Exhibit No.: ________________
Issue(s): Liberty Income Eligible Rate Design
Witness/Type of Exhibit: Marke/Direct
Sponsoring Party: Public Counsel
Case No.: ER-2024-0261

DIRECT TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY

FILE NO. ER-2024-0261

July 21, 2025

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I. INTRODUCTION

Q. Please state your name, title, and business address.

A. Geoff Marke, PhD, Chief Economist, Office of the Public Counsel (OPC or Public Counsel), P.O. Box 2230, Jefferson City, Missouri 65102.

Q. What are your qualifications and experience?

A. I have been in my present position with OPC since 2014 where I am responsible for economic analysis and policy research in electric, gas, water, and sewer utility operations.

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

A. Yes. A listing of the Commission cases in which I have previously filed testimony and/or comments is attached in Schedule GM-1.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to provide some background on Liberty Utilities' ("Liberty" or "Empire") vulnerable residential customer population and to propose an income-eligible discount residential rate for qualifying Liberty customers.

II. THE LIBERTY INCOME ELIGIBLE RATE

Q. What does affordability mean within the context of utility bills?

A. "Affordability" refers to a state of affairs in which a customer can reasonably pay their bill. Affordability is often closely tied to "fairness"; namely, it is unfair to charge customers more for utility service than they can afford. Unfairness, in this sense, would result in customers falling so far behind on their utility bills that over time they accumulate an unpaid account that they cannot possibly pay. The inevitable outcome is service disconnection for those customers and severe obstacles in service restoration.

Q. Is there a business case for utility energy bill assistance programs?

A. Most definitely. A utility's core mission should be to maintain infrastructure to supply safe, reliable, and *affordable* service to its customers. Energy assistance programs support the core mission of affordability by minimizing late payments, bad debt, and disconnections. A breakdown of the perceived benefits, costs, and risks of utility bill assistance programs can be seen in Table 1.

Table 1: Benefits, Costs and Risks in Utility Bill Assistance

Benefits	Costs	Risks
Improved on-time payments	Direct assistance costs	Free ridership
Reduced debt collection costs and disconnections	Administrative and marketing costs	Burdensome program implementation
Enhanced customer satisfaction		Insufficient impact on bill affordability
Positive externalities (e.g., better quality of life and community-wide benefits)		

Utility bill assistance programs constitute a targeted investment that enables low-income customers to make more consistent payments for utility service by reducing the customer's energy burden. A reduced energy burden should result in a decrease in arrearage write-offs, collection costs, and disconnections.

The importance of affordable rates is also embedded in the Mission Statement espoused by the Missouri Public Service Commission, as shown in Figure 1.

Figure 1: Missouri Public Service Commission Mission Statement[1]

Mission Statement

We will:

- ensure that Missourians receive safe and reliable utility services at just, reasonable and affordable rates;
- support economic development through either traditional rate of return regulation or competition, as required by law;
- establish standards so that competition will maintain or improve the quality of services provided to Missourians;
- provide the public the information they need to make educated utility choices;
- provide an efficient regulatory process that is responsive to all parties, and perform our duties ethically and professionally.

Q. Has Liberty conducted any research regarding its customers' likely energy burden?

A. Yes. As a result of a nonunanimous stipulation and agreement entered into by the parties in Case No. ER-2021-0312 a third-party consultant, Empower Dataworks, conducted a 2023 Energy Burden Assessment for Liberty's electric Missouri customers.[2]

Q. What is an energy burden?

A. Energy burden refers to the percentage of a household's income spent on energy bills. A high energy burden means a significant portion of a household's income is being used for energy, potentially impacting their ability to afford other essential needs like housing, food, medicine, and transportation. A household with a high energy burden spends more than 6% of its income on energy bills, and those with a severe burden spend more than 10%.[3] For example, a household with $50,000 in income should spend no more than $3,000 on its energy bills. Importantly, energy burden estimates typically contain both electric and gas utility bills; however, Empower Dataworks controlled for households that heated with electricity and those that did not. Specifically, the study selected 4% and above as the threshold for high non-electric

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1 Missouri Public Service Commission (2025) About the PSC. https://psc.mo.gov/General/About_The_PSC

2 See also GM-1.

3 These thresholds are based on Fisher, Sheehan and Colton's Home Energy Affordability Gap Analysis. This burden takes into account the total cost of shelter and the proportion of total shelter cost devoted specifically to energy. For more information, see http://www.homeenergyaffordabilitygap.com/

space-heating burden and 6% and above as the threshold for high electric-space heating customers.

Q. What does Missouri's energy burden look like?

A. Not good. Missouri ranked 13th in highest estimated average energy burden in the United States according to the U.S. Department of Energy's Low-Income Energy Affordability Data ("LEAD") Tool. The US DOE estimated that approximately 24% of households in Missouri have an unaffordable energy burden. Additionally:

> Each year, the average household (with unaffordable utility bills) in Missouri spends $1,021 more in utility bills than they can afford (above the 6% affordability standard)—compared to the national average of $921.06.[4]

Q. What is the estimated energy burden for Liberty's electric customers?

A. Of the 114,000 identified households in the Empower Dataworks study, 37,000 were deemed to have a high energy burden. This represents approximately 32.5% of Liberty's customers in the study and is 8.5% greater than the DOE 24% average for the state of Missouri.[5] A distribution breakdown of customers' relative energy burden can be seen in Figure 2.

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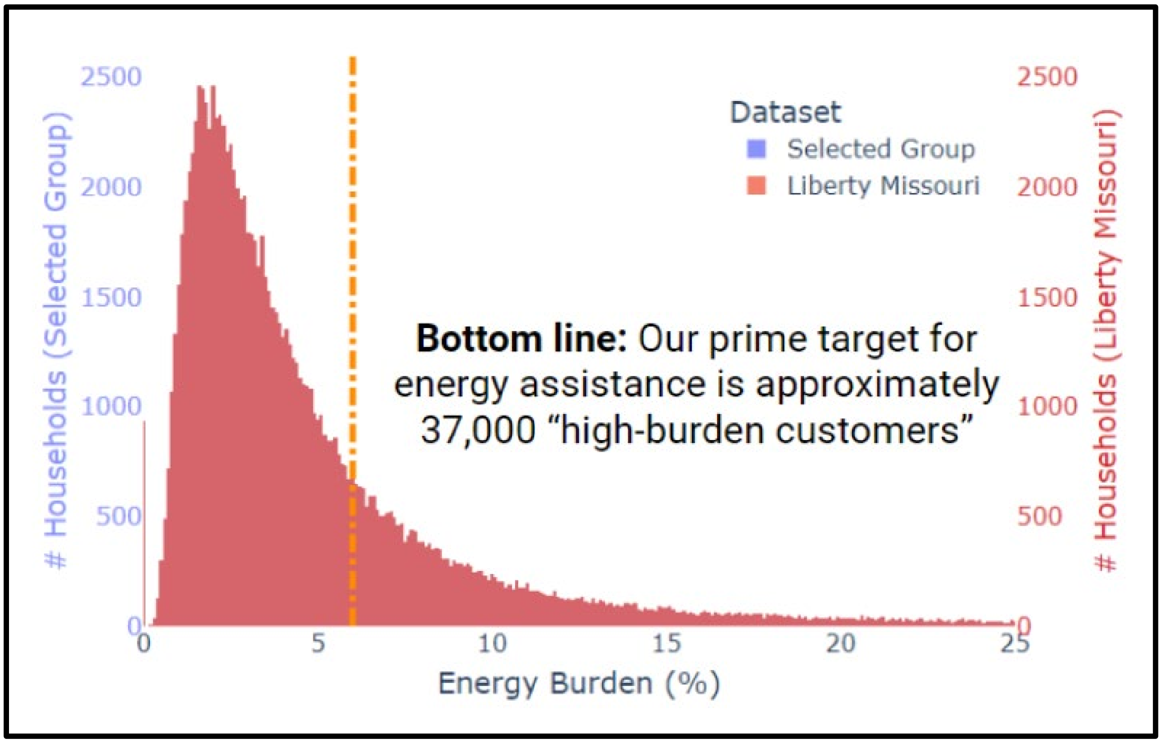
[4] The US DOE LEADS platform has been designated "403 Forbidden" on the US DOE website and can no longer be accessed; however, the University of Michigan's Energy Equity Project https://energyequityproject.org/ retained the information by state. I have included a copy of Missouri's profile in GM-2 for reference.

[5] See GM-1 p. 16.

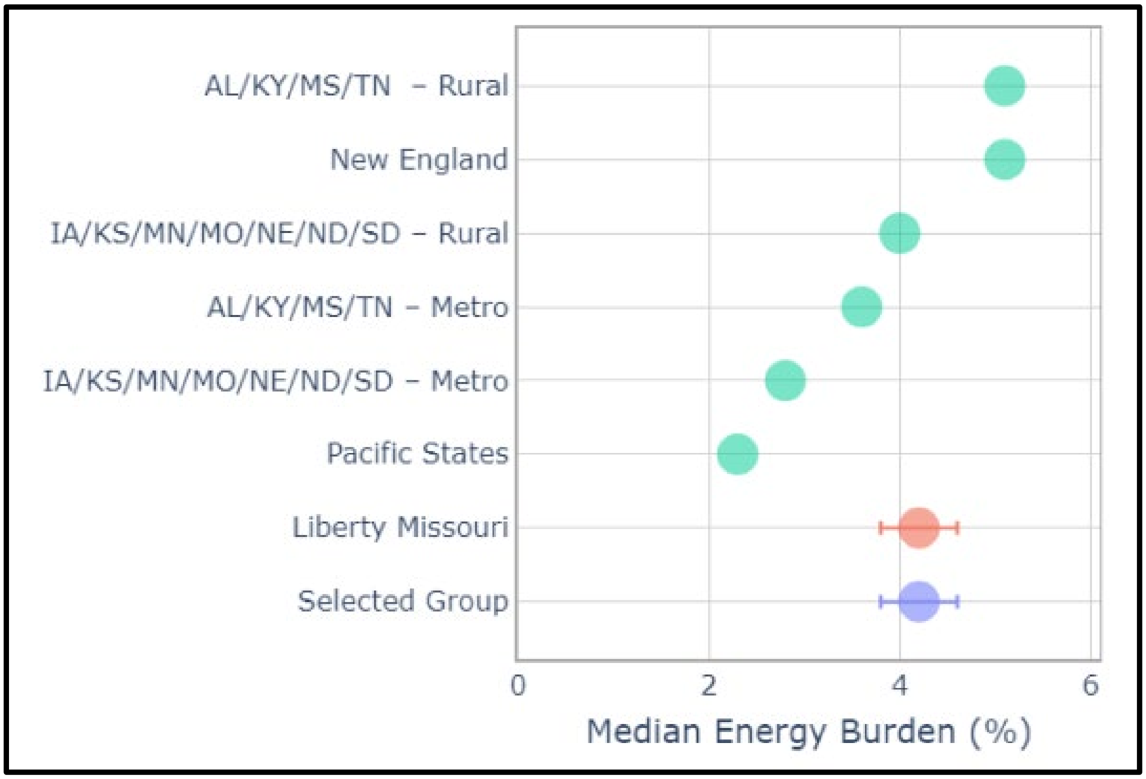
Figure 2. Energy Burden (%) of Liberty's Customers[6]



As a whole, Liberty customers had an average and median electricity energy burden of 5.3% (electric space heating) and 3.5% (non-electric space heating), respectively, in the 2021-2023 study period. Figure 3 shows Liberty Missouri customers' median energy burden relative to other regional energy burden benchmarks.

[6] *Ibid.* p. 18.

Figure 3: Median Energy Burden of Liberty and select regions[7]



The Empower Dataworks analysis also suggests that approximately 39% of residents during the study period would have been eligible for federal subsidies from the Low Income Home Energy Assistance Program ("LIHEAP"), which is administered at 60% of the State Median Income. Furthermore, Empower estimates that approximately 52% of the high energy burden customers are renters, which makes long-term solutions such as energy efficiency upgrades a significant challenge due to the split-incentive problem between landlords and tenants.

Q. What is the landlord-tenant spilt-incentive problem?

A. With many rental leases, the tenant is responsible for paying utility bills. If a landlord invests in energy efficiency upgrades, the landlord bears the upfront cost, but doesn't directly see the

[7] *Ibid*. p. 16.

financial benefits of a lower utility bill—as those savings accrue to the tenant. Conversely, a tenant has little incentive to invest in energy efficiency upgrades to a building they do not own and for which they may not be able to recoup the benefits of before moving. Tenants may not be fully aware of the energy-saving potential of upgrades, or they may not be able to accurately assess the impact of a landlord's decisions on their energy consumption.

Q. Did Empower Dataworks estimate how much annual funding would be needed to minimize all of Liberty's low-income customers' energy burdens to manageable levels (e.g., below 4% for non-electric heating, and 6% for electric heating of overall income)?

A. Yes. Empower estimated that it would take an additional $33M annually.[8]

Q. Is there information of which the Commission should be aware when considering this study?

A. Yes.

- The data set that Empower was working with included the period during and immediately following the COVID-19 pandemic, where energy usage varied from historical norms;
- Furthermore, the data set does not include results from more recent surcharge additions to Liberty's electric customer bills, such as the energy efficiency and securitization surcharges;
- Estimated annual assistance suggested by the study assumes full LIHEAP funding remains in place, which is no longer guaranteed;[9]

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[8] *Ibid*. p. 16.

[9] The Trump administration proposed budget includes eliminating LIHEAP (~$4B annually) in its entirety. Budgetary notes state:

> This Administration is committed to lowering energy costs for American families by unleashing energy production. The Low Income Home Energy Assistance Program (LIHEAP) is unnecessary because States have policies preventing utility disconnection for low-income households, effectively making LIHEAP a pass-through benefitting utilities in the Northeast. Further, LIHEAP rewards States like New York and California, two of the top recipients for LIHEAP funding, which have implemented anti-consumer policies that drive up home energy prices. The Government Accountability Office (GAO) has raised significant program integrity concerns related to fraud and abuse in LIHEAP. In 2010, GAO investigators audited seven States and found names of 11,000 dead people and hundreds of prisoners used as applicants for funds. More

- The study does not include subsequent household cost increases from inflation, or the various rate increases for natural gas and water/wastewater service over the past four years; and
- Approximately only 16-20% of households eligible for LIHEAP actually receive assistance today.[10] This suggests that annual costs related to this program need to be tempered by participation levels that will not likely encompass all (or even a quarter) of customers who would be eligible (at least in the initial years of roll-out), barring some data sharing agreements between the Missouri Department of Social Services and Liberty.

Taken together, the annual assistance amount needed to induce affordable electric bills across most of its customers is almost certainly understated from the Empower study.

Q. Are all bill assistance programs the same?

A. No. Bill assistance programs can be designed in a variety of ways depending on the unique problem the program is attempting to address. For example, in Missouri these programs can be viewed through one of three perspectives, including:

1.) **<u>Crisis Program(s):</u>** These are programs designed to address imminent disconnections for nonpayment and includes federal subsidies such as those from the Energy Crisis Intervention Program ("ECIP") funding through LIHEAP in which customers have to produce a disconnection notice to receive funding. Other examples include the Critical Medical Needs Program, in which eligible medical needs customers are given two

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than 1,000 Federal employees whose Federal salary exceeded maximum income threshold received benefits and, in several cases, people living in million-dollar houses received benefits. The Budget proposes to end this program and to instead support low-income individuals through energy dominance, lower prices, and an America First economic platform.
See also: https://www.whitehouse.gov/wp-content/uploads/2025/05/Fiscal-Year-2026-Discretionary-Budget-Request.pdf

[10] Edison Electric Institute (2025) LIHEAP Funding: Who Benefits from LIHEAP https://www.eei.org/en/issues-and-policy/liheap#:~:text=In%202021%2C%20more%20than%2034,to%20pay%20their%20energy%20bills.

additional months of service before disconnections, as well as possible financial support through the local United Way chapter that administers the program.

2.) **Stability Program(s):** These are programs designed to address outstanding arrearages and bad debt, often by incentivizing payment through a matching program. Examples include Ameren Missouri's Keeping Current, Spire Missouri's Payment Partner Program, and Liberty's proposed "Fresh Start Plan" in this docket.[11]

Long-term stability programs have also been realized through utility-sponsored income-eligible weatherization programs.

3.) **Affordability Program(s):** These are programs designed to address affordability by providing a discount or bill credit for customers. Examples include Ameren Missouri's Dollar More, Spire Missouri's DollarHelp, and income-eligible rates like Liberty's Low Income Pilot Program ("LIPP").

Historically, Missouri regulators have focused on the first two types of programs (crisis and stability); however, with the passage of SB 4, the Commission now has the power to approve low-income rates. RSMo 393.1680 states:

> Notwithstanding any other provision of law to the contrary, the commission may approve a special alternative residential customer rate or bill discount from a utility company, as defined in section 393.550, based in part on household utility burden. The rate or bill discount approved shall incorporate a commission-authorized rate or bill discount from the appropriate base residential rate. For purposes of this subsection, "utility burden" means the percentage of income paid by a customer to a utility company for the cost of electricity, natural gas, or water service. Any eligibility verification needed to implement the new alternative rate shall be done by an independent third party

[11] Liberty witness Nathan W. Hackney recommends a "Fresh Start Plan" program that fits this description in his direct testimony. I will address Mr. Hackney's proposed program in greater detail in rebuttal testimony.

or parties selected by a process established by the commission that includes input from the utility company and the office of the public counsel.[12]

Q. In light of the change to Missouri law, what are you proposing the Commission order?

A. I am recommending that costs related to the residential customer charge be waived for income-eligible residential customers, which includes those whose incomes are at or below 150% of the federal poverty line (or 60% of the State's Median Income, depending on which metric the Missouri Department of Social Services adopts). This is the same threshold utilized for LIHEAP eligibility. Table 1 provides a breakdown.

Table 1: Liberty Energy Burden breakdown by percentage and number of customers

Estimated # of Liberty Households under 60% Area Median Income (2023)	Average Monthly Discount	Average Annual Discount	Total Costs at 100% participation	Total Annual Costs at 20% Participation (LIHEAP proxy)
44,460	$14.00	$168	44,460 accounts $7,469,280	8,892 accounts $1,493,856

Q. Doesn't Liberty's current Low-Income Pilot Program offer a fixed discount?

A. Liberty's LIPP program is currently available to customers at or below the 135% Federal Poverty Level. Eligible customers receive a $28 bill credit for six of the twelve months and have to be enrolled in the Company's budget billing program.

Q. What is a recent participation level in the LIPP?

A. As of October 2024, there were 551 customers enrolled in the program.[13]

[12] Senate Bill No. 4. 103rd General Assembly (2025) https://www.senate.mo.gov/25info/pdf-bill/tat/SB4.pdf p. 84.
[13] Case No ER-2024-0261 Direct Testimony of Nathaniel W. Hackney, p. 13, 5-6.

Q. How does your proposal differ from Liberty's LIPP?

A. I have extended the eligibility from 135% FPL to 60% area median income. The total annual bill credit remains the same, but I am recommending it be applied to the customer charge for every month as opposed to six months. Finally, I am recommending a considerably larger annual budget of $4 million to be funded 50/50 between shareholders and ratepayers in anticipation of need.

Q. Why are you proposing these changes?

A. First, I believe the need is greater today than it was when we evaluated the LIPP program in the last rate case.

Second, OPC has been in talks with the Missouri Department of Social Services regarding potential data sharing of state-administered income-eligible programs and utility-sponsored programs. The hope is that utility customers can have the option to participate in any income-eligible utility program if they have been deemed qualified for a similar income-eligible state-administered program. For example, if a Liberty customer applies for LIHEAP and receives those funds, they will also have the option of being automatically enrolled in Liberty's income-eligible rate design program. There may also be opportunities to register customers through shared data agreements between utilities (e.g., Spire shares data with Liberty).

Q. Why are you proposing this manner of bill assistance?

A. My recommendation is based on a variety of factors including:

1. Ease of administration (tied to existing LIHEAP eligibility)
2. A general targeted approach allows for greater participation and ease of future data sharing with state agencies; and
3. Finally, the approach is reasonable given the time constraints due to the sudden change in law and near-term uncertainty surrounding the economy and social safety net programs in general.

Q. Do you have a recommendation for unexpended program funds?

A. Given the likely near-term fall-out of federally subsidized “safety net” programs, I recommend that any unexpended funding be directed to the Critical Medical Needs program to help keep customers' lights on in the face of increased costs. I am also open to drafting up the tariff in such a manner as to allow for flexibility for arrearage assistance or weatherization as well.

Q. What effectiveness metrics are you proposing?

A. I am proposing that Liberty meet with relevant stakeholders on a quarterly basis to discuss program metrics, outreach, and discuss potential changes to this and the rest of Liberty’s programs in the face of economic uncertainty. Metrics to be examined would include, but are not limited to:

- Customer participation levels relative to annual budgeted amounts
- Bad debt and arrearage changes
- Disconnection trend lines (voluntary and involuntary)
- Geographic participation and 3rd party program administration numbers
- Cross-program participation (e.g., especially with weatherization)
- Qualitative customer and implementor feedback

Q. Is there anything else you want to highlight to the Commission regarding your proposal?

A. Yes, as stated earlier, LIHEAP funding is at risk of being discontinued after the end of September and before the winter season. This raises two immediate challenges: the first is that some sort of additional funding stream will be necessary to maintain some semblance of existing affordability levels. This current proposal is too small to cover the gap from lost LIHEAP assistance. Additionally, many low-income households will face further budgetary constraints if Medicaid, food, and/or housing assistance are ultimately cut and reduced from the federal budget as currently proposed by the executive office. This is on top of fears of a recession and growing worries surrounding tariffs and their impact on the price of everyday goods.

The Commission should also be cognizant that if LIHEAP funding is discontinued, there will be an administrative void in determining eligibility and the processing of this proposed program. Today, bill assistance programs rely heavily on the Missouri Department of Social Services and local community action agencies to function as the "gatekeepers" of these programs. If funding for LIHEAP ceases/freezes, there is a concern that there will be no "gatekeepers" to verify participants. As such, I am presently in talks with stakeholders over contingency plans if such a scenario arises for our existing bill assistance programs and the future introduction of this program. I will update future testimony accordingly on the progress of those talks.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request of The	)	
Empire District Electric Company d/b/a	)	
Liberty for Authority to File Tariffs	)	Case No. ER-2024-0261
Increasing Rates for Electric Service	)	
Provided to Customers in Its Missouri	)	
Service Area	)	

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Chief Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff Marke
Chief Economist

Subscribed and sworn to me this 18th day of July 2025.

TIFFANY HILDEBRAND
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES AUGUST 8, 2027
COLE COUNTY
COMMISSION #15637121

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.