers and shareholders. I specifically
21 highlight the Energy Infrastructure Reinvestment (EIR) program and the Energy
22 Community Tax Credit Bonus and recommend that Ameren pursue these opportunities
23 and maximize the resulting ratepayer benefits.

1 **II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS**

2 **Q Please summarize your testimony and related recommendations.**

3 A I recommend that the Commission order the Company to:

- 4 • Promptly follow up with the Loan Programs Office (LPO) of the U.S. Department
5 of Energy (DOE) on the status of its EIR application to ensure the viability of
6 proposed investments, availability of funding, and planned use of funding.
- 7 • Continue to pursue the LPO’s consent to disclose the status of its application for
8 an EIR loan guarantee and report that status to the parties in this case.
- 9 • Submit a thoughtfully designed Part II EIR application as soon as possible.
- 10 • Evaluate how to maximize ratepayer savings from any approved EIR funding by
11 investigating the applicability of the “capital recycling” approach with the
12 Commission and the DOE.
- 13 • Take advantage of tax credits and available tax credit bonuses, such as the Energy
14 Community Tax Credit Bonus, whenever reasonably feasible.

15 **III. ENERGY INFRASTRUCTURE REINVESTMENT PROGRAM**

16 *EIR Basics*

17 **Q Please describe the EIR program.**

18 A The EIR program was created under the *2022 Inflation Reduction Act*. It is administered
19 by the LPO of the DOE “to help the United States leverage its extensive energy
20 infrastructure and skilled workforce to support the energy transformation.”¹ IRA

¹ “Title 17 Clean Energy Financing – Energy Infrastructure Reinvestment.” U.S. Department of Energy.
<https://www.energy.gov/lpo/energy-infrastructure-reinvestment>.

1 provided EIR with \$5 billion through Fiscal Year 2026 to support up to \$250 billion in
2 loan guarantees.²

3 The EIR program finances projects that “retool, repower, repurpose, or replace” retiring
4 energy infrastructure or improve the pollutant profile of operating energy infrastructure.³

5 It is intended to benefit utility customers and energy communities historically dependent
6 on fossil fuel infrastructure. Projects are required to engage with communities and
7 demonstrate how the investments will benefit those communities.⁴

8 **Q Please provide some examples of potential projects eligible for EIR loans.**

9 A The DOE has provided examples of potential EIR projects, which include:⁵

- 10 • Replacing retired power plants with renewable energy and storage
- 11 • Reconductoring transmission to expand transfer capacity of zero-emission energy
- 12 • Upgrading wind farms to increase output

13 **Q Please describe the financing options available under the EIR program.**

14 A The EIR program guarantees either a direct loan from the U.S. Treasury’s Federal
15 Financing Bank or a third-party loan backed by the DOE. The cost of EIR debt financing
16 includes a base rate equal to the U.S. Treasury curve (or third-party rate), plus a liquidity
17 spread equal to 37.5 basis points, plus a 0.1 percent or 0.6 percent closing fee as well as
18 advisor and monitoring costs.⁶ The loan amount cannot exceed 80 percent of the eligible

² “#DeployDeployDeploy: 2. The Energy Infrastructure Reinvestment (EIR) Program,” U.S. Department of Energy.
<https://www.energy.gov/lpo/articles/deploydeploydeploy-2-energy-infrastructure-reinvestment-eir-program>.

³ “Title 17 Clean Energy Financing – Energy Infrastructure Reinvestment.” U.S. Department of Energy.
<https://www.energy.gov/lpo/energy-infrastructure-reinvestment>.

⁴ “#DeployDeployDeploy: 2. The Energy Infrastructure Reinvestment (EIR) Program,” U.S. Department of Energy.
<https://www.energy.gov/lpo/articles/deploydeploydeploy-2-energy-infrastructure-reinvestment-eir-program>.

⁵ *Ibid.*

⁶ “Pricing for LPO Financing by Program.” U.S. Department of Energy.
<https://www.energy.gov/lpo/articles/pricing-lpo-financing-program>.

1 project costs, the loan tenor cannot exceed 30 years from time of loan closing, and loans
2 cannot be subordinate to other financing.⁷

3 ***Applicability and Benefits of EIR Financing for Ameren***

4 **Q How does Ameren Missouri’s rate case spending relate to planned investments?**

5 A In this rate case, “the Company has filed tariffs that reflect an increase of approximately
6 \$446.2 million or approximately 15.49% in its overall revenue requirement.”⁸ Ameren
7 Missouri’s revenue requirement increase reflects implementation of its Integrated
8 Resource Plan (IRP). The IRP calls for “greater utilization of renewable energy resources
9 backstopped by dispatchable generation to ensure reliability” to mitigate myriad risks
10 posed by over-reliance on fossil-fueled generation.⁹ The investments and revenues from
11 three new plants, as planned in the IRP, are reflected in rate base in this case.¹⁰ The
12 plants’ financing terms have a direct bearing on the costs proposed for collection in this
13 rate case, just as future IRP investments will have direct bearing on the costs collected in
14 future rate cases. Ameren Missouri states that the addition of a portfolio of renewable and
15 gas generation, as outlined in the IRP, is the most cost-effective means to meet its
16 customers’ energy needs over time.¹¹

⁷ “Preparing a Strong Energy Infrastructure Reinvestment Project Application for Efficient Loan Processing,” U.S. Department of Energy. <https://www.energy.gov/lpo/articles/preparing-strong-energy-infrastructure-reinvestment-project-application-efficient-loan>.

⁸ Direct Testimony of Warren Wood at 3.

⁹ *Ibid* at 11.

¹⁰ *Ibid*.

¹¹ *Ibid* at 12.

1 **Q Can EIR financing provide a more cost-effective way to meet Ameren Missouri’s**
2 **customers’ energy needs over time?**

3 A Yes; as I discuss below, EIR funding should be able to reduce costs to ratepayers for
4 utilities such as Ameren that have low-quality rate base projects still on their books, and
5 have the need, and opportunity, to build new renewable projects at the site of existing
6 fossil infrastructure. Per the DOE, “EIR provides utilities with attractive, cost-
7 competitive debt financing for portions of utility capital investment plans while reducing
8 costs to customers.”¹² Importantly, electric utilities that apply for an EIR loan guarantee
9 must demonstrate to DOE that financial benefits received from the guarantee will be
10 passed on to the customers of, or associated communities served by, that utility.¹³
11 Therefore, by applying for and optimizing the use of an EIR loan, Ameren Missouri
12 could make the most of available federal funding that has been designed to reduce
13 ratepayer costs and revitalize communities impacted by the energy transition.

14 **Q Why are ratepayer benefits important?**

15 A As discussed above, Ameren Missouri’s proposals will raise electric bills by 15.49
16 percent on average across the customer classes.¹⁴ The rate increase will affect certain
17 customer classes—and groups within those customer classes, such as low-income
18 residential customers—disproportionately as compared to others. With further capital
19 spending in the Company’s near-term plan, and with the economy still recovering from

¹² “Understanding Energy Infrastructure Reinvestment Loan Program Eligibility for Regulated Utilities.” U.S. Department of Energy. <https://www.energy.gov/lpo/articles/understanding-energy-infrastructure-reinvestment-loan-program-eligibility-regulated>.

¹³ “Title 17 Clean Energy Financing – Energy Infrastructure Reinvestment.” U.S. Department of Energy. <https://www.energy.gov/lpo/energy-infrastructure-reinvestment>.

¹⁴ Direct Testimony of Nicholas Bowden at 31.

1 years of record inflation, Ameren should leverage alternative financing and funding
2 programs to provide value to ratepayers.

3 The residential class is already showing signs of severe financial pressure, demonstrated
4 by increasing monthly disconnections and high levels of arrearages. Specifically:¹⁵

- 5 • Disconnections have risen from well below 10,000 earlier in the year to 12,423 in
6 August; 16,116 in September; and 17,043 in October.
- 7 • The average amount of delinquent bill payment has risen from \$150 and under
8 earlier in the year to around \$200 in the past three months.

9 The EIR offers Ameren Missouri the opportunity to apply for and maximize federal
10 funding to support a healthier ratepayer population. That should be a clear priority for the
11 Company.

12 **Q Why are energy community benefits important?**

13 A Energy communities that rely on extraction, processing, or transport of fossil fuels for
14 employment or have faced coal facility closure are likely to experience a disproportionate
15 burden or vulnerability when a large fossil fuel facility retires as well as from local
16 pollution when a facility is operating. For example, the recent closing of the Company's
17 second-largest coal plant, Rush Island, is expected to result in the loss of 90 jobs and
18 between \$1.0 million to \$1.5 million in tax revenue for local schools if there is no new
19 development.¹⁶ The Commission has recognized the importance of community transition
20 after Ameren Missouri closes the plant. Local news coverage of a recent Commission

¹⁵ "Service Disconnection Reports." Accessed at https://psc.mo.gov/General/Service_Disconnection_Reports.

¹⁶ "Can Ameren's newly shuttered coal plant in Missouri find new life? Other former plants have." Bryce Gray. St. Louis Post-Dispatch. October 28, 2024. https://www.stltoday.com/news/local/business/can-ameren-s-newly-shuttered-coal-plant-in-missouri-find-new-life-other-former-plants/article_191981ea-8ccf-11ef-8a29-0b6f96d10b79.html.

1 meeting quoted Commissioner Jason Holsman as instructing the Company to develop a
2 plan on how to use the site of the retiring facility in a manner that will benefit the
3 community.¹⁷ An EIR loan may support more rapid deployment of replacement
4 infrastructure. It also may allow the Company to take advantage of assets such as existing
5 power lines, grid interconnections, and permits. This may help with community
6 revitalization, which the Commission has acknowledged should be a priority.

7 **Q Has Ameren Missouri sought EIR funding?**

8 A Yes. The Company filed a Part 1 application under the EIR program.¹⁸ When asked about
9 the status of its application, Ameren Missouri stated that it “is unable to disclose the
10 status of its application for a loan guarantee without the prior consent of the LPO,” which
11 the Company requested on November 27th and has not yet received.¹⁹ However, the
12 Company expects that “nearly all of its planned clean energy investments through 2032
13 would be eligible” for the EIR program.²⁰

14 **Q How could Ameren Missouri optimally utilize EIR funding?**

15 If Ameren Missouri receives approval for a loan guarantee, there are ways that the
16 Company can maximize ratepayer benefits. The DOE describes the EIR program as
17 offering cost-competitive debt financing for utility capital investments. However, if
18 Ameren Missouri simply uses EIR loans to displace corporate debt, overall ratepayer

¹⁷ *Ibid.*

¹⁸ Ameren Missouri’s response to CCM-35, attached as Attachment CP-2.

¹⁹ *Ibid.*

²⁰ Ameren Missouri’s Status Report. AW-2023-0156. October 31, 2023.

1 savings may be minimal, as most utilities can already borrow at attractive interest rates²¹
2 without the added complication and cost of participating in a federal program.

3 However, the energy research organization RMI has described a more nuanced approach
4 for utilizing EIR funding, termed "capital recycling," involving an accounting maneuver
5 that "free[s] up balance sheet capital to be recycled into" EIR investments.²² Under this
6 approach, an application for a high-leverage EIR loan to finance up to 80 percent of the
7 total costs for a proposed reinvestment portfolio would proceed as normal. To mitigate
8 potential negative credit rating implications, part or all of the loan might be structured to
9 use an off-balance sheet, bankruptcy-remote special purpose vehicle (SPV), to be
10 recovered by a dedicated non-bypassable surcharge.

11 Under the SPV, Ameren Missouri can decide which costs to recover through the
12 surcharge. Rather than just recovering the cost of the new project, which is a high-quality
13 capital-intensive clean asset with a long recovery time, Ameren Missouri can designate
14 some or all of the EIR proceeds to recover low-quality rate base. This can include costs
15 not directly tied to current service delivery that could be deemed imprudent or excessive,
16 such as undepreciated plant balances for uneconomic power plants. Such investments
17 may have higher risk and rapidly declining earnings for shareholders and high annual
18 depreciation and amortization costs associated with shorter recovery periods for
19 customers. Moving these investments off-balance sheet to the SPV is an accounting move

²¹ Indeed, Ameren's cost of debt is likely relatively low given that its proposed weighted average cost of capital (7.4%) is based on a capital structure that was recently about 51% equity and 49% debt, with a cost of equity of 10.25%. *See* Direct (Public) Testimony of Darryl T. Sagel at 14.

²² Christian Fong, David Posner, Uday Varadarajan. "Maximizing the Value of the Energy Infrastructure Reinvestment Program for Utility Customers." May 24, 2024. <https://rmi.org/maximizing-the-value-of-the-energy-infrastructure-reinvestment-program-for-utility-customers/>.

1 that can benefit both ratepayers with a lower rate of return and shareholders with
2 improved debt quality.

3 If the EIR loan is larger than the low-quality assets, Ameren Missouri can also move
4 some of the new clean assets into the SPV. All asset costs recovered through the SPV,
5 including both the low-quality rate base assets and new clean assets, are taken off the
6 utility balance sheet and no longer need to be recovered through base tariffs in
7 subsequent rate cases. Any assets assigned to rate base, including the reinvestment
8 portfolio costs that will not be recovered through the surcharge, earn a financial return at
9 the utility's rate of return (calculated including any EIR debt kept on balance sheet).

10 **Q Is "capital recycling" feasible in Missouri and has the DOE approved it as a use**
11 **case for EIR loans?**

12 **A** RMI conducted a case study of capital recycling in Missouri, implying that the structure
13 could be permissible.²³ My understanding is that Ameren Missouri does not need to seek
14 permission from the DOE to create an SPV or otherwise use capital recycling, provided it
15 also constructs the project for which it received the EIR funding. I therefore do not know
16 of a reason why Ameren Missouri could not use this approach—provided it gets
17 Commission approval—and I recommend that the Company investigate the applicability
18 of the structure with the Commission. I do not know of utilities that have publicly
19 pursued this specific approach to date. The LPO encourages close collaboration with

²³ *Ibid.*

1 DOE staff while utilities navigate the application process²⁴ and as such, Ameren Missouri
2 should initiate conversations with the LPO about this approach.

3 **Q Why should Ameren Missouri use EIR funding if securitization is legal in Missouri?**

4 A Securitization is a valuable tool to address undepreciated plant balance or other assets
5 that are no longer providing value to ratepayers and remove them from a utility balance
6 sheet. But EIR financing can offer loans for more than just the undepreciated plant
7 balance level because the loans are tied to the cost of a new project. This means that the
8 amount of capital available for recycling, and therefore the benefits available, may be
9 larger through EIR financing than through using only securitization. The Company
10 should evaluate the tradeoffs with securitization as it considers its options for EIR
11 funding.

12 **Q Is there urgency around Ameren Missouri’s application for an EIR loan?**

13 A Yes. The DOE may approve EIR loans until the end of fiscal year 2026. Therefore,
14 Ameren Missouri must diligently pursue any funding it has already applied for and
15 provide any needed follow-up as soon as possible before EIR funding expires.

16 **Q What are your recommendations regarding EIR funding?**

17 A I recommend that the Commission order the Company to:

- 18 • Promptly follow up with the DOE LPO on the status of its EIR application to
19 ensure the viability of proposed investments, availability of funding, and planned
20 use of funding.

²⁴ “Understanding Energy Infrastructure Reinvestment Loan Program Eligibility for Regulated Utilities.” U.S. Department of Energy. <https://www.energy.gov/lpo/articles/understanding-energy-infrastructure-reinvestment-loan-program-eligibility-regulated>.

- 1 • Continue to pursue the LPO’s consent to disclose the status of its application for
2 an EIR loan guarantee and report that status to the parties in this case.
- 3 • Submit a thoughtfully designed Part II EIR application as soon as possible.
- 4 • Evaluate how to maximize ratepayer savings from any approved EIR funding by
5 investigating the applicability of the “capital recycling” approach with the
6 Commission and the DOE.

7 **IV. ENERGY COMMUNITY TAX CREDIT BONUS**

8 **Q Please describe the Energy Community Tax Credit Bonus.**

9 A The IRA’s tax credit bonuses meaningfully boost the tax incentives already available
10 through the production tax credit (PTC) and investment tax credit (ITC), which allow
11 taxpayers to deduct a percentage of the cost of renewable energy systems from their
12 federal taxes.²⁵ The Energy Community Tax Credit Bonus of up to 10 percent of the PTC
13 or 10 percentage points to the ITC is available for projects located in energy
14 communities. DOE defines energy communities as either (1) a brownfield site; (2) a
15 census tract, or one directly adjoining, that has had a coal mine closed after 1999, or a
16 coal-generator close after 2009; (3) an area that relies on extraction, processing, or
17 transport of fossil fuels for employment (0.17 percent direct employment or greater) or
18 tax revenue (25 percent local tax revenue), or that has an unemployment rate at or above
19 the national average.²⁶

²⁵ OAR US EPA, “Summary of Inflation Reduction Act Provisions Related to Renewable Energy,” Overviews and Factsheets, November 21, 2022, <https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>.

²⁶ Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization. Energy Community Tax Credit Bonus. Available at <https://energycommunities.gov/energy-community-tax-credit-bonus/>.

1 **Q What is the applicability of the Energy Community Tax Credit for the Company?**

2 A Missouri has a number of counties that qualify as energy communities under both the
3 coal facility closure criteria and fossil fuels employment criteria.²⁷ It appears that there is
4 significant overlap between Ameren Missouri’s service territory and energy communities,
5 especially those of the coal closure type.²⁸ The Rush Island site, mentioned above, would
6 likely be a candidate for the Energy Community Tax Credit Bonus, based on the coal
7 closure criteria.²⁹ Although the plant location is not yet designated as an energy
8 community in the mapping tool, this site should be eligible according to the definition
9 discussed above.

10 **Q Why should Ameren Missouri prioritize investments that will allow it to take**
11 **advantage of the Energy Community Tax Credit Bonus?**

12 A Tax credits can provide substantial benefits to coal facility closure communities. For
13 example, when retiring a coal-fired generating station in Minnesota, Xcel Energy made
14 use of the Energy Community Tax Credit Bonus to help create new jobs, improve local
15 economic development, and generate clean energy.³⁰ The ITC, with the energy
16 community adder, helped the utility to build a battery energy storage site at the location
17 of the retired coal plant. By making the most of available funding opportunities, Ameren
18 Missouri could likely also increase ratepayer and community benefits without incurring

²⁷ U.S. Department of Energy, Energy Community Tax Credit Bonus Map. Available at <https://arcgis.netl.doe.gov/portal/apps/experiencebuilder/experience/?id=a2ce47d4721a477a8701bd0e08495e1d>.

²⁸ “Service Territory | Ameren Corp,” accessed December 2, 2024, <https://www.ameren.com/company/about-ameren/service-territory>.

²⁹ “IRS Issues Guidance for Energy Communities and the Bonus Credit Program under the Inflation Reduction Act | Internal Revenue Service,” accessed November 25, 2024, <https://www.irs.gov/newsroom/irs-issues-guidance-for-energy-communities-and-the-bonus-credit-program-under-the-inflation-reduction-act>.

³⁰ Ryan Mills, “The Sherco Clean Repowering: How One Community Turned a Coal Plant into a Hub for a New Clean Economy,” RMI, November 8, 2024, <https://rmi.org/the-sherco-clean-repowering-how-one-community-turned-a-coal-plant-into-a-hub-for-a-new-clean-economy/>.

1 significant additional costs. I recommend that Ameren Missouri pursue such tax credits
2 and bonuses.

3 **V. CONCLUSION**

4 **Q Does this conclude your testimony?**

5 **A** Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to Adjust its)
Revenues for Electric Service.) **No. ER-2024-0319**

AFFIDAVIT OF CAROLINE PALMER

I, the undersigned, being duly sworn, states that my name is Caroline Palmer, and that the foregoing Direct Testimony of Caroline Palmer, including attachments, was prepared by me on behalf of the Consumers Council of Missouri. This testimony was prepared in written form for the purpose of its introduction into evidence in the above utility case at the Missouri Public Service Commission.

I hereby swear and affirm that the attached testimony is true and correct to my best knowledge, information, and belief, and I adopt said testimony as if it were given under oath in a formal hearing.



Caroline Palmer

Subscribed before me on this 3 day of December ____, 2024:







Caroline Palmer, Principal Associate

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cpalmer@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Cambridge, MA. *Principal Associate*, June 2024 – present.

- Conduct analysis and provide expert witness and consulting services on behalf of public interest clients in regulatory proceedings, on topics including electric utility class cost of service, revenue allocation, advanced rate design, avoided cost methodology, and distributed generation interconnection and planning.

Strategen Consulting, Oakland, CA. *Senior Manager*, 2024; *Manager*, 2023 - 2024; *Senior Consultant*, 2021 - 2022; *Consultant*, 2019 - 2021.

- Conducted analysis and provided expert witness and consulting services to state regulatory commissions, state consumer advocates, and non-profits to advance the public interest in regulatory decision-making around electricity service, pricing, and decarbonization.

Metropolitan Area Planning Council Boston, MA. *Clean Energy Fellow*, 2017.

- Provided technical assistance to Massachusetts local government on renewable energy technology and energy planning.

Fulbright Foundation Athens, Greece. *Fulbright Research Fellow*, 2015 – 2016.

- Designed and conducted original, independent research on renewable energy policymaking and implementation in the context of Greece's severe economic crisis

Meister Consultants Group (now Cadmus), Boston, MA. *Analyst*, 2014 – 2015.

- Performed research and writing for renewable energy policy design, analysis, and implementation.

EDUCATION

University of California, Berkley, CA

Master of Public Policy – Energy Policy, 2019

Georgetown University, Washington, DC

Bachelor of Science in Foreign Service – Science, Technology, and International Affairs, 2013

PUBLICATIONS

Palmer, C. 2019. *Using Low Carbon Fuel Standard Proceeds from EV Adoption to Improve the Efficiency of Electricity Rates*. Berkeley Public Policy Journal.

TESTIMONY

Nova Scotia Utility and Review Board (M11874). Direct Testimony of Caroline Palmer regarding costs incurred to implement the Renewable to Retail market. On behalf of Counsel to Nova Scotia Utility and Review Board. November 1, 2024.

Maine Public Utilities Commission (Docket No. 2024-00137). Direct Testimony of Caroline Palmer and Eric Borden regarding Stranded Cost Rate Design. On behalf of the Maine Office of the Public Advocate. October 1, 2024.

New York Public Service Commission (Cases 24-E-0322 & 24-G-0323): Direct Testimony of Caroline Palmer, Melissa Whited, and Ben Havumaki regarding the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a National Grid for Electric and Gas Service. On behalf of the Utility Intervention Unit (UIU) of the New York Department of State's Division of Consumer Protection. September 26, 2024.

Massachusetts Department of Public Utilities (D.P.U. 23-150): Direct Testimony, Surrebuttal Testimony, and Cross-examination of Caroline Palmer and Ron Nelson regarding Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, pursuant to G.L. c. 164, § 94 and 220 CMR 5.00, for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance-Based Ratemaking Plan. On behalf of the Massachusetts Office of the Attorney General. March 29, 2024, May 3, 2024, and May 20, 2024.

North Carolina Utilities Commission (Docket No. E-7, Sub 1276): Direct Testimony of Caroline Palmer regarding the Application of Duke Energy Carolinas, LLC, for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina and Performance-Based Regulation. On behalf of the North Carolina Attorney General's Office. July 19, 2023.

Oklahoma Corporation Commission (Case No. PUD 2022-000093.): Adoption of Direct Testimony and Cross-examination regarding the Application of Public Service Company of Oklahoma, for an adjustment in its rates and charges and the electric service rules, regulations, and conditions of service for electric service in the state of Oklahoma and to approve a formula-based rate proposal. On behalf of AARP. May 22, 2023.

Maine Public Utilities Commission (Case No. 2022-00152): Direct Testimony and Surrebuttal Testimony of Caroline Palmer, Nikhil Balakumar, and Ron Nelson regarding the Central Maine Power Company's request for Approval of a Rate Change - 307 (7/30/23). On behalf of the Maine Governor's Energy Office. December 2, 2022 and April 6, 2023.

Massachusetts Department of Public Utilities (D.P.U. 21-91): Direct Testimony and Cross-examination of Caroline Palmer and Ron Nelson regarding the Petition of NSTAR Electric Company d/b/a Eversource Energy for approval of its Phase II Electric Vehicle Infrastructure Program and EV Demand Charge Alternative Proposal. On behalf of the Massachusetts Office of the Attorney General. January 5, 2022, and March 22, 2022.

Massachusetts Department of Public Utilities (D.P.U. 21-90): Direct Testimony and Cross-examination of Caroline Palmer and Ron Nelson regarding the Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, for approval of its Phase III EV Market Development Program and EV Demand Charge Alternative Proposal. On behalf of the Massachusetts Office of the Attorney General. January 5, 2022, and March 22, 2022.

Massachusetts Department of Public Utilities (D.P.U. 21-92): Direct Testimony and Cross-examination of Caroline Palmer and Ron Nelson regarding the Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for approval of its EV Infrastructure Program, EV Demand Charge Alternative Proposal, and Residential EV Time-of-Use Rate Proposal. On behalf of the Massachusetts Office of the Attorney General. January 5, 2022, and March 22, 2022.

PRESENTATIONS

Palmer, C. 2022. Utility Transportation Electrification from a Consumer Advocate Perspective. NASUCA Mid-Year Meeting. Indianapolis, IN.

Palmer, C. 2017. Integration of renewable energy in Greek energy markets: A case study. 2nd HAEE International Conference. Athens, Greece.

Resume last updated December 2024

Ameren Missouri
Case Name: ER-2024-0319
Docket No(s): 2024 Electric Rate Review

Response to Discovery Request: CCM-CCM-35
Date of Response: 12/2/2024
Witness: N/A

Question:In Ameren Missouri's 10/31/2023 Status Report in AW-2023-0156, the Company indicated its intention to file a Part I application for the DOE's Title 17 Clean Energy Financing Program under section 1706 Energy Infrastructure Reinvestment prior to the end of the year.

- a. Did the Company file an application for the DOE's Title 17 Clean Energy Financing Program under section 1706 Energy Infrastructure Reinvestment? If no, why not?
- b. If the answer to part a is yes, please provide the application.
- c. If the answer to part a is yes, please provide the status of the application and a summary of DOE's communications regarding the application and timeline for consideration.
- d. If the answer to part a is yes, please describe the specific infrastructure projects/investments the Company applied for and the respective dollar amounts. Explain how the Company chose those projects and funding levels.

Response:

Prepared By: Darryl Sagel
Title: Vice President and Treasurer
Date: November 27, 2024

- a. As stated in the Company's response to data request CCM-1 in EF-2024-0021, the Company filed a Part 1 Application under the EIR Section 1706 program.
- b. The Company provided the Part 1 Application in response to data request CCM-1 in EF-2024-0021.
- c. Pursuant to a Letter from the Loan Programs Office (LPO) of the Department of Energy, dated as of April 12, 2024, Union Electric Company is unable to disclose the status of its application for a loan guarantee without the prior consent of the LPO. Union Electric Company has requested prior written consent from the LPO as of November 27th has not received such prior written consent.
- d. See response to (c) above.