

## Missouri Public Service Commission

### Respond Data Request

<b>Data Request No.</b>	0458
<b>Company Name</b>	MO PSC Staff-(All)
<b>Case/Tracking No.</b>	ER-2018-0145
<b>Date Requested</b>	7/13/2018
<b>Issue</b>	Other - Other
<b>Requested From</b>	Nicole Mers
<b>Requested By</b>	Lewis Mills
<b>Brief Description</b>	BIP Method
<b>Description</b>	With regard to the use of a Base-Intermediate-Peak ("BIP") method to allocate electric utility generation costs, please provide: a. A citation to Commission Orders in regulatory proceedings of which Staff is aware in which one or more parties filed a BIP study. b. For proceedings identified in a., a statement of how that BIP allocation approach differs from what Staff has filed in these cases.
<b>Response</b>	1. With regard to the use of a Base-Intermediate-Peak ("BIP") method to allocate electric utility generation costs, please provide: a. A citation to Commission Orders in regulatory proceedings of which Staff is aware in which one or more parties filed a BIP study. This information is publicly available to MCEG. For convenience, a list not intended to be exhaustive is provided below: Kansas City Power & Light Company ER-2012-0174 (BIP, not D-BIP) Kansas City Power & Light Company ER-2014-0370 Kansas City Power & Light Company ER-2018-0145 KCP&L Greater Missouri Operations Company ER-2018-0146 Kansas City Power & Light Company ER-2016-0285 Union Electric Company d/b/a Ameren Missouri ER-2016-0179 Empire District Electric Company ER-2016-0023 Empire District Electric Company ER-2014-0351 Union Electric Company d/b/a Ameren Missouri ER-2014-0258 b. For proceedings identified in a., a statement of how that BIP allocation approach differs from what Staff has filed in these cases. Generation characteristics and load characteristics vary case to case and utility to utility. For example, the Ameren Missouri generation units are not considered in a KCPL case and vice versa. ER-2012-0174 was a simple BIP, not the detailed BIP Other cases the numbers of CP used to establish peak demand may vary from 2-4 based on whether additional CP are reasonably close to maximum CP. DR response submitted by Sarah Lange (sarah.lange@psc.mo.gov).
<b>Objections</b>	NA

The attached information provided to **Missouri Public Service Commission** Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the **Missouri Public Service Commission** if, during the pendency of Case No. **ER-2018-0145** before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If

these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the **MO PSC Staff-(All)** office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to **MO PSC Staff-(All)** and its employees, contractors, agents or others employed by or acting in its behalf.

**Security :** Public  
**Rationale :** NA

## Missouri Public Service Commission

### Respond Data Request

<b>Data Request No.</b>	0430
<b>Company Name</b>	MO PSC Staff-(All)
<b>Case/Tracking No.</b>	ER-2018-0146
<b>Date Requested</b>	7/13/2018
<b>Issue</b>	Other - Other
<b>Requested From</b>	Mark Johnmson
<b>Requested By</b>	Lewis Mills
<b>Brief Description</b>	BIP Method
<b>Description</b>	With regard to the use of a Base-Intermediate-Peak ("BIP") method to allocate electric utility generation costs, please provide: a. A citation to Commission Orders in regulatory proceedings of which Staff is aware in which one or more parties filed a BIP study. b. For proceedings identified in a., a statement of how that BIP allocation approach differs from what Staff has filed in these cases.
<b>Response</b>	1. With regard to the use of a Base-Intermediate-Peak ("BIP") method to allocate electric utility generation costs, please provide: a. A citation to Commission Orders in regulatory proceedings of which Staff is aware in which one or more parties filed a BIP study. This information is publicly available to MCEG. For convenience, a list not intended to be exhaustive is provided below: Kansas City Power & Light Company ER-2012-0174 (BIP, not D-BIP) Kansas City Power & Light Company ER-2014-0370 Kansas City Power & Light Company ER-2018-0145 KCP&L Greater Missouri Operations Company ER-2018-0146 Kansas City Power & Light Company ER-2016-0285 Union Electric Company d/b/a Ameren Missouri ER-2016-0179 Empire District Electric Company ER-2016-0023 Empire District Electric Company ER-2014-0351 Union Electric Company d/b/a Ameren Missouri ER-2014-0258 b. For proceedings identified in a., a statement of how that BIP allocation approach differs from what Staff has filed in these cases. Generation characteristics and load characteristics vary case to case and utility to utility. For example, the Ameren Missouri generation units are not considered in a KCPL case and vice versa. ER-2012-0174 was a simple BIP, not the detailed BIP Other cases the numbers of CP used to establish peak demand may vary from 2-4 based on whether additional CP are reasonably close to maximum CP. DR response submitted by Sarah Lange (sarah.lange@psc.mo.gov).
<b>Objections</b>	NA

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these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the **MO PSC Staff-(All)** office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to **MO PSC Staff-(All)** and its employees, contractors, agents or others employed by or acting in its behalf.

**Security :** Public  
**Rationale :** NA

**KANSAS CITY POWER & LIGHT COMPANY**  
**Case No. ER-2018-0145**

**Comparison of Production Allocation Factors**

<u>Line</u>	<u>Class</u>	Staff <u>DBIP<sup>1</sup></u> (1)	Mainstream Methods					
			<u>Based on KCPL Load Data</u>			<u>Based on Staff Load Data</u>		
			<u>A&amp;E</u> <u>4CP<sup>2</sup></u> (2)	<u>A&amp;E</u> <u>4NCP<sup>3</sup></u> (3)	<u>4CP<sup>3</sup></u> (4)	<u>A&amp;E</u> <u>4CP<sup>4</sup></u> (5)	<u>A&amp;E</u> <u>4NCP<sup>1</sup></u> (6)	<u>4CP<sup>4</sup></u> (7)
1	Residential	35.07%	42.29%	41.50%	41.96%	40.91%	41.15%	40.50%
2	Small General Service	5.43%	5.27%	5.29%	5.29%	5.68%	5.58%	5.68%
3	Medium General Service	14.95%	14.88%	14.60%	14.96%	15.16%	14.88%	15.22%
4	Large General Service	24.06%	21.13%	21.29%	21.45%	22.21%	22.01%	22.51%
5	Large Power Service	19.69%	15.87%	16.15%	16.34%	15.52%	15.29%	16.08%
6	Lighting	<u>0.80%</u>	<u>0.56%</u>	<u>1.18%</u>	<u>0.00%</u>	<u>0.51%</u>	<u>1.09%</u>	<u>0.00%</u>
7	Missouri Retail	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

<sup>1</sup> Staff's Class Cost-of-Service Report, page 17.

<sup>2</sup> WN KCPL Allocators MO Rev 11-30-17 Avg & Excess 4CP.xls

<sup>3</sup> Calculated using data from WN KCPL Allocators MO Rev 11-30-17 Avg & Excess 4CP.xls

<sup>4</sup> Calculated using data from (CONF) Staff Workpapers of Sarah Lange, Confidential gen unit info KCPL BIP direct.xlsx

# **ELECTRIC UTILITY COST ALLOCATION MANUAL**

**January, 1992**



**NATIONAL ASSOCIATION OF  
REGULATORY UTILITY COMMISSIONERS  
1102 Interstate Commerce Commission Building  
Constitution Avenue and Twelfth Street, NW  
Post Office Box 684  
Washington, DC 20044-0684  
Telephone No. (202) 898-2200  
Facsimile No. (202) 898-2213**

**Price: \$25.00**

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# CHAPTER 8

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## CLASSIFICATION AND ALLOCATION OF COMMON AND GENERAL PLANT INVESTMENTS AND ADMINISTRATIVE AND GENERAL EXPENSES

This chapter describes how general plant investments and administrative and general expenses are treated in a cost of service study. These accounts are listed in the general plant Accounts 389 through 399, and in the administrative and general Accounts 920 through 935.

### I. GENERAL PLANT

General plant expenses include Accounts 389 through 399 and are that portion of the plant that are not included in production, transmission, or distribution accounts, but which are, nonetheless, necessary to provide electric service.

One approach to the functionalization, classification, and allocation of general plant is to assign the total dollar investment on the same basis as the sum of the allocated investments in production, transmission and distribution plant. This type of allocation rests on the theory that general plant supports the other plant functions.

Another method is more detailed. Each item of general plant or groups of general and common plant items is functionalized, classified, and allocated. For example, the investment in a general office building can be functionalized by estimating the space used in the building by the primary functions (production, transmission, distribution, customer accounting and customer information). This approach is more time-consuming and presents additional allocation questions such as how to allocate the common facilities such as the general corporate computer space, the Shareholder Relation Office space, etc.

Another suggested basis is the use of operating labor ratios. In performing the cost of service study, operation and maintenance expenses for production, transmission, distribution, customer accounting and customer information have already been functionalized, classified, and allocated. Consequently, the amount of labor, wages, and salaries assigned to each function is known, and a set of labor expense ratios is thus available for use in allocating accounts such as transportation equipment, communication equipment, investments or general office space.

## II. ADMINISTRATIVE AND GENERAL EXPENSES

Administrative and general expenses include Accounts 920 through 935 and are allocated with an approach similar to that utilized for general plant. One methodology, the two-factor approach, allocates the administrative and general expense accounts on the basis of the sum of the other operating and maintenance expenses (excluding fuel and purchased power).

A more detailed methodology classifies the administrative and general expense accounts into three major components: those which are labor related; those which are plant related; and those which require special analysis for assignment or the application of the beneficiality criteria for assignment.

The following tabulation presents an example of the cost functionalization and allocation of administrative and general expenses using the three-factor approach and the two-factor approach.

Account Operation		Three-Factor Allocation Basis	Two-Factor Allocation Basis
920	A & G Salaries	Labor - Salary and Wages	Labor - Salary and Wages
921	Office Supplies	Labor - Salary and Wage	Labor - Salary and Wages
922	Administration Expenses Transferred-Credit	Other - Subtotal of Operating Expenses <b>Less Fuel and Purchased Power</b>	Labor - Salary and Wages
923	Outside Services Employed	Other - Subtotal of Operating Expenses <b>Less Fuel and Purchased Power</b>	Labor - Salary and Wages
924	Property Insurance	Plant - Total Plant <sup>1</sup>	Plant - Total Plant
925	Injuries and Damages	Labor - Salary and Wages <sup>2</sup>	Labor - Salary and Wages
926	Pensions and Benefits	Labor - Salary and Wages	Labor - Salary and Wages
927	Franchise Requirements	Revenues or specific assignment	Revenues or specific assignment

<sup>1</sup>A utility that self-insures certain parts of its utility plant may require the adjustment of this allocator to only include that portion for which the expense is incurred.

<sup>2</sup>A detailed analysis of this account may be necessary to learn the nature and amount of the expenses being booked to it. Certain charges may be more closely related to certain plant accounts than to labor wages.



Account Operation		Three Factor Allocation Basis	Labor-Ratio Allocation Basis
928	Regulatory Commission Expenses	Other - Subtotal of Operating Expenses Less Fuel and Purchased Power	Labor - Salary and Wages
928	Duplicate Charge-Cr.	Other - Subtotal of Operating Expenses Less Fuel and Purchased Power	Labor - Salary and Wages
930.1	General Advertising Expenses	Other - Subtotal of Operating Expenses Less Fuel and Purchased Power	Labor - Salary and Wages
930.2	Miscellaneous General Expenses	Other - Subtotal of Operating Expenses Less Fuel and Purchased Power	Labor - Salary and Wages
931	Rents	Plant - Total Plant <sup>3</sup>	Plant - Total Plant
<b>Maintenance</b>		<b>Three Factor Allocation Basis</b>	<b>Labor-Ratio Allocation Basis</b>
935	General Plant	Plant - Gross Plant	Labor - Salary and Wages

<sup>3</sup>A detailed analysis of rental payments may be necessary to determine the correct allocation bias. If the expenses booked are predominantly for the rental of office space, the use of labor, wage and salary allocators would be more appropriate.

**KANSAS CITY POWER & LIGHT COMPANY**  
**Case No. ER-2018-0145**

**Change in Class Revenue Requirement  
in Staff's Preferred Study from  
Revising Staff's Allocation of Production  
Non-Fuel O&M Expense and A&G Expense\***

<u>Line</u>	<u>Class</u>	Change from Non-Fuel Production O&M Expense Allocation <u>(\$000)</u> (1)	Change from A&G Expense Allocation <u>(\$000)</u> (2)	Total <u>(\$000)</u> (3)
1	Residential	\$ 3,077	\$ (266)	\$ 2,811
2	Small General Service	\$ 171	\$ (39)	\$ 132
3	Medium General Service	\$ (97)	\$ 36	\$ (61)
4	Large General Service	\$ (1,036)	\$ 115	\$ (922)
5	Large Power Service	\$ (1,374)	\$ 164	\$ (1,210)
6	Lighting	<u>\$ (741)</u>	<u>\$ (9)</u>	<u>\$ (750)</u>
7	Total	\$ (0)	\$ 0	\$ (0)

\* O&M Expenses less A&G Expenses allocator replaced with Payroll allocator.

**KANSAS CITY POWER & LIGHT COMPANY**  
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**Change in Class Revenue Requirement  
in Staff's Preferred Study from  
Revising Staff's Allocation of Production  
Non-Fuel O&M Expense and A&G Expense\***

<u>Line</u>	<u>Class</u>	Change from	Change from	Total
		Non-Fuel Production O&M Expense Allocation <u>(\$000)</u> (1)	A&G Expense Allocation <u>(\$000)</u> (2)	
1	Residential	\$ 3,077	\$ (141)	\$ 2,936
2	Small General Service	\$ 171	\$ (12)	\$ 159
3	Medium General Service	\$ (97)	\$ (35)	\$ (132)
4	Large General Service	\$ (1,036)	\$ 13	\$ (1,024)
5	Large Power Service	\$ (1,374)	\$ 174	\$ (1,199)
6	Lighting	<u>\$ (741)</u>	<u>\$ 0</u>	<u>\$ (741)</u>
7	Total	\$ (0)	\$ 0	\$ (0)

\* O&M Expenses less A&G Expenses allocator replaced with Net Plant allocator.