BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

APPLICATION OF THE EMPIRE DISTRICT ELECTRIC COMPANY, A KANSAS CORPORATION, FOR AN ADJUSTMENT IN ITS RATE AND CHARGES FOR ELECTRIC SERVICE IN THE STATE OF OKLAHOMA	)))))	CAUSE NO. PUD 201600468

RESPONSIVE TESTIMONY OF MARK E. GARRETT

RATE DESIGN ISSUES

ON BEHALF OF

OKLAHOMA INDUSTRIAL ENERGY CONSUMERS ("OIEC")

March 22, 2017

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I. WITNESS IDENTIFICATION AND PURPOSE OF TESTIMONY

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A: My name is Mark Garrett. My business address is 50 Penn Place, Suite 410, 1900 NW Expressway, Oklahoma City, Oklahoma 73118.

Q: DID YOU PROVIDE TESTIMONY IN THE REVENUE REQUIREMENT PHASE OF THESE PROCEEDINGS ON MARCH 13, 2017?

A: Yes.

Q: HAVE YOU BEEN QUALIFIED AS AN EXPERT IN COST OF SERVICE AND RATE DESIGN MATTERS WITH THIS COMMISSION?

A: Yes. A description of my qualifications and a list of the proceedings in which I have been involved were included with that testimony.

Q: ON WHOSE BEHALF ARE YOU APPEARING IN THESE PROCEEDINGS?

A: I am appearing on behalf of Oklahoma Industrial Energy Consumers (OIEC).

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A: The purpose of my testimony is to address Empire's cost of service study and rate design.

II. SUMMARY OF RECOMMENDATIONS

1. I recommend that the Environmental Compliance Plan ("ECP") rider be approved by this Commission. The cost of that rider should be allocated on an equal percentage basis to all customer classes. This allocation method ensures that all customers share equally in these additional environmental compliance costs.

2. If the Commission does not accept the recommendation in my Revenue Requirement testimony to implement an ECP rider with no other rate changes, the Commission should make the following modifications to the Company's cost of service study:

   a. Empire's class cost of service study should be modified to utilize the 4 Coincident Peak ("4CP") methodology for allocation of its transmission costs, rather than Empire's proposed 12 Coincident Peak ("12CP") methodology. A 4CP methodology reflects how the transmission system is actually used in Oklahoma. It is also the methodology approved by this Commission regarding allocation of transmission costs for both Oklahoma Gas and Electric Company ("OG&E") and Public Service Company of Oklahoma ("PSO").

   b. Empire's class cost of service study should be modified to utilize the 4 Coincident Peak Average and Excess ("4CP AED") methodology for allocation of its production costs, rather than Empire's proposed 12 Coincident Peak Average and Excess ("12CP AED") methodology. A 4CP AED methodology reflects how Empire's production plant is actually used in Oklahoma. It is also the methodology approved by this Commission regarding allocation of production costs for both OG&E and PSO.

III. ECP RIDER COST RECOVERY AND ALLOCATION RECOMMENDATION

Q: IN YOUR REVENUE REQUIREMENT TESTIMONY YOU RECOMMENDED THAT THE COMMISSION ALLOW THE COMPANY TO COLLECT ONLY THE CAPITAL COSTS ASSOCIATED WITH THE ASBURY AND RIVERTON 12 ENVIRONMENTAL COMPLIANCE UPGRADES THROUGH AN ECP RIDER, WITH NO ADDITIONAL RATE INCREASE. HOW SHOULD THE

ECP COSTS BE RECOVERED BY EMPIRE AND ALLOCATED TO THE CUSTOMER CLASSES?

A: The capital costs for the Asbury and Riverton 12 environmental upgrades should be recovered through the Environmental Compliance Rider (ECP Rider) attached hereto as Exhibit MG-RD1. Ideally, the capital costs would be allocated to the customer classes using the 4CP AED methodology described above for all production plant, since the Asbury and Riverton 12 capital costs are production plant costs.

However, in my revenue requirement testimony filed March 13, 2017, I recommended that the ECP rider costs be allocated to the customer classes based on existing revenues in each class. The result of this allocation would be that all customers receive an equal percentage increase as result of the added ECP costs. In other words, if the ECP results in an overall 9.53% increase in base rates, each customer class would receive a 9.53% rate increase. This would ensure that all customers share equally in the additional ECP rider costs. The ECP Rider provides for an equal percentage increase of EPC capital costs to all customer classes.

Q: IN ITS REVENUE REQUIREMENT TESTIMONY, THE AG RECOMMENDED THAT THE ECP COSTS BE ALLOCATED ON A KWH BASIS. DO YOU AGREE WITH THIS RECOMMENDATION?

A: No. That would be an incorrect allocation of the capital costs associated with Empire's environmental upgrades and such allocation would unfairly penalize the high load factor commercial and industrial customers. In Oklahoma, capital costs associated with

production assets have always been allocated on a demand basis, not on an energy basis, and this is the correct allocation of these costs. As I said earlier, ideally, the ECP costs would be allocated on a demand basis using the 4CP AED allocation that is used to allocate OG&E and PSO production costs. In this situation, though, as set forth in my direct revenue requirement testimony, I am recommending that the ECP rider costs be allocated to the customer classes on an equal percentage basis, so that all customers share equally in paying for these additional environmental compliance costs.

Q: WHAT IS THE RESULT OF THIS ALLOCATION?

A: The results are set forth in Table 1 below:

Table 1: ECP Rider Oklahoma Rate Class Allocation

Line	Customer Class	Current Base Revenues	Base Revenue %	ECP Rider Allocation	Base Rate % Increase
1	Residential	$ 2,296,718	27.22%	$ 218,904	9.53%
2	Res Total Elec	858,574	10.18%	81,832	9.53%
3	Commercial	1,104,592	13.09%	105,280	9.53%
4	TEB	200,635	2.38%	19,123	9.53%
5	GP	1,521,728	18.03%	145,028	9.53%
6	PT	2,201,910	26.10%	209,868	9.53%
7	Street Lights	47,499	0.56%	4,527	9.53%
8	Private Lights	201,810	2.39%	19,235	9.53%
9	Spec Lights	4,175	0.05%	398	9.53%
10	**Total**	**$ 8,437,640**	**100%**	**$ 804,205**	**9.53%**

IV. CLASS COST OF SERVICE AND RATE DESIGN RECOMMENDATIONS IF ECP RIDER RECOMMENDATION IS REJECTED

Q: DO YOU RECOMMEND ANY CHANGES TO EMPIRE'S FILED COST OF SERVICE STUDY?

A: In the event the Commission rejects my recommendation to disallow recovery of amounts in excess of the Riverton 12 and Asbury capital costs recovered through the ECP Rider, I recommend Empire's class cost of service study be modified to utilize a 4CP methodology for transmission cost allocation. I further recommend Empire's class cost of service study be modified to utilize the 4 CP AED methodology for allocation of its production costs.

A. **Transmission Plant Allocation Methodology Change**

Q: WHAT IS YOUR CONCERN WITH EMPIRE'S PROPOSED TRANSMISSION COST ALLOCATION?

A: Empire has proposed that jurisdictional costs for transmission service be allocated to the various customer classes by a 12CP allocation methodology. My recommendation is that the transmission costs should be allocated utilizing the 4 Coincident Peak ("4CP") methodology and not by the 12 Coincident Peak ("12CP") methodology.

Q: WHAT ALLOCATION METHODOLOGY DOES OG&E USE FOR TRANSMISSION COST ALLOCATION IN OKLAHOMA?

A: OG&E uses a 4CP allocation for allocating transmission costs to the various customer classes in Oklahoma as this methodology best reflects retail customers' use of the transmission system. The OG&E method recognizes that SPP charges the various regulatory jurisdictions based upon a jurisdictional allocation of transmission-related costs utilizing a 12CP method, but the class allocations at OG&E are based on a 4CP allocation.

Q: WHAT ALLOCATION METHODOLOGY DOES PSO USE FOR TRANSMISSION COST ALLOCATION IN OKLAHOMA?

A: In the most recent PSO rate case, Cause No. PUD 201500208, transmission cost allocation was a litigated issue. In its Order No. 657877 the Commission specifically found that PSO's system is a summer peaking system, and that it is appropriate to use a

4CP method for transmission cost allocation. My recommendation here is consistent with the Commission's findings in the PSO case.

Q: WHAT REASON DID EMPIRE GIVE FOR USING THE 12CP ALLOCATION METHOD FOR ITS TRANSMISSION SYSTEM COSTS?

A: Empire provides very little support for a 12CP allocation of Transmission Plant. At page 20 of his direct testimony, Mr. Overcast states: "The use of 12 CP reflects the use of Transmission Plant on a monthly basis. Absent significant differences in monthly loading of the transmission system, such as high summer peaks and low winter peaks, a 12 CP allocation factor is consistent with the design and use of Transmission Plant."

Q: DO YOU AGREE WITH THIS RATIONALE?

A: No. The rationale Mr. Overcast provides does not apply to the Empire system. At page 17 of his direct testimony, Mr. Overcast provides a table that shows the monthly demand on Empire's system. The table shows that Empire's system has significant differences in monthly loading, making the 12CP methodology inapplicable to this system.

Q: HOW DO EMPIRE'S RETAIL CUSTOMERS USE THE EMPIRE TRANSMISSION SYSTEM?

A: Monthly demand data, as provided in Mr. Overcast's testimony in the tables appearing at pages 17 and 18, demonstrate that Empire is clearly a peaking system with well-defined summer and winter peaks. For this reason Empire's transmission costs should

be allocated using a CP methodology that more accurately reflects how the system is used.

Q: WHAT DO YOU RECOMMEND?

A: I recommend that the Commission reject Empire's proposed 12CP allocation methodology for transmission costs and instead require that Empire use the 4CP methodology for allocation of transmission costs to its retail customers. A review of the Oklahoma demand data provided in Empire's workpapers, reveals that Empire's Oklahoma system is both a summer and winter peaking system. The correct methodology to reflect the strong summer and winter peaks on the Empire system is a 4CP methodology based on the 2 summer and the 2 winter peak months.

Q: WILL THE USE OF THE 4CP FOR TRANSMISSION COST ALLOCATION AFFECT EMPIRE'S CURRENT SPP RECOVERY RIDER?

A: Yes. If the Commission adopts my transmission cost allocation recommendation, the SPP rider will also appropriately allocate the SPP rider costs to the customer classes using a 4CP methodology.

B. <u>Production Plant Allocation Methodology Change</u>

Q: WHAT IS YOUR CONCERN WITH EMPIRE'S PROPOSED PRODUCTION COST ALLOCATION?

A: Empire has proposed that production costs be allocated using a 12CP Average and Excess Demand model. At page 17 of his direct testimony, Mr. Overcast provides a table that shows the monthly demand on Empire's system. Based upon the information in this table, he concludes that the allocation of production costs in Oklahoma requires the use of a 12CP. This data, however, actually shows that Empire's system has well defined summer and winter peaks. This is even more so for its Oklahoma system where the summer and winter peaks are even higher, compared to the other months. My recommendation is that the allocation of production costs between Empire's various Oklahoma customer classes should be based on the 2 summer and the 2 winter peak months. An average and excess model based on these four months would be much more appropriate for the allocation of production costs to Empire's customer classes compared to Empire's proposed 12CP allocation.

Q: WHAT PRODUCTION ALLOCATION IS ACCEPTED BY THE OCC IN OKLAHOMA?

A: The Oklahoma Commission has long accepted the use of the 4CP Average and Excess ("4CP AED") method to allocate production costs between the customer classes. This method has been approved by this Commission for use by both OG&E and PSO. In developing a 4CP AED for Empire, I utilized the method which has been adopted by this Commission for many years.

Q: HAVE YOU MADE ANY MODIFICATIONS TO THE PRODUCTION ALLOCATION METHOD ACCEPTED BY THE OCC FOR OG&E AND PSO?

A: Yes. OG&E and PSO have well-defined summer peaks. Empire on the other hand has both a summer and a winter peak. I adjusted the 4CP used by both OG&E and PSO that is based on four summer months, to a 4CP that includes the two summer peak months and the two winter peaks months. This method is superior to the 12CP method as it recognizes production assets must be available to serve both the summer and winter peaks.

Q: IN THE EVENT THAT THE COMMISSION DOES NOT ACCEPT YOUR RECOMMENDATION TO APPROVE AN ECP RIDER FOR THE RECOVERY OF RIVERTON 12 AND ASBURY CAPITAL COSTS AND NOTHING MORE, HOW WOULD YOU RECOMMEND THAT ANY INCREASE IN RATES BE ALLOCATED TO EMPIRE'S CUSTOMER CLASSES?

A: I recommend that any increase in base rates be allocated to Empire's customer classes using Empire's cost of service study with the modifications discussed above for transmission and production plant allocations.

Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A: Yes, it does.

OKLAHOMA CORPORATION COMMISSION

THE EMPIRE DISTRICT ELECTRIC COMPANY

(Name of Issuing Utility)

OKLAHOMA
(Territory to. which schedule is applicable)

ATTACHMENT 1

Index No.

Schedule ECR

Sheet _1 of 2___

Replacing Schedule _____

which was filed _____

ASBURY/RIVERTON 12 ENVIRONMENTAL
COST RECOVERY RIDER-ECR

Sheet 1 of 2 Sheets

APPLICATION:
To all bills rendered by the Company for utility service, permitting the recovery of such cost.

TERM:
This rider will have a term beginning with the effective date of a Commission Order approving the rider in Cause No. PUD 201600468 and ending with the rate effective date of the general rate case to be filed on or after August 1, 2018, unless modified by the Oklahoma Corporation Commission ("Commission"),

BASIS OF ADJUSTMENT:
Company will collect from customers as an adjustment to the aforementioned bills, an environmental charge equal to the annual capital investment-related revenue requirements associated with the Asbury Environmental Retrofit and Riverton 12 Investment undertaken by Company. The calculation of such revenue requirements will be made in conformity with the formula stated in this Rider, and will not change absent Commission approval.

Company shall provide quarterly reports to the Commission of its collections including a calculation of the total collected under this Rider,

METHOD OF BILLING:
The environmental charge shall be collected by applying the following factor and adding the charge to each applicable customer's bill:

ARECRR Factors	Factors per kWh
Residential 1/	$.00555
Commercial	$.00767
Total Electric Building	$.00500
General Power	$.00491
Power Transmission	$.00330
Lighting 2/	$.01422

1/ Includes the Residential and Residential-Total Electric Pricing Plans
2/ includes the Street Light, Private Light and Special Light Pricing Plans

BASIS FOR DETERMINING THE ECR:
The monthly charge shall reflect the recovery of the ECR revenue requirement as approved by the Commission in Cause No. PUD 201600468. The ECR charge shall be implemented on an interim basis subject to refund, and shall remain fixed until otherwise ordered by the Commission.

ANNUAL TRUE-UP:
The revenue collected pursuant to the application of this Rider shall be compared to the estimated revenue approved for collection by the Commission on an annualized basis. The amount of any over{under) recovery Shall be included in any refund calculation that may result from the re-calculation of the revenue requirement to take place during Empire's rate case to .be filed on or after August 1, 2018.

INTERIM SUBJECT TO REFUND:
The revenue collected pursuant to this rider, as approved by the Commission in Cause No. PUD 201600468, shall be collected on an interim basis; subject to refund. For purposes of determining whether a refund is necessary, each component of the ECR revenue requirement will be determined by the Commission during Empire's general rate case (to be filed on or after August 1, 2018). The ARECRR revenue requirement will then be compared against the ECR revenue requirement approved by the Commission in Cause No. PUD 201600468. If the ECR revenue requirement calculated by the Commission in Empire's 2018 general rate case is less than the ECR. revenue requirement approved by the Commission in Cause No. PUD 201600468, then Empire shall refund the difference through a bill credit. The refund rates (bill credits) shall be distributed to customers in the same fashion as the original ARECRR rates contained in this tariff. The components of the ERC revenue requirement to be determined in the 2018 general rate case shall include the following:

Revenue requirements for ECR = (RB x r) + D

RB = the rate base investment associated with the ECR. Rate base will consist of all prudently incurred gross plant investment associated with the ECR, less Accumulated Depreciation associated with the ECR, less any applicable Accumulated Deferred Income Taxes associated with the ECR investment.

r = the pretax rate of return approved by the Commission to set rates for Empire's operations in Oklahoma, unless otherwise agreed to by the parties and the Commission.

D = the Depreciation Expense, calculated using Commission approved depreciation rates, and the Commission Approved Gross Plant component of ECR Rate Base described above.

DEFINITIONS AND CONDITIONS:

Company for the purposes of this rate schedule or rider is defined as The Empire District Electric Company.

Rate Authorized by: _____

_____

(Order No.) (Cause No.) (Date of Order)

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