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 Increasing Rates for Electric Service Provided to Customers in its Missouri Service Area.	)))))	**Case No. ER-2021-0312**

Staff's Initial Brief

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and for its *Initial Brief,* states as follows:

Introduction

Only a single issue was litigated in this general rate case, the others having been settled by stipulation and agreement. The litigated issue concerns class cost responsibility shifts. This introduction will explain what class cost responsibility shifts are in the overall context of ratemaking.

A general rate case is a proceeding in which the Commission, with due consideration of all relevant factors, sets just and reasonable rates for service.[1] Such a case has two parts, the first being the establishment of the revenue requirement, that is, the total amount of revenue required by the utility for a year of operation.[2] The second part is the design of rates intended to collect the required revenue from the company's

[1] Sections 393.130 and 393.140, RSMo.; ***State ex rel. Utility Consumers Council of Missouri, Inc. v. Public Service Commission,*** 585 S.W.2d 41, 49 (Mo. banc 1979) ("Even under the file and suspend method, by which a utility's rates may be increased without requirement of a public hearing, the commission must of course consider all relevant factors including all operating expenses and the utility's rate of return, in determining that no hearing is required and that the filed rate should not be suspended.").

[2] *See* L.E. Alt, ***Energy Utility Rate Setting,*** 18 (2006); Federal Energy Regulatory Commission, ***Cost-of-Service Rates Manual,*** 1 (1999) [available electronically at www.ferc.gov].

customers over the course of a year.[3] Class cost responsibility shifts fall within the second half of the general rate case.

Rate design is a complex and often contentious process. The goal is to match costs to cost causers, so that each customer will pay an amount approximately equivalent to what it actually costs to serve that customer.[4] Rate design has three parts: first, customers are sorted into classes based upon the cost of serving them; second, the proportional revenue responsibility of each customer class is determined; third, rate schedules are designed for each class to collect that required revenue. Rate design may be driven by considerations in addition to recovering the necessary revenue requirement in a fair and equitable manner. For example, economic development may be encouraged by artificially reducing industrial or commercial rates at the expense of residential ratepayers; or the affordability of basic services may be enhanced by artificially reducing the cost of a certain initial increment of service at the expense of high-volume users.

Utilities classify customers based on usage and service characteristics in order to minimize inter-customer subsidization. Part of the concept of "just and reasonable" rates is that each customer pays the cost of his or her own service and only his or her own service. However, the costs of serving various customers may differ significantly and so customers are grouped in classes based on usage and service characteristics in order to match rates as closely as possible to the actual costs of service. The guiding principle is to match costs to cost causers.[5] Typical classes are residential, large and small

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[3] *Id.*

[4] Alt, *supra,* 58-60; J.C. Bonbright *et al.,* ***Principles of Public Utility Rates,*** 85-179 (PUR: Arlington, VA, 2nd ed. 1988).

[5] ***State ex rel. A.P. Green Refractories, Inc. v. Public Service Commission,*** 752 S.W.2d 835, 837 (Mo. App., W.D. 1988).

commercial, industrial, and government. The development of customer classes is not generally part of a rate case because that work has usually already been done. Occasionally, a new rate class is defined or an existing one is eliminated or merged with another.

The next step is determining the class revenue responsibility. The amount of money that each customer class is responsible for is the class cost-of-service and this is determined by means of a class cost-of-service study ("CCOS study"). The purpose of the CCOS study is to determine the percentage of the total company revenue requirement that is the responsibility of each class. A CCOS study is performed following procedures specified by the National Association of Regulatory Utility Commissioners ("NARUC") for the industry in question. These procedures involve three successive steps – functionalization, classification and allocation.

- *Functionalization* is the process of categorizing utility assets and operations by the role each plays in service delivery. In electric rate cases, these functional roles are generation, transmission, distribution, customer services, and administrative and general. Functionalization of costs is aided by the system of accounts that the utility is required to use in keeping its books, which is designed on a functionalized basis.
- *Classification,* in turn, is the process of subdividing the functionalized costs into categories that reflect cost-causation. These categories include customer-related costs, such as meters, meter reading and bill collecting, demand-related costs, commodity costs, and "other" costs. For example,

the residential customer class, because it is the most numerous, is responsible for the largest share of customer-related costs.

- *Allocation* is the process of distributing the functionalized and classified costs across the various rate classes based on the principle of cost responsibility. Allocation is performed using allocation factors, which are ratios that reflect the proportion of the total units that may be attributed to each customer class.

Once the revenue responsibility of each class is determined by the CCOS study, the actual rate schedules are designed based upon the billing determinants. Billing determinants include such data as the number of customers in each class, the total usage of each class, the usage profile of each class, the number of bills per year of each class, and so forth.

Sometimes, rates and costs get out of alignment. In that situation, the prices charged for service no longer match the actual cost of that service. In such circumstances, some customers pay more than the actual cost of their service while others pay less. This problem is addressed through class cost responsibility shifts. This entails a percentage adjustment to the cost responsibility of each class in order to bring prices and costs back into alignment. Necessarily, this adjustment causes some rates to go up and others to go down. In cases in which a rate increase is granted, class cost adjustments magnify the impact of the rate increase on some customer classes.

The situation in this case is that some parties propose a class cost responsibility adjustment, while other parties oppose it. This issue could not be settled by the parties and so is presented to the Commission to resolve.

Argument

The Staff and the Office of Public Counsel ("OPC") oppose any class cost responsibility shifts in this case and instead support equal percentage increases. That means that the rate increase would be evenly distributed across the classes and everybody's rates will increase by the same percentage. The Empire District Electric Company, doing business as "Liberty" ("Empire"), and the Missouri Energy Consumers Group ("MECG"), on the other hand, urge the Commission to make class cost responsibility adjustments in order to bring rates back into alignment with costs.[6] Empire amended its position at the hearing to propose an increase of 8.3% for the Residential Class.[7] MECG requests an adjustment of 25% of the disparity.[8] This adjustment, plus the agreed Revenue Requirement increase of 7.64%, would result in an effective increase to the Residential Class of 12.3875%.

Empire and MECG assert that quite significant class cost responsibility shifts are required: "[B]oth [Empire's and MECG's] studies agree that a significant residential subsidy exists. That is, as reflected below, while the residential class would need a revenue neutral increase of 18.99% in order to reach [its actual] cost of service, all other non-lighting class would receive a revenue neutral decrease."[9]

[6] Tr. vol. 6, p. 103, ll. 19-22.

[7] Tr. vol. 6, p. 111, ll. 11-16.

[8] MECG Statement of Position, p. 1. 18.99 * 0.25 = 4.7475; 4.7475 + 7.64 = 12.3875.

[9] MECG Statement of Position, p. 2.

Rate Class	A&E 8 NCP
Residential	18.99%
Commercial	-4.19%
Small Heating	-2.20%
General Power	-19.80%
Transmission Service	-31.84%
Total Electric Building	-23.36%
Feed Mill	-9.58%
Large Power	-19.58%
Miscellaneous	37.42%
Municipal Street Lighting	39.94%
Private Lighting	-30.43%
Special Lighting	428.09%

MECG Statement of Position, citing Ex. 354, Sch. KM-4s (page 2 of 2).

Why would Staff oppose these proposed adjustments based on notions of fundamental fairness? As explained in the *Introduction,* rate design is guided by a complex statistical study known as a CCOS study. In the present case, Empire and MECG submitted CCOS studies;[10] Staff and OPC did not. Staff's expert believes that the Empire and MECG studies are flawed and therefore should not be trusted. Staff is strongly opposed to making class cost responsibility adjustments based on untrustworthy studies.

The studies in question purport to show that the rates of the residential class are nearly 20% below the actual cost of serving that class.[11] The industrial customer classes, on the other hand, are purportedly paying about 20% more than their actual cost of service.[12] Those industrial customers, of course, are MECG's clients. If the class cost

[10] MECG's study is actually a revised version of Empire's. Maini Direct, p. 14, ll. 12-18.

[11] See the chart on the previous page.

[12] Id.

responsibility shifts proposed by MECG and Empire are implemented, the rates of the industrial classes will go down and the residential rates will go up.

Staff's expert, Sarah Lange, provided a detailed analysis of the defects in the CCOS studies relied on by Empire and MECG. First of all, Ms. Lange pointed out that Empire's peaks are not robust and are subject to error due to the effects of rate switching. Additionally, Empire's normalized and annualized revenues and NSI differed from Staff's. Ms. Lange believed Staff's are to be preferred.

> Empire's study, as many traditional CCOS Studies do, relies heavily on peak hour class loads. Empire's peaks are derived from a load research process that relies on an analysis of its load spread across Missouri, Kansas, Arkansas, Oklahoma, and wholesale sales, with a single factor applied to estimate jurisdictional loads and peaks for the Missouri portion. Whatever the reliability of this process is for creation of total NSI shapes, it is less reliable when reduced to a class-level, particularly with the granularity of Empire's CCOS classes. Further, rate switching is common between Empire's GP and TEB rate schedules and Empire's CB and SH schedules. Also, during the test year, there was net switching from CB to Residential. Studying these rate schedules as separate rate classes for peak purposes increases the likelihood of error, and ignores the likelihood that the Non-coincident Peak ("NCP") of the combined rate schedules is less than the additive NCP of the rate schedules combined. Finally, Staff's normalized and annualized revenues and NSI varied from Empire's, and Staff considers its results more reasonable.[13]

Staff criticized the demand data relied on by Empire and by MECG.[14] Mr. Lyons responded, essentially, that that was the way they have always done it; which is no response at all.[15] Mr. Lyons responded to Staff's concerns about rate switching that he

[13] Lange Rebuttal, p. 17, l. 21, to p. 18, l. 10.

[14] Tr. vol. 6, p. 74, ll. 19-22.

[15] Tr. vol. 6, p. 74, l. 18, through p. 75, l. 6.

did not think it was extraordinary.[16] That, too, is no answer at all. Staff also criticized Empire's CCOS study for its reliance on class peak demand.[17]

Ms. Lange went on to testify that the unreliability stemming from the rate switching permeates the entire CCOS study "because of the reliance on peak allocation within the Empire study as the basis for many "external" allocators upon which many "internal" allocators are derived."[18] Likewise, Empire's class data is not precise enough either for assignment of market energy costs[19] or the creation of highly-differentiated ToU rate designs.[20]

The allocators selected by Empire for the accounts associated with the stable production-related revenue requirement, variable production-related revenue requirement, the cost of market energy, and the proceeds of energy market participation are not reasonable and are internally inconsistent.[21] It is also not reasonable to allocate generation revenue requirement that has been incurred for reasons other than provision of capacity as capacity-related.[22] The Empire study allocators selected for the accounts associated with the stable production-related revenue requirement (capital costs, a portion of operating expenses, a related allocation of property tax) are based on an assumption that the plant was built primarily for meeting peak capacity requirements.[23]

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[16] Tr. vol. 6, p. 75, l. 19, to p. 76, l. 5.

[17] Tr. vol. 6, p. 76, ll. 10-13.

[18] Lange Rebuttal, p. 18, ll. 11-15.

[19] Lange Rebuttal, p. 18, ll. 18-19.

[20] Lange Rebuttal, p. 18, n. 5.

[21] Lange Rebuttal, p. 19, ll. 2-6.

[22] Lange Rebuttal, p. 19, ll. 6-7.

[23] Lange Rebuttal, p. 19, ll. 7-11.

The inequity of this allocator selection is compounded by the fact that a significant portion of the production facilities in the Empire fleet have low costs or no costs or expenses that vary with the number of kWh generated.[24]

Ms. Lange testified that it is not reasonable to allocate the capital costs of low- or no-variable cost generation based on class capacity requirements.[25] While it may be possible to conduct a study under which specific generation facilities are allocated entirely, or proportionately, to a given class and all costs, expenses, and revenues associated with that facility are proportionately allocated to that class, that is not how Empire treated production facilities in its study.[26]

Based on Staff's accounting schedules, approximately 1/3 of Empire's production rate base and depreciation expense is related to non-dispatchable resources, such as wind, that have essentially no expenses that vary with the number of kWh generated.[27] The most reasonable and simplest allocation approach to apply within the context of Empire's CCOS would be to allocate non-dispatchable generation on class energy requirements, which produces the same result as levelizing the stable revenue requirement of the facility over the kWh produced by the facility.[28]

Ms. Lange testified that it is important to consider how both stable and variable generation costs, including fuel, are allocated when allocating the cost of market energy,

[24] Lange Rebuttal, p. 19, ll. 11-13.

[25] Lange Rebuttal, p. 19, ll. 14-16.

[26] Lange Rebuttal, p. 19, ll. 16-19.

[27] Lange Rebuttal, p. 19, l. 20, through p. 20, l. 1.

[28] Lange Rebuttal, p. 20, ll. 1-4.

and the proceeds of energy market participation.[29] Empire participates in the Southwest Power Pool ("SPP") integrated market and it is fundamentally unfair to charge one group of customers for the costs of building and maintaining a power plant, while providing the sales revenue from that power plant to another group of customers.[30] This is acutely true where generation with little to no marginal costs such as fuel are concerned.[31] Specifically, under the MECG study and the Empire direct study that it is based on, the Residential, CB, SH, and Lighting rate schedules are paying for 58% of the cost of wind but only receiving 49% of the wind revenue; conversely, the LP, GP, TEB, and Feedmill rate schedules are paying for only 43% of the cost of wind, but receiving 52% of the wind revenue.[32] This is fundamentally unfair, and represents too large a portion of Empire's revenue requirement and net energy revenues to ignore or dismiss.[33]

Ms. Lange explained that it is not a simple matter, particularly in the context of an A&E study,[34] to realign net revenues to align the revenue requirement benefits of capacity with the cost responsibility for that capacity.[35] The A&E study predates the development and implementation of today's integrated energy markets, such as the SPP IM in which Empire participates.[36] Because hourly loads are not available to assign market energy expenses to the classes by the hour in which those expenses are experienced, there is

[29] Lange Rebuttal, p. 20, ll. 5-8.

[30] Lange Rebuttal, p. 20, ll. 8-10.

[31] Lange Rebuttal, p. 20, ll. 10-11.

[32] Lange Rebuttal, p. 20, ll. 12-15. Values are rounded.

[33] Lange Rebuttal, p. 20, ll. 15-16. The Empire surrebuttal study did improve this misalignment with regard to wind revenues.

[34] "A&E" means Average and Excess.

[35] Lange Rebuttal, p. 20, ll. 17-20.

[36] Lange Rebuttal, p. 20, ll. 20-21.

no reliable way in this case to allocate the value for energy that was obtained.[37] Further, there is no way to disaggregate fuel costs for the hours in which Empire's load used energy from the fuel costs from the hours in which Empire's generation exceeded its load.[38]

Empire's direct CCOS Study, the MECG study, and the Empire surrebuttal study for non-wind revenues allocated fuel expenses and the revenues from energy sales, Renewable Energy Certificate Sales, and Production tax credits by netting all "energy" related costs and revenues.[39] This approach is not appropriate where a utility's generation does not more or less align to its native load, nor where a utility participates in an integrated energy market.[40] In this case, Empire does both.[41] These concerns do not effect only the revenue requirement driven by production accounts; most of the internally-created allocators in the Empire study rely on the plant allocations within the production accounts.[42]

Ms. Lange also testified that it is not reasonable to allocate the costs of Empire's company-use Electric Vehicle ("EV") charging equipment and current publicly available EV charging equipment solely to Empire's customers that are served at secondary.[43] These costs are caused by management decisions that are unrelated to the distribution

[37] Lange Rebuttal, p. 20, l. 21, through p. 21, l. 2.

[38] Lange Rebuttal, p. 21, ll. 2-4.

[39] Lange Rebuttal, p. 21, ll. 5-7.

[40] Lange Rebuttal, p. 21, ll. 7-9.

[41] Lange Rebuttal, p. 21, l. 9.

[42] Lange Rebuttal, p. 21, ll. 10-13.

[43] Lange Rebuttal, p. 21, ll. 15-17.

infrastructure requirements of customers in general, let alone the distribution infrastructure requirements of only those customers served at secondary voltage.[44]

Empire's distribution classifications are not generally reasonable.[45] While the classification of accounts between primary and secondary is an improvement over prior cases and other utilities, Empire did not attempt to classify customer-specific infrastructure associated with service to primary customers as customer-related for allocation among primary customers.[46] Empire is cooperating with the Staff to further improve this process in future cases.[47] Empire's classification of significant amounts of distribution plant as customer-related is against the emerging industry best practices, and should be improved in future cases through application of the "basic customer" approach.[48] These concerns do not affect only the revenue requirement driven by the distribution account because most of the internally-created allocators in the Empire study rely on the plant allocations within the distribution accounts.[49]

The Empire CCOS study is not reliable for the purpose of introducing changes to the revenue responsibility of the rate classes in this case.[50] In addition to the discussions above, Staff is concerned that the subscription solar revenue requirement appears to be generally allocated to the rate classes instead of being more directly assigned for recovery from the benefiting customers, and regulatory expense is allocated as related to

[44] Lange Rebuttal, p. 21, ll. 18-20.

[45] Lange Rebuttal, p. 22, ll. 1-2.

[46] Lange Rebuttal, p. 22, ll. 2-5.

[47] Lange Rebuttal, p. 22, ll. 5-6.

[48] Lange Rebuttal, p. 22, ll. 6-8.

[49] Lange Rebuttal, p. 22, ll. 9-12.

[50] Lange Rebuttal, p. 22, ll. 14-16.

class-allocations of labor instead of a more reasonable allocator such as revenue or sales.[51]

Ms. Lange explained that Staff didn't prepare a modification to the Empire study to address these issues because the issues identified as Staff's concerns with Empire's peak information and class makeup so undermine the Empire study that reasonable results are not possible from simply changing which costs and expenses are allocated by the unreliable allocators.[52] These fundamental weaknesses mean that Ms. Maini's attempt to tweak the Empire CCOS study cannot result in a useful or reliable product. For example, within the Empire study, unreasonable classes were selected to develop unreliable class loads, which were used to develop unreliable class peaks, which are then used to allocate non-dispatchable generation and to unreasonably allocate the proceeds of generation.[53] Incorporating an attempt to disaggregate market activities would not cure the underlying problem with the reasonableness of the peaks and class makeup.[54] These same factors, among others, prevent the reasonable implementation of high-differential Time of Use ("ToU") rates at this time.[55] Neither the available hourly load information, nor the underlying cost information is precise enough to move beyond the ToU rate designs recommended by Staff in the Rate Design Report.[56]

[51] Lange Rebuttal, p. 22, ll. 16-20.

[52] Lange Rebuttal, p. 22, l. 21, through p. 23, l. 3.

[53] Lange Rebuttal, p. 23, ll. 3-6.

[54] Lange Rebuttal, p. 23, ll. 7-8.

[55] Lange Rebuttal, p. 23, n. 8.

[56] Lange Rebuttal, p. 23, n. 8.

Empire has now fully deployed Advanced Metering Infrastructure ("AMI") metering, and the highest-quality load data obtained in the history of the State of Missouri will be the basis of its next rate case.[57] This case presents an excellent opportunity to effectively set aside an attempt to debate detailed results based on broad-brush inputs, and to instead focus on rate design elements that will better recover costs from customers while also educating customers as to the basic drivers of their electric bills.[58]

Ms. Maini's adjustment to the Empire study does not address Staff's concerns with the reliability of Empire's study for shifting class revenue responsibilities.[59] It is not reasonable to rely on Edison Electric Institute ("EEI") average bill data to understand the bill increases that may or may not be experienced by particular customers as discussed extensively in Ms. Maini's testimony.[60] EEI data is useful for understanding a utility's revenues, but not for understanding a customer's bills. Changes in customer makeup, for example, rate switching or growth of particular customers or the number of similar customers within a rate schedule can drive apparent changes in EEI results that are not indicative of the experiences of customers who remain in a rate schedule.[61]

Ms. Maini's contention that closely aligning rates with each class' cost of service fulfills the important goals of promoting equity among classes and encouraging economic efficiency is no longer fully accurate in today's regulatory world, in that a modern CCOS study encompasses significant offsetting revenues, and in that rates can be more

[57] Lange Rebuttal, p. 23, ll. 8-10.

[58] Lange Rebuttal, p. 23, ll. 10-13.

[59] Lange Rebuttal, p. 23, ll. 15-17.

[60] Lange Rebuttal, p. 23, l. 18, through p. 24, l. 1.

[61] Lange Rebuttal, p. 24, ll. 1-5.

closely aligned to determinants across classes given the advent of cost-effective advanced metering.[62] Today, a customer's class is no longer the best tool for pricing a customer's energy.[63] Historically, it was prohibitively expensive to meter and bill exactly how much energy each customer used at all times.[64] Classes were used as a shortcut for setting rates, and class distinctions at Empire were based on annual demand, and on end use.[65] The general premise of a class is a simplifying assumption that customers within a class used energy similarly enough that they could be billed based on either the total usage in a month or the highest usage in an interval in a month, or a simple relationship of those amounts, without regard to the time of day that energy is actually consumed or the time of day at which a customer experienced its peak demand.[66]

Ms. Lange explained that, to illustrate the relationships between rate schedules (class), demand, energy usage, and a customer's bill, Staff calculated Empire bills for two fictitious customers - a data center, ("Customer A") with a 95% load factor, and a manufacturer ("Customer B") with a 45% load factor.[67] Staff calculated the bills for the same load profiles at various levels of usage, representing the level of variation from some of the smallest consumption customers on the Empire system, up to the size of some of the largest customers on the Empire system.[68] Note that these bills would result regardless of the time of day at which the customers used energy or experienced their

[62] Lange Rebuttal, p. 24, ll. 16-19.

[63] Lange Rebuttal, p. 24, l. 19.

[64] Lange Rebuttal, p. 24, ll. 20-21.

[65] Lange Rebuttal, p. 24, ll. 21-22.

[66] Lange Rebuttal, p. 24, ll. 22-27.

[67] Lange Rebuttal, p. 25, ll. 1-4.

[68] Lange Rebuttal, p. 25, ll. 4-6.

peak demand – meaning the 45% load profile bills would apply equally to a customer peaking at 4 pm with all usage between 8 am and 8 pm as it would to a customer peaking at 4 am with all usage between 8 pm and 8 am.[69] To facilitate comparisons, the annual bills for each divided by the annual consumption for each are provided below at varying levels of usage.[70]

Note, in the Residential, CB, and SH rate schedules, the customers pay the same average rate on each rate schedule despite their very different usage patterns.[71] Note that on the GP, TEB, and LP rate schedules, at a given level of usage, the average rate disparity for Customer A and Customer B ranges from $0.021 to $0.0453, with the smaller disparity on the higher average cost rate, and the lower disparity on the higher average cost rate.[72] This result is not facially reasonable.[73] Grouping customers into classes based on more or less the average annual demand is no longer the best tool for aligning a customer's rates with their cost causation.[74] With the advent of cost-effective AMI metering, billing customers by the energy they consume is now capable of providing a more meaningful price signal than billing customers based on the rate schedule under which they are served.[75]

[69] Lange Rebuttal, p. 25, ll. 6-10.

[70] Lange Rebuttal, p. 25, ll. 10-12.

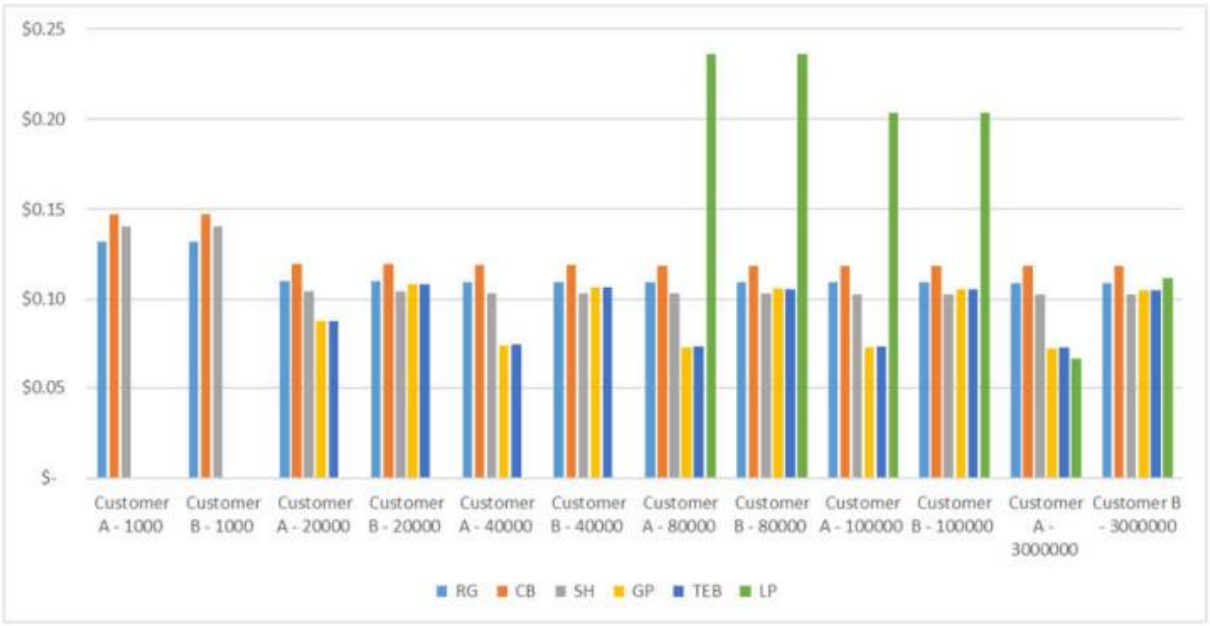
[71] Lange Rebuttal, p. 25, ll. 15-16.

[72] Lange Rebuttal, p. 25, l. 16, through p. 26, l. 2.

[73] Lange Rebuttal, p. 26, ll. 2-3.

[74] Lange Rebuttal, p. 26, ll. 3-4.

[75] Lange Rebuttal, p. 26, ll. 4-7.



At page 12, Ms. Maini explains how economic efficiency may be achieved.[76] Staff's expert responds that Ms. Maini's view is not accurate in the context of embedded cost rates and within the parameters of Missouri energy regulation and Empire's existing regulatory mechanisms.[77] Most blatantly, this view ignores the impact of the revenues from energy sales, Renewable Energy Credit ("REC") sales, and Production Tax Credits ("PTCs") to reduce the net embedded energy cost.[78] Within its CCOS, Empire has classified these costs as energy-related, however, they are not related to the energy requirements of Empire's load.[79]

Ms. Maini's purported correction of Mr. Lyons' load factor/A&E calculation, including the treatment of interruptible credit value advocated by MECG, does not appear

[76] Lange Rebuttal, p. 26, ll. 8-33.

[77] Lange Rebuttal, p. 26, l. 34, through p. 27, l. 2.

[78] Lange Rebuttal, p. 27, ll. 2-4.

[79] Lange Rebuttal, p. 27, ll. 4-5.

to be internally consistent in terms of the treatment of the net value of capacity and energy-related costs and revenues.[80] MECG relies on the Net Base Energy Cost ("NBEC") calculation to determine the level of "energy" costs in energy rates.[81] This is unreasonable and is the result of applying the cost of market energy that has been offset by other revenues to rate design.[82] This approach is problematic in the context of class cost of service and the ToU NBEC, as discussed above.[83] It is also inappropriate in the context of rate design.[84] Adjusting the NBEC to remove revenues and reduce fuel by the simple proportion of load to generation results in an NBEC of roughly $0.042 per kWh.[85] The net energy cost value that MECG cites in its discussion includes $14 million in transmission revenues, $221,928 in sales of RECs, and a net of approximately $165 million in off system sales revenues net of excess fuel costs.[86] It is not reasonable, as Empire and MECG do, to ignore the actual incremental cost of obtaining energy in favor of that cost, minus unrelated revenues.[87]

While Empire's amended position is an 8.3% increase for the Residential Class, Empire's expert witness admitted that he was not opposed to allocating an increase to the Residential Class that reflected the overall Revenue Requirement increase

[80] Lange Rebuttal, p. 27, ll. 6-10.

[81] Lange Rebuttal, p. 27, ll. 11-13.

[82] Lange Rebuttal, p. 27, ll. 13-14.

[83] Lange Rebuttal, p. 27, ll. 14-15.

[84] Lange Rebuttal, p. 27, ll. 15-16.

[85] Lange Rebuttal, p. 27, ll. 16-17.

[86] Lange Rebuttal, p. 27, ll. 17-20.

[87] Lange Rebuttal, p. 27, ll. 20-21.

of 7.64%.[88] He agreed that, with the deployment of AMI meters, a better data set would be available for class cost responsibility adjustments in Empire's next rate case.[89] He agreed that his original study required revision and that MECG relied upon his original study.[90]

Conclusion

Staff is of the opinion that class cost responsibility shifts should not be made on the basis of untrustworthy studies. Much better studies will be available in the future due to the AMI meters deployed by Empire. Staff urges the Commission to leave any class cost responsibility shifts for Empire's next rate case, when they can be made with confidence.

WHEREFORE, Staff prays that the Commission will accept its *Initial Brief* and determine this issue as Staff recommends; and grant such other and further relief as is just in the circumstances.

Respectfully submitted,

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[88] Tr. vol. 6, p. 98, l. 23, through p. 99, l. 10.

[89] Tr. vol. 6, p. 99, ll. 11-25.

[90] Tr. vol. 6, p. 100, l. 1, through p. 101, l. 1.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Mail, postage prepaid, to all counsel of record pursuant to the Service List maintained by the Commission's Data Center, **on this 25th day of February, 2022.**

/s/ Kevin A. Thompson