

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

COMMONWEALTH EDISON COMPANY	:	
	:	No. 13-0387
Tariff filing to present the Illinois Commerce	:	
Commission with an opportunity to consider	:	
revenue neutral tariff changes related to rate	:	
design authorized by subsection 16-108.5(e)	:	
of the Public Utilities Act.	:	

Rebuttal Testimony of  
**MICHAEL T. O'SHEASY**  
Vice President  
Christensen Associates Energy Consulting, LLC  
On Behalf Of  
Commonwealth Edison Company

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1 **I. INTRODUCTION**

2 **A. Witness Identification**

3 **Q. What is your name and business address?**

4 A. My name is Michael T. O'Sheasy. My business address is 5001 Kingswood Drive,  
5 Roswell, Georgia 30075.

6 **Q. By whom and in what position are you employed?**

7 A. I am a Vice President at Christensen Associates Energy Consulting, LLC ("CA"). I am  
8 providing testimony on behalf of Commonwealth Edison Company ("ComEd") in this  
9 proceeding.

10 **B. Summary of Rebuttal Testimony**

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. The purpose of my rebuttal testimony is two-fold. First, I respond to the direct testimony  
13 of Chicago Transit Authority ("CTA") and Northeast Illinois Regional Commuter  
14 Railroad Corporation ("Metra") (together, "CTA/Metra") witness Mr. James G. Bachman  
15 (CTA/Metra Joint Ex. 1.0) regarding CA's report, *Meeting Commonwealth Edison's*  
16 *Distribution Allocation Requirements from the Illinois Commerce Commission Order 10-*  
17 *0467* ("CA Distribution Study"), ComEd Ex. 3.07. Second, I address proposals relating  
18 to cost allocation by phase of service made by Illinois Industrial Energy Consumers  
19 ("IIEC") witness Mr. Robert R. Stephens (IIEC Ex. 1.0); and The Coalition to Request  
20 Equitable Allocation of Costs Together ("REACT") witness Mr. Harry L. Terhune  
21 (REACT Ex. 2.0).

22 **Q. In brief, what conclusions do you reach?**

23 A. Mr. Bachman's assertion that CA's recommendation regarding the allocation of costs  
24 associated with "combination" poles (i.e., poles carrying equipment that serves both  
25 secondary and primary voltage levels) is incorrect because observed data are not helpful  
26 in determining how the costs of combination poles should be allocated. In addition, I  
27 conclude that the allocation of costs according to phase of service proposed by Messrs.  
28 Stephens and Terhune is not standard practice within the electric industry and that such  
29 an approach to cost allocation could begin an unsustainable and complex process in  
30 which each customer class would seek to exclude specific costs from their cost of service  
31 ("COS") due to some aspect of their circumstances.

32 **C. Qualifications and Professional Background**

33 **Q. Please state your qualifications.**

34 A. As a Vice President at CA, my work includes leading projects relating to cost-of-service  
35 that include both embedded cost of service studies ("ECOSSs") and marginal cost of  
36 service studies and rate design for electric utilities. I have testified before various  
37 commissions on both costing and pricing. I have published numerous articles on pricing  
38 in many journals including *Natural Gas and Electricity*, *TAPPI Journal*, *Public Utilities*  
39 *Fortnightly*, *Electric Perspectives*, *EPRI Journal*, *Energy Customer Management*, and  
40 *The Electricity Journal*. Prior to joining CA, I worked for over twenty years with the  
41 electric utilities within the Southern Company electric system in various roles including  
42 cost of service and rate design. I received a Bachelors of Industrial Engineering from the  
43 Georgia Institute of Technology in 1970. In 1974, I earned a Masters in Business  
44 Administration from Georgia State University.

45 Additional information about my qualifications appears in my resume attached to  
46 my testimony as ComEd Ex. 11.01.

47 **II. RESPONSE TO CTA/METRA WITNESS MR. BACHMAN**

48 **Q. What is Mr. Bachman's concern regarding CA's Distribution Study?**

49 A. Mr. Bachman asserts that CA "inappropriately substituted its judgment for ComEd's  
50 engineers' judgment" regarding the allocation of costs associated with combination poles,  
51 which are those poles that carry both secondary and primary equipment. (CTA/Metra  
52 Joint Ex. 1.0, 11:242-262).

53 **Q. What was CA's recommendation specifically?**

54 A. The CA Distribution Study recommendation was to allocate 100% of combination pole  
55 costs to the primary service level (which becomes what ComEd refers to as "shared"  
56 costs which are allocated to primary voltage and secondary voltage customers)<sup>1</sup>, where  
57 ComEd had previously been allocating 50% to primary service and 50% to secondary  
58 service. (ComEd Ex. 3.07, pages 10-11).

59 **Q. Why does Mr. Bachman oppose this recommendation?**

60 A. Mr. Bachman states that "where direct observation was not accomplished, there was no  
61 reason or study objective to replace ComEd engineering judgment with consultant  
62 judgment." (CTA/Metra Joint Ex. 1.0, 12:270-271).

63 **Q. Is Mr. Bachman correct that CA did not directly observe combination poles?**

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<sup>1</sup> My reference in this testimony to "primary service" means ComEd's shared primary voltage costs that are shared by both primary and secondary voltage customers.

64 A. No. The field review included recording the types of equipment attached to each  
65 observed pole. Many of these observations were of poles to which both primary and  
66 secondary lines are attached (i.e., combination poles). The sizes of the poles and  
67 equipment on these combination poles were carefully recorded in the direct observations  
68 process.

69 Q. **Did CA base its recommendation on the data collected during the field reviews?**

70 A. No, the observed data are not helpful in determining how the costs of combination poles  
71 should be allocated between primary and secondary service levels. Specifically, the field  
72 observations of whether a pole is a combination pole do not provide any insight as to how  
73 the pole should be allocated to primary and secondary service levels. To make this  
74 determination, one must investigate what caused the combination poles to be installed,  
75 i.e., what caused the cost to be incurred. To conduct such a review, CA questioned  
76 ComEd distribution engineering on their construction practices.

77 Q. **What was the conclusion of this review?**

78 A. The costs of combination poles should be allocated to service levels based on how the  
79 costs are incurred. Based on my experience and conversations with ComEd engineers  
80 (and even with other electric utilities' distribution engineers), the size and cost of the  
81 combination poles depends directly upon the attachment of primary service and not  
82 whether it also happens to accommodate secondary service. The basis for this finding is  
83 that the pole exists, first and foremost, to attach primary lines and to meet necessary  
84 safety clearances over roadways and from buildings. The attachment of secondary lines  
85 is a convenience for secondary service. If, for example, secondary customers asked that  
86 their voltage level of service be changed from secondary voltage to primary voltage, the

87 size and cost of the pole would not normally change. Additionally, a utility would not be  
88 able to transmit power efficiently if it did not have the primary service level (i.e., a utility  
89 cannot have secondary service without primary service).

90 **Q. As a result, what do you recommend for the treatment of combination pole costs in**  
91 **cost allocation?**

92 A. As stated in the CA Distribution Study (ComEd Ex. 3.07, pages 10-11), I recommend that  
93 the entire cost of the combination pole should be allocated to the primary service level,  
94 which will result in the costs of the pole being paid by customers served at both the  
95 primary and secondary service levels.

96 **Q. How does CA's recommendation of associating 100% of combination poles to the**  
97 **primary service level change the eventual allocation of poles to rate**  
98 **classes/customers relative to ComEd's current methodology?**

99 A. ComEd currently splits combination poles with 50% allocated to the primary service  
100 level and 50% allocated to the secondary service level, which means an entire 50% of the  
101 costs of combination poles are not allocated to primary service level customers. In other  
102 words, secondary voltage customers bear the entire burden for the one-half of the  
103 combination pole costs that is directly allocated to the secondary service level, and  
104 additionally secondary voltage customers are responsible for a share of the 50% of pole  
105 costs directly allocated to the primary service level. CA's recommendation means that  
106 100% of the costs of combination poles will be allocated to all primary and secondary  
107 service level customers based upon ComEd's "shared" allocation.

108 Q. **Is the recommended allocation appropriate given the Illinois Commerce**  
109 **Commission’s directive<sup>2</sup> to use direct observation to assess ComEd’s pole cost**  
110 **allocation?**

111 A. Yes. While CA conducted the required direct observation of the poles and other  
112 facilities, CA did not believe that the data it collected provided information that is  
113 relevant to the allocation of those combination pole costs to primary and secondary  
114 service levels. Rather than simply summarize the data collected and its relevance (or lack  
115 thereof) for cost allocation, the CA Distribution Study describes the methods I  
116 recommend for allocating combination pole costs, which was based on my industry  
117 experience and conversations with ComEd’s and other electric utility engineers. (ComEd  
118 Ex. 3.07, pages 10-11). It is a logical conclusion and more appropriately reflects cost  
119 causation in ComEd’s ECOSS.

120 **III. RESPONSE TO IIEC WITNESS MR. STEPHENS AND REACT WITNESS MR.**  
121 **TERHUNE**

122 Q. **Can you please summarize the key concern of Mr. Stephens?**

123 A. Yes. Mr. Stephens states “single-phase distribution assets exist, and function to serve,  
124 exclusively or nearly exclusively, customers who take service at secondary voltages.  
125 Hence, cost causation principles suggest that customers at higher voltages, such as  
126 transmission voltage or primary voltage generally should not be allocated single-phase  
127 primary system costs.” (IIEC Ex. 1.0, 2:27-31).

128 Q. **Can you please summarize the key concern of Mr. Terhune?**

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<sup>2</sup> Docket No. 10-0467, Order (May 24, 2011) at 180-181.

129 A. Yes. Mr. Terhune states that “under the principle that costs should be assigned to their  
130 causers, and with respect to the ELLC and MV Over 10 MW customer classes, one- and  
131 two-phase and 4 kV primary voltage distribution facilities should not be included in the  
132 revenue requirement of an ELLC customer who requires three-phase service for a load in  
133 excess of 10 MW. Further, in the case of customer receiving non-standard service, which  
134 may include a de minimis utilization of 4 kV, single- or two-phase primary service  
135 connections, the allocation of costs to their customer class should be in proportion to the  
136 de minimis use.” (REACT Ex. 2.0, 40:933-941).

137 Q. **As found through the CA Distribution Study (ComEd Ex. 3.07, pages 13-20), how**  
138 **are costs separated into levels of service?**

139 A. Costs are separated into secondary voltage, primary voltage at 4kV or less, and primary  
140 voltage above 4kV. However these levels of service are not separated into single phase  
141 and three phase costs.

142 Q. **What are Messrs. Stephens and Terhune proposing?**

143 A. They propose to further define level of service according to single-phase, dual-phase, and  
144 three-phase service.

145 Q. **Do you have an opinion on their recommendations?**

146 A. Yes. Based on my experience and the research CA conducted as part of the *Survey of*  
147 *Approaches to Distribution Cost Allocation By Voltage*, (“CA Cost Allocation Survey”) ComEd Ex. 3.09, this approach is not commonly used in the electric industry. In  
148 addition, I believe that accepting this method of “allocation by exclusion” and “path of  
149 service” could lead to a proliferation of similar requests from every customer class,  
150

151 resulting in increasingly complicated ECOSs and more contentious regulatory  
152 proceedings, with no clear general benefit.

153 **Q. Why does single phase service occur at the primary service level?**

154 A. Primary lines originate out of substations at three-phase service. Subsequently, single-  
155 phase taps split off of these three-phase primary lines in order to serve single-phase  
156 primary service level customers and/or to serve secondary service level customers  
157 requiring single-phase service.<sup>3</sup> In some cases, single-phase primary taps are present  
158 simply due to the history of how the utility's primary service level construction practices  
159 evolved and may eventually be replaced with three-phase taps if changes occur in the  
160 load requirements of the customers utilizing the tap. These procedures are guided by a  
161 least-cost objective.

162 **Q. Did the CA Cost Allocation Survey include any questions regarding the allocation of**  
163 **costs by phase of service?**

164 A. Yes. CA asked two multi-part questions. The first question was: "Do you allocate the  
165 costs for single-phase circuits and three-phase circuits differently such that one class of  
166 customers is responsible for the costs of a major portion of such single-phase or three-  
167 phase circuits? If yes, are these single-phase circuits and related equipment allocated  
168 only to secondary voltage customers? If the secondary voltage customers are allocated  
169 the majority of the costs for single-phase circuits, are the three-phase circuits also  
170 allocated to the secondary voltage customers and in what manner?"

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<sup>3</sup> Occasionally single-phase taps may be converted into three-service phase for delivery to a customer requiring three-phase service using a device called a phase-converter but this is usually just performed for relatively small loads.

171           The second question was: “For the primary voltage level of service, do you have  
172 circuits with single-phase load or just three-phase load? If you have single-phase circuits  
173 at primary, do you have: single-phase primary customers being served from these single-  
174 phase primary circuits, three-phase customers being served from these single-phase  
175 primary circuits with appropriate necessary equipment to enable three-phase service,  
176 and/or single-phase secondary customers served from these single-phase primary  
177 circuits? For COS allocation purposes do you place the costs of these single-phase  
178 primary circuits as part of your primary voltage level of service or do you place these  
179 single-phase primary circuits into your secondary voltage level of service?”

180 **Q. How many utilities were included in the CA Cost Allocation Survey?**

181 A. CA received sixteen completed surveys. The utilities were distributed across three size  
182 categories (defined by the number of customers served) and density categories (defined  
183 as the number of customers per transmission mile).

184 **Q. What were the results of the survey?**

185 A. CA’s Cost Allocation Survey provided the following summary of the responses to the  
186 questions above (ComEd Ex. 3.09 at 16): “Distinction between single-phase and three-  
187 phase service is not much of a costing issue for the survey respondents... At the primary  
188 level, four respondents stated that they had three-phase service only, four stated that they  
189 had both types and three indicated that their utility didn’t make the distinction. The  
190 remainder did not know the exact situation, an indicator that the distinction is not  
191 important in their case.”

192 **Q. How would you summarize these findings as they relate to your testimony?**

193 A. None of the utilities CA surveyed reported engaging in the practice proposed by Messrs.  
194 Stephens and Terhune. This supports my conclusion that the allocation of primary  
195 service level costs according to phase of service is not standard practice in the electric  
196 industry for cost of service.

197 Q. **Are you familiar with any utility proposing such a separation?**

198 A. No. Mr. Stephens has offered in his testimony that Wisconsin Electric Power Company  
199 (“WEPCO”) is proposing such a separation. (IIEC Ex. 1.0, 5:103-115). However, I have  
200 not examined WEPCO’s methodology for relevance to ComEd.

201 Q. **Do you believe that primary service level costs should be allocated in cost of service**  
202 **according to phase of service?**

203 A. No, for two major reasons:

204 1. Allocating by phase of service requires determining the *path of service* for  
205 specific customers, which is time consuming and not commonly done in the industry. It  
206 is complicated, not always determinative, and the paths can change over time. These  
207 paths may be reflective of the standards in place when installed, yet these standards may  
208 change over time with cost efficiency allowing for older equipment to remain in place  
209 until a later date. Rather than using *path of service*, *level of service* is the typical cost of  
210 service methodology in use by utilities. Typical levels of service utilities use for cost  
211 allocation are transmission, primary, and secondary with each service level having its  
212 own respective allocator to the utility’s rate classes.

213           2.       The proposals of Messrs. Stephens and Terhune amount to allocation by  
214 exclusion. That is, they have identified a particular type of equipment that they do not  
215 believe serves their customers and they propose excluding that equipment from their cost  
216 allocation. The additional proposal by CTA/Metra witness Mr. Bachman to exclude the  
217 costs of certain distribution facilities because the geographical location of the facilities  
218 does not benefit Railroad customers is a similar allocation by exclusion proposal.  
219 However, there may be other customers who also do not use this type of equipment.  
220 There may be other types of equipment that are not used universally by all customers at  
221 that service level. Allowing this allocation exclusion may invite allocation exclusions to  
222 any customer group that can identify types of equipment that it does not use as  
223 intensively as its allocation factor would indicate. This may produce a process in which  
224 the ECOSS becomes increasingly more disaggregated and complex. This is a reason why  
225 the industry normally uses “average” rate-making with levels of service. While it is  
226 reasonable to investigate creating more differentiated levels of service, I do not  
227 recommend the use of path of service and/or allocation exclusion.

228 **IV. CONCLUSION**

229 **Q. Does this complete your rebuttal testimony?**

230 **A. Yes.**