MEMORANDUM

To:	Missouri Public Service Commission Official Case File, Case No: EO-2019-0046
From:	Geoff Marke, Chief Economist Missouri Office of the Public Counsel
Subject:	Response to The Empire District Electric Company d/b/a Liberty PISA Report and Presentation on March 25, 2021
Date:	April 6, 2021

Overview:

On February 26, 2021 Empire n/k/a Liberty filed its Notice Regarding PISA ("Plant-in-Service-Accounting") and Annual Report in Case No. EO-2019-0046. Liberty's report provides a high-level synopsis on its five-year planned capital investment that totals $1,413,100,000 with an additional $597,000,000 investment in wind generation.

This memorandum outlines OPC's concerns as it relates to Liberty's planned capital investments and the projected impact on its captive customers and consequently the Southwest Missouri economy.

Impact on customers:

In Liberty Utilities PISA stakeholder presentation, Liberty identified 158,512 electric connections in Missouri. For illustrative purposes, assuming the five-year planned capital investments of $2,010,100,000 were spread out evenly over time and across each of its accounts

$2,010,100,000 (costs) / 5yrs / 158,512 (accounts)

If invested and the investment contemporaneously collected from customers it would result in the following additional average costs per customer:

- $12,681.06 over five years; or
- $2,536.21 per year over five years; or
- $211.35 per month over five years

These costs do not include:

- The current costs included in rates (ROE, associated O&M, etc…);
- The $217 million in fuel and purchased power costs from the February Storm Uri freeze in 2021;
- Any cost overruns in excess of the estimated $597million for its three wind farms;[1]

[1] There will be hundreds more millions of dollars due on these farms after the expiration of the contract entered into with its tax equity partners.

- Any costs associated with its ratepayer-funded merchant generation wind assets if they fail to meet their projected revenues entitled to its tax equity partners;
- Any increase to the corporate federal tax rate;[2] and
- Carrying costs associated with deferrals.

Contextually, all of these costs will be borne by customers who are not as economically secure relative to the average household in the state of Missouri. In fact, according to the American Community Economic Survey Data:[3]

- 16 out of 16 Liberty MO counties have a mean household income lower than the Missouri average ($73,100);
- 16 out of 16 Liberty MO counties have a median household income lower than the Missouri average ($53,600);
- 13 out of 16 Liberty MO counties have a larger poverty rate than the Missouri average (14.2%); and
- 11 out of 16 Liberty MO counties have a larger childhood poverty rate than the Missouri average (19.5%).

Furthermore, relying on publically available Energy Information Administration ("EIA") data utilized in Liberty's last general rate case (ER-2019-0374)[4], the members of eight out of ten Southwest Missouri co-operative utilities, citizens of the City of Springfield and all of the Missouri investor-owned utilities' ratepayers pay less for their electricity than Missouri's Liberty (Empire) electric customers as shown in Table 1.

Table 1: EIA 2018 utility bundled retail sales of "comparable" Missouri utilities [5]

Utility	Ownership	Customers	Sales (MW)	Revenues	Average Price
Barton County	Coop	6,564	159,345	17,763,000	11.15
Sac Osage	Coop	11,121	151,722	19,353,200	12.6
Ozark	Coop	33,324	535,3186	1,925,200	11.57
Barry	Coop	9,667	182,820	20,639,500	11.29
New-Mac	Coop	17,740	413,943	44,041,000	10.64
Southwest	Coop	41,317	611,562	65,113,000	10.65
Webster	Coop	18,520	384,763	31,904,000	8.29
White River Valley	Coop	44,231	787,048	97,635,000	12.41
Laclede	Coop	37,064	685,606	69,410,800	10.12
Se-MA-NO	Coop	6,106	112,216	9,955,800	8.87
Springfield	Muni	115,823	3,142,918	272,379,900	8.67
Empire	IOU	154,042	4,321,595	522,849,900	12.10
Evergy West	IOU	326,627	8,385,396	805,203,200	9.60
Evergy Metro	IOU	289,299	8,675,389	966,953,500	11.15
Ameren Missouri	IOU	1,223,595	33,699,583	3,161,693,900	9.38

[2] It should not be lost on the Commission that Liberty delayed rate reductions entitled to customers from the Tax Cuts and Job Act of 2017 over two separate contested cases and 240 days after the Act was enacted.
[3] See also Case No. ER-2019-0374, The Direct Testimony of Geoff Marke p. 20.
[4] Data from forms EIA-861-schedules 4A & 4D and EIA-861S.
[5] See also Case No. ER-2019-0374, The Direct Testimony of Geoff Marke p. 3, line 5.

Liberty has given its 60-day rate case notice in Case No. ER-2021-0312, a case which should include, at a minimum, both its wind and automated meter interface ("AMI") investments; thus further increasing rates in the near-term.

Finally, it is worth noting that in Case No. ER-2019-0374 in the Direct Testimony of Sheri Richard, Schedule SDR-2, "Adjusted Test Year Rate Base", the total rate base amount for the electric company was as follows:

Total Rate Base Adjusted Test Year = $1,457,360,469

Contrast this with the filed PISA capital projects cost:

PISA CAPEX over the next 5 years = $2,010,100,000

Assuming all of the proposed PISA expenses are "prudent" capital expenses (and not operation expense), this would represent a roughly 138% increase in rate base relative to what the Company filed in its last rate case (2020).

Generously assuming that 38% of these costs are operation expenses and taking into account current depreciation schedules, the Company's twenty page PISA Report can reasonably be characterized as a summary blueprint on how it plans to double its current rate base size in the next five years.

Part I: Liberty's Clean Transition Plan

Part I of the PISA/Customer Transition focuses on capital investment on infrastructure to:

Meet customer demands for cleaner electricity supplied from renewable resources.

Part I includes the following cost categories:

• 600 MW Wind	$597.0M
• 60 MW Solar	$98.9M
• 20 MW Solar + Storage	$67.5M
• Reduce Emissions	$61.4M
Total	$824.8M

The concerns regarding generation costs are at least three-fold:

1.) That these cost estimates are understated for the wind projects (e.g., interconnection fees, conservation measures, etc…) and do not take into account the risk exposure to customers who will now be exposed to the SPP market as merchant generators.

2.) The lack of detail surrounding the non-wire alternative solar + storage offering.[6]

[6] OPC assumes that the 60MW of community solar will be similar in design as the current tariff OPC supported whose costs are borne by participants. Whether Liberty can attract enough participant interest in community solar costs to warrant $100M investment is another question.

3.) Further capital investments in existing fossil fuel generation ("Emission Reduction") given this Company's track record of continuing to expect a return on and of the capital expenditures made to reduce emissions for the Asbury Power Plant only to strand it shortly thereafter.

Part II: Modernize the Customer Experience

Part II of the PISA/Customer Transition focuses on capital investment on infrastructure to:

Empower customers with more information and control over their energy consumption and costs

Part II includes the following cost categories:

• Customer First	$132.4M
• Cyber & Technology	$21.7M
• Electrify Transportation	$20.8M
• Energy Efficiency	$15.7M
Total	$190.6M

Customer First

Titling an initiative "Customer First" does not make it so. Based on the staggered deployment of metering infrastructure (hardware first, software years later) and emphasis on increasing rate base (no reference of customer education plans) it is clear that the initiative should be renamed "Shareholder First." This is because shareholders will be earning a sizable return on their investment years before customers stand to gain any benefit from AMI investment in the form of Time-of-Use ("TOU") rates. The staggered nature of the AMI investment ensures that shareholders will be profiting while ratepayers' benefits are delayed indefinitely.

To unlock the espoused benefits of AMI, the principal investment within the Customer First suite, there needs to be accompanying software investment in the form of CIS interface and, perhaps most importantly, a plan to educate and encourage customers to change their usage habits through modern rates. All three of these parts: 1.) AMI hardware; 2) CIS software; and 3) educational buy-in of modern rate design should happen simultaneously with the inclusion of the costs in rates.

Evergy Metro/West only did parts 1 and 2, and neglected part 3. As a result, ratepayers in the greater Kansas City area are paying a premium for a really expensive meter that makes it easier for Evergy to disconnect them for non-payment, but which accomplishes very little else. Utility commissioners who rejected AMI applications in New Mexico, Massachusetts, Virginia and Kentucky in 2019 echoed this same concern.[7] OPC put Liberty on notice of this issue in its most recent rate case, but to no avail. Approximately one and one-half years have passed since Liberty filed its last case, and it appears Liberty has chosen to place its customers a distant third to its shareholders and management by focusing on increasing rate base through the AMI hardware, staggering its enabling software investment years later, and making no plans now to educate its customers to take advantage of the benefits AMI hardware can unlock for them.

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[7] Walton R. (2020) Most utilities aren't getting full value from smart meters, report warns. *UtilityDive*. https://www.utilitydive.com/news/most-utilities-arent-getting-full-value-from-smart-meters-report-warns/570249/.

Electrify Transportation & Energy Efficiency

Liberty has filed both an electrification application and a MEEIA application with the Commission where OPC is commenting; therefore, OPC is not providing additional comments about these cost expenditures in this memorandum, except to state an observation pertaining to expenditures for energy efficiency. It appears from Liberty's presentation that it only anticipates having two years (2021 and 2022) of "high" program expenditures, then its planned expenditures drop to significantly lower annual levels thereafter.

	2021	2022	2023	2024	2025	Total
Energy Efficiency	$5.9	$5.4	$1.5	$1.5	$1.5	$15.7M

Part III: Safety & Reliability

Part III of the PISA/Customer Transition focuses on capital investment in infrastructure to:

Ensure the infrastructure continues to operate safely and reliably.

It includes the following cost categories:

- Distribution Automation $78.9M
- T&D Resiliency $225.7M (Transmission) + $480.7M (Distribution)
- Substation S&R $96.2M
- Plant Optimization $108.5M

Total $990M

Seemingly operating under the assumption that the more zeros found in the price tag, the less scrutiny it will receive, Liberty puts forward just under a $1 billion in planned safety and reliability investments over the next five years in 3 ½ pages of its 20-page report. Based on the available information provided, high level concerns include:

- $990M in planned safety and reliability investment void of any meaningful details
- The lack of any cost-benefit studies or references to such an analysis;
- Undergrounding any part of the distribution or transmission system;
- The cost-effectiveness and rationale behind "sustainable microgrids";
- What problems Liberty is solving, and how the benefits will outweigh the cost and accompanying customer bill increases; and
- Further capital investments in existing fossil fuel generation ("Generation Optimization") given this Company's track record of continuing to expect a return on and of the capital expenditures made to increase efficiency and extend the useful life of the Asbury Power Plant only to strand it shortly thereafter.

In addition, as pointed out in an OPC filing in EO-2021-0001,[8] Liberty had neglected routine maintenance of its current transmission and distribution infrastructure. In that filing, OPC stated

[8] In the Matter of The Empire District Electric Company's Infrastructure Standards Compliance Plan Pursuant to 20 CSR 4240-23.020

its concern that the change in focus towards profit-producing investments at the expense of system maintenance could lead to a less reliable system, and harm to the public. Liberty should not be adding this extraordinary amount of infrastructure if it will not take care of the infrastructure it already has.

Customer Satisfaction & Affordability:

Liberty scored in the bottom quartile, 116 out of 138 utilities, in overall customer satisfaction in the 2018 (most recently viewed) JD Power Scores, and its customers had some of the largest electric bills in the United States. Evidence during its last rate case revealed Liberty's poor customer service (call center metrics, estimated bills), and now its customers face increased bills due to fuel costs during the February 2021 weather event.

Liberty has just filed a report stating it intends to invest over $2 billion dollars over the next five years for which it expects its 158,512 captive customers to pay. The word "affordable" appears three times in Liberty's 20-page report as follows:[9]

- Page 2: "Also, Liberty continuously strives to make the most of every dollar and every hour of labor, in order to most efficiently provide reliable and affordable electric service to its customers."
- Page 5: "As customers evolve how they use electricity, Liberty will continue to modernize its grid to support those new needs in a safe and reliable manner while maintaining affordability and community values."[10]
- Page 9: "Over the next five years, Liberty will complete the decommissioning of the Asbury coal plant (Asbury was de-designated from the SPP market as of the end of March 1, 2020, after nearly 50 years of service) and add nearly 680 megawatts of more affordable and more sustainable renewable generation."

How $2 billion in expenditures on an accelerated basis will result in affordable rates for Liberty's customers is irreconcilable. The lack of detail surrounding Liberty's PISA investments and the rate impact implications should give this Commission and stakeholders pause as to how Liberty's customers will fare if Liberty's rates are increased relative to the expected costs for these "investments." The Commission should require Liberty to provide more detail, including expected

[9] For comparison purposes, the term "energy efficiency" appears 8 times and has an entire section devoted to its topic. This is despite the fact that the Liberty is only planning on annual energy efficiency funding of $1.7 million dollars a year for 2023, 2024 and 2025 (i.e., $5.1 million of $2,010,100,000 in planned investment).

[10] On the topic of "community values", my direct testimony from the last rate case noted that Liberty is the only Missouri IOU whose shareholders do not contribute a cent to low-income bill assistance (all of these costs are borne by ratepayers). Additionally, the Company has collected approximately $500 million in revenues each of the past five years but donated less than $500 thousand in charitable giving to support their Missouri communities.

In 2020, Liberty shareholders did donate $500K to support communities within its service territory due to the COVID-19 pandemic; however, the $500K was for all Liberty Utilities service territories. That is, that pool of money was allocated to entities in California, Arizona, New Hampshire, Illinois, Kansas, Oklahoma, Arkansas, Iowa, etc… It is not clear how much went to Missouri agencies for bill assistance or how much went to Missouri non-profits not associated with bill assistance.

Meanwhile, in 2020, Algonquin reported annual dividends per share of $0.61, which represents a 10% annual increase to shareholders for the 10th consecutive year in a row.

bill impacts on its customers. Over a year ago, in Case No. ER-2019-0374 on behalf of OPC I concluded my Direct Testimony with the following observation:

> The Company seeks a significant rate increase in this case and plans to file another case immediately after this one. I am genuinely concerned about the pending impacts these cases will have on Empire's customers and the Southwest Missouri economy in the near future. Empire is about 1/10th the size of Ameren Missouri. Simply put, if rates continue to increase as I expect with the planned investments, customers that can, will seek an exit. If wholesale customers continue to exit and residential customers continue to invest in rooftop solar a negative feedback loop will occur that will only exaggerate the financial impact of customers not fortunate enough to be able to leave as well as the long-term sustainability of the utility.

A global pandemic, a record recession, a massive unanticipated winter fuel expenditure and SPP wholesale energy price spike, and a 20-page report outlining $2 billion in planned investment all have occurred since then. My concern has grown into a justifiable fear for the financial health of Southwest Missouri in the near future from the confluence of all these factors. While the pandemic, recession, and weather related fuel and purchased power expenses cannot be avoided, the massive $2 billion dollar unexpected investments outlined in a cursory 20-page report void of any cost benefit analysis can.

To be clear, Liberty's PISA plan is the equivalent of building a second, bigger Liberty utility on top of its current rate base. To the best of my knowledge, Liberty has not increased its customer base or energy demand 138% since its last rate case nor is it expected to over the next five years.[11]

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[11] Rate base at the start of ER-2019-0374 = $1,457,360,469
Planned 5-year PISA Investments = $2,010,100,000
$1,457,360,469 + $2,010,100,00 = $3,467,460,469
[($3,467,460,469 - $1,457,360,469)/$1,457,360,469]*100 = 137.93% increase

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Compliance of The Empire District Electric Company with Certain Requirements Related to SB 564 and Related Matters	))))	Case No. EO-2019-0046

VERIFICATION OF GEOFF MARKE

Geoff Marke, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my memorandum in the above-captioned case.

2. The information in the attached memorandum is true and correct to the best of my knowledge, information, and belief.

/s/Geoff Marke

Geoff Marke
Chief Economist
Office of the Public Counsel