

**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. :

Surrebuttal Testimony of  
**BRADLEY L. BJERNING**  
Principal Regulatory Specialist  
Regulatory Strategies and Solutions  
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 Bradley L. Bjerning. My business address is 440 South LaSalle Street,  
5 Chicago, Illinois 60605.

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

7 A. I am employed by Commonwealth Edison Company (“ComEd”) as a Principal  
8 Regulatory Specialist in the Regulatory Strategies and Solutions Group.

9 **Q. Are you the same Bradley L. Bjerning that submitted direct and rebuttal testimony**  
10 **in this proceeding?**

11 A. Yes.

12 **B. Summary of Surrebuttal Testimony**

13 **Q. What is the purpose of your surrebuttal testimony?**

14 A. I respond to the rebuttal testimony of Illinois Commerce Commission (“ICC” or  
15 “Commission”) Staff (“Staff”) witness William R. Johnson (ICC Staff Exhibit (“Ex.”)  
16 4.0); Illinois Attorney General (“AG”) witness Scott J. Rubin (AG Ex. 3.0); Illinois  
17 Industrial Energy Consumers (“IIEC”) witness Robert R. Stephens (IIEC Ex. 3.0); City  
18 of Chicago and Citizen Utility Board (“City/CUB”) witness Edward C. Bodmer  
19 (City/CUB Ex. 2.0); Chicago Transit Authority (“CTA”) and Northeast Illinois Regional  
20 Commuter Railroad Corporation (“CTA/Metra”) witness James G. Bachman (CTA/Metra  
21 Joint Ex. 2.0 Corrected); and the Coalition to Request Equitable Allocation of Costs

22 Together (“REACT”) witnesses Harry L. Terhune (REACT Ex. 5.0) and Jeffery Merola  
23 (REACT Ex. 6.0).

24 Staff and Intervenors raise several concerns to which I respond. The failure to address  
25 any particular point raised by Staff and Intervenors does not equal agreement to that  
26 point.

27 **Q. Do various parties support different ECOSSs or a combination of the ECOSSs that**  
28 **you presented in your rebuttal and/or direct testimony?**

29 A. Yes, the following table, Table BLB-SR1, is an update to Table BLB-R1 in my rebuttal  
30 testimony and provides a summary of the witnesses who recommended that the ICC  
31 approve a specific ECOSS and a description of the illustrative ECOSS they each support.  
32 For Staff and IIEC, I provided updated illustrative ECOSSs based upon my  
33 understanding of their proposal from their direct and/or rebuttal testimony for the purpose  
34 of confirming the accuracy of their inputs and the resulting ECOSS. In addition, I note  
35 for reference that the applicable rate designs for each ECOSS is presented in the  
36 surrebuttal testimony of Mr. Tenorio as ComEd Exs. 13.01 for Staff and 13.02, 13.03,  
37 and 13.04 for IIEC. I am submitting, or have previously submitted, ComEd’s version of  
38 their proposal as the exhibit number provided in the table below.

<b>Table BLB-SR1: Summary of the ECOSSs Supported in Testimony</b>		
<b>Witness</b>	<b>Illustrative ECOSS Supported</b>	<b>Description</b>
Kroger Mr. Townsend	ComEd Ex. 3.01 RDI ECOSS	The RDI ECOSS is the basis for comparison to the illustrative ECOSSs submitted in this proceeding and is different from ComEd’s current ECOSS in its 2013 formula rate update proceeding as described in ComEd Ex. 3.0 beginning at line 391 on page 20.

<b>Table BLB-SR1: Summary of the ECOSSs Supported in Testimony</b>		
Staff Mr. Johnson	ComEd Ex. 14.01 “Staff-Sponsored REVISED ECOSS”	Illustrative ECOSS - same as the RDI ECOSS except that it incorporates all the findings and recommendations presented in the study, ComEd Ex. 3.07, <i>Meeting Commonwealth Edison’s Distribution Allocation Requirements from Illinois Commerce Commission Order 10-0467</i> , updated March 14, 2013 (“CA Distribution Study”) other than those pertaining to the allocation of costs associated with 4 kilovolt (“kV”) facilities and also includes the indirect uncollectible cost allocation factors in accordance with the Indirect Uncollectible Cost Study. Mr. Johnson attached this ECOSS model to his rebuttal testimony as Attachment 4.01. (Staff Ex. 4.0, 13:301-307) ComEd Ex. 14.01 confirmed the accuracy of the inputs and results of Staff Attachment 4.01.
AG Mr. Rubin	ComEd Ex. 7.01 “AG-Sponsored ECOSS”	Combination of illustrative ECOSSs presented in ComEd Exs. 3.14, 3.16, and 3.18; which differs from the RDI ECOSS in three ways: (1) it incorporates all of the findings and recommendations presented in the CA Distribution Study other than those pertaining to the allocation of the costs associated with 4 kV facilities; (2) it treats indirect uncollectible costs in accordance with the Indirect Uncollectible Cost Study presented in ComEd Ex. 3.08; and (3) it uses NCP allocation factors that are developed on the basis of customer sectors.
IIEC Mr. Stephens	ComEd Ex. 14.02 “IIEC-Sponsored REVISED ECOSS”	A modification of the RDI ECOSS that reallocates 20% of costs in “Shared Distribution Lines” to “Secondary Voltage Distribution Lines”. This ECOSS is modified from ComEd Ex. 3.01 – RDI ECOSS with a functionalization of 20% of Shared Distribution Lines functional costs to Secondary Voltage Distribution Lines from costs in FERC Accounts 364, 365, 366 and 367. (IIEC Ex. 1.0, 11:251-12:255 & IIEC Ex. 3.0, 3:5-9)

40 Q. **How do the ECOSSs listed in Table BLB-SR1 change the cost allocations to the**  
41 **nonresidential, residential and lighting customer sectors?**

42 A. The total change in cost allocation from the RDI ECOSS is summarized in Table BLB-  
43 SR2 for the residential, nonresidential and lighting customer sectors. The cost allocation  
44 changes in this table are shown in millions of dollars and percentages. Table BLB-SR2  
45 shows that the Staff and AG-Sponsored ECOSSs lower the total cost allocation to the  
46 residential and lighting sectors which is offset by an increase in the total cost allocation to  
47 the nonresidential sector. Conversely, the IIEC-Sponsored REVISED ECOSS increases  
48 the total cost allocation to the residential and lighting sectors which is offset by a  
49 decrease in the total cost allocation to the nonresidential sector. Kroger's position was  
50 based on the RDI ECOSS and therefore does not change cost allocations to any of the  
51 customer sectors or the delivery classes within those sectors.

<b>Table BLB-SR2: Change in Cost Allocation from RDI ECOSS to Staff or Intervenor-Sponsored ECOSS</b>			
	<b>Residential Total Cost Allocation Change</b>	<b>Nonresidential Total Cost Allocation Change</b>	<b>Lighting Total Cost Allocation Change</b>
ComEd Ex. 3.01 - RDI ECOSS - Kroger Supported ECOSS	\$0.00M (0.0%)	\$0.00M 0.0%	\$0.00M (0.0%)
ComEd Ex. 14.01 - “Staff-Sponsored REVISED ECOSS”	↓ (\$5.90M) (0.4%)	↑ \$6.31M 0.7%	↓ (\$0.41M) (2.1%)
ComEd Ex. 7.01 - “AG – Sponsored ECOSS”	↓ (\$7.96M) (0.6%)	↑ \$8.26M 0.9%	↓ (\$0.30M) (1.5%)
ComEd Ex. 14.02 - “IIEC – Sponsored REVISED ECOSS”	↑ \$52.57M 3.9%	↓ (\$54.26M) (5.6%)	↑ \$1.69M 8.7%

52

53 **Q. In summary, what other observations do you make regarding Staff and Intervenor**  
54 **rebuttal testimony?**

55 A. REACT, IIEC, City/CUB and the CTA/Metra witnesses continue to support further  
56 segmentation of ComEd’s distribution system in order to allocate costs differently than  
57 the allocations in effect today. This segmentation includes creating divisions of the  
58 ComEd distribution system based upon the use of, no use of, or a *de minimis* use of  
59 certain facilities including single-phase and two-phase versus three-phase configured  
60 circuits, overhead versus underground configured facilities, facilities that operate at 4  
61 kilovolts (“kV”) versus facilities that operate at 12 kV, old facilities versus new facilities,  
62 and facilities based on the geographical location of the customers in the delivery class.  
63 On the other hand, Staff witness Mr. Johnson urges the Commission to exercise caution  
64 when considering requests for segments of distribution system costs to be excluded from

65 the cost allocation to a single delivery class without consideration for applying the same  
66 approach to all other delivery classes. (Staff Ex. 4.0, 18:423-431).

67 **Q. Do you have any further comments regarding these issues?**

68 A. Yes, ComEd has remained neutral to the proposals presented by Staff and the intervening  
69 parties. Like Mr. Johnson in this proceeding, and Staff witness Mr. Peter Lazare in prior  
70 dockets (ComEd Ex. 7.0, 27-28:457-472), ComEd raises concerns and provides  
71 clarifications regarding proposals that could be considered inequitable if such proposals  
72 request cost adjustments for a single delivery class without additional consideration for  
73 other delivery classes. Although some parties may state that they support an across the  
74 system segmentation for all delivery classes rather than just the delivery classes they  
75 represent, ComEd has concerns about performing resource intensive and complicated  
76 system segmentation cost allocations for a system as large as ComEd's that will  
77 undoubtedly provoke controversy over how such system segmentation cost allocations  
78 are performed. ComEd has provided information which shows that ComEd's distribution  
79 system operates as a complex interconnected distribution system that provides reliable  
80 service consisting of approximately 6,400 circuits, many of which provide multi-path or  
81 back-up service to increase reliability. Any study to assign costs based upon the "path of  
82 service" of these 6,400 circuits to serve customers in a particular delivery class would be  
83 difficult, may not significantly change costs assigned to various customer classes, and  
84 would clearly interest a wide variety of parties that may be impacted by resulting changes  
85 in cost allocations that negatively affect the types of customers they represent.

86 C. **Itemized Attachments**

87 Q. **What exhibits are attached to your surrebuttal testimony?**

88 A. The following exhibits are attached to this surrebuttal testimony:

- 89 1. ComEd Ex. 14.01 is the Staff-Sponsored REVISED ECOSS;
- 90 2. ComEd Ex. 14.02 is the IIEC-Sponsored REVISED ECOSS;
- 91 3. ComEd Ex. 14.03 is ComEd's response to data request REACT 5.04; which  
92 concerns the reasonableness of their proposal;
- 93 4. ComEd Ex. 14.04 is ComEd's response to data request REACT 4.03; which  
94 concerns the Switching Study compliance filing in Docket No. 10-0467;

95 **II. COST OF SERVICE ISSUES IN THE REBUTTAL TESTIMONY FILED BY**  
96 **STAFF AND INTERVENORS**

97 A. **ICC Staff**

98 Q. **Has Staff witness Mr. Johnson updated the ECOSS model that he supports in his**  
99 **rebuttal testimony in this proceeding?**

100 A. Yes. Mr. Johnson now supports an ECOSS model that is “[t]he one provided by the  
101 Company in response to Staff data request WRJ 7.01(a) that is the same as the RDI  
102 ECOSS except that it employs all the findings and recommendations presented in the CA  
103 Distribution Study other than those pertaining to the allocation of costs associated with  
104 4 kV facilities and also includes the indirect uncollectible cost allocation factors in  
105 accordance with the Indirect Uncollectible Cost Study.” (Staff Ex. 4.0, 13:301-307) Mr.  
106 Johnson attached that ECOSS model to his rebuttal testimony as Attachment 4.01.

107 Q. **Has ComEd reviewed Attachment 4.01 of Staff Ex. 4.0?**

108 A. Yes. This attachment is ComEd’s data request response WRJ 7.01 developed from the  
109 RDI ECOSS but which employs all the findings and recommendations presented in the  
110 CA Distribution Study other than those pertaining to the allocation of costs associated  
111 with 4 kV facilities and also includes the indirect uncollectible cost allocation factors in  
112 accordance with the Indirect Uncollectible Cost Study. This ECOSS is attached to my  
113 testimony as ComEd Ex. 14.01, the “Staff-Sponsored REVISED ECOSS”.

114 Q. **How do the results presented in Schedule 3<sup>1</sup> of ComEd Ex. 14.01 compare to the**  
115 **RDI ECOSS?**

116 A. As previously provided in Table BLB-SR2, Schedule 3 of ComEd Ex. 14.01 reflects a  
117 decrease of \$5,897,000 and \$414,000 of ComEd’s revenue requirement allocated to the  
118 residential and lighting sectors, respectively, and is offset by an increase of \$6,311,000 of  
119 ComEd’s revenue requirement allocated to the nonresidential sector. The largest  
120 percentage change occurred with the Dusk to Dawn delivery class in the amount of a  
121 7.09% decrease in revenue responsibility and the largest percentage change within the  
122 residential and nonresidential sectors occurred with decrease of 2.24% for the Multi-  
123 Family with Electric Space Heating delivery class and an increase of 3.00% for the  
124 Railroad delivery class, respectively.

125 Q. **With respect to the three customer sectors, how do the cost allocations in the Staff-**  
126 **Sponsored REVISED ECOSS presented in ComEd Ex. 14.01 compare to the cost**  
127 **allocations in the RDI ECOSS?**

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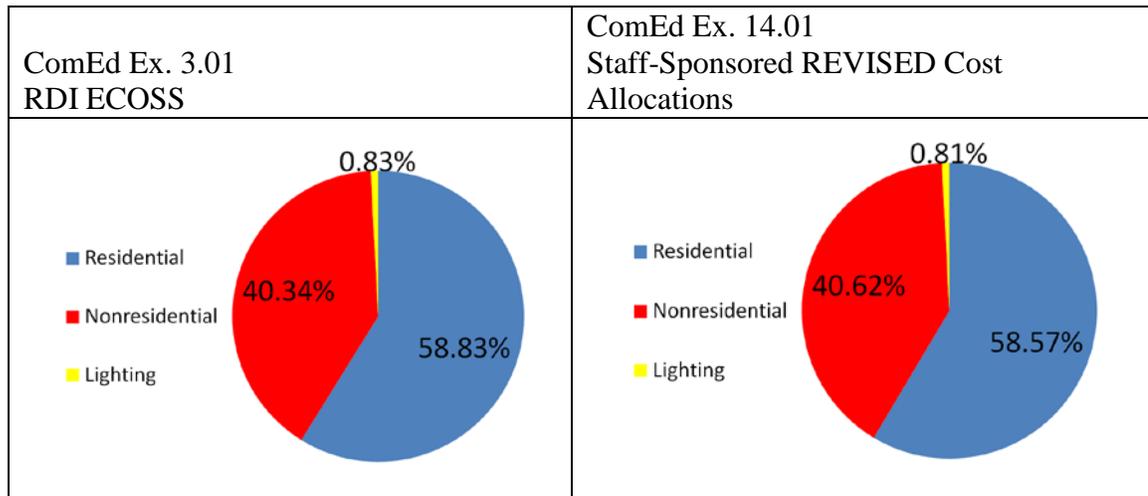
<sup>1</sup> The Schedule 3 - Comparison of Delivery Service Cost of Service, is a page in ComEd’s ECOSS that presents a side-by-side comparison for two ECOSSs for the overall portion of the applicable Rate Year Net Revenue Requirement allocated to each of the fifteen delivery classes.

128 A. The cost allocations to the three customer sectors in the RDI ECOSS and the Staff-  
129 Sponsored REVISED ECOSS presented in ComEd Ex. 14.01 are provided below in  
130 Table BLB-SR3, with arrows to indicate a change in allocation, and Figure BLB-SR1.

<b>Table BLB-SR3: RDI Cost Allocations and ComEd Ex. 14.01 Staff-Sponsored REVISED Cost Allocations</b>						
Cost Category	ComEd Ex. 3.01 RDI ECOSS			ComEd Ex. 14.01 Staff-Sponsored REVISED ECOSS		
	Resid. Sector	Nonres. Sector	Lighting Sector	Resid. Sector	Nonres. Sector	Lighting Sector
HV ESS	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%
HV Distribution Substations	46.32%	53.63%	0.05%	46.32%	53.63%	0.05%
HV Distribution Lines	45.18%	54.77%	0.05%	45.18%	54.77%	0.05%
Shared Distribution Substations	46.40%	53.55%	0.05%	46.40%	53.55%	0.05%
Secondary Voltage Distribution Substations	49.56%	49.53%	0.90%	49.56%	49.53%	0.90%
Shared Distribution Lines	46.44%	53.51%	0.05%	46.43% ↓	53.52% ↑	0.05%
Secondary Voltage Distribution Lines	75.39%	23.51%	1.10%	75.37% ↓	23.51%	1.12% ↑
Primary Voltage Transformers	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%
Secondary Voltage Transformers	49.56%	49.53%	0.90%	49.56%	49.53%	0.90%
Service Connections	91.77%	7.05%	1.18%	91.77%	7.05%	1.18%
Customer Installations Other	79.81%	19.84%	0.35%	79.81%	19.84%	0.35%
FIL	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
Metering Service	78.82%	20.89%	0.29%	78.82%	20.89%	0.29%
Billing Computation and Data ( <i>some costs moved to Indirect Uncollectibles</i> )	84.00%	15.85%	0.15%	84.00%	15.85%	0.15%
Indirect Uncollectibles ( <i>new</i> )	Na	na	na	86.87%	22.71%	10.68%
Bill Issue and Processing	90.36%	9.48%	0.17%	90.36%	9.48%	0.17%
Customer Service and Information	77.07%	22.53%	0.40%	77.07%	22.53%	0.40%
Revenue Related	58.48%	40.31%	1.21%	58.23% ↓	40.59% ↑	1.19% ↓
<b>Total</b>	<b>58.83%</b>	<b>40.34%</b>	<b>0.83%</b>	<b>58.57% ↓</b>	<b>40.62% ↑</b>	<b>0.81% ↓</b>

131

**Figure BLB-SR1: RDI Cost Allocations and  
ComEd Ex. 14.01 Staff-Sponsored REVISED Cost Allocations**



132

133 Q. **Does Mr. Johnson comment on cost allocation proposals by other parties?**

134 A. Yes. Mr. Johnson makes the following recommendations:

135 (1) Reject AG witness Rubin’s proposal to include the all sector non-coincident  
136 peak analysis into the final Commission approved ECOSS;

137 (2) Reject REACT’s, IIEC’s, and CTA/Metra’s proposals regarding the allocation  
138 of the primary/secondary distribution system. Mr. Johnson also offers a  
139 reminder that the Commission rejected IIEC’s similar proposal to allocate the  
140 costs for single-phase components to secondary customers in Docket No. 10-  
141 0467. (*Id*, 16:378-381); and

142 (3) Revise the cost allocation for combinations poles from the current 50% to  
143 shared primary voltage and 50% to secondary voltage methodology to

144 Christensen Associates Energy Consulting, LLC (CA) recommended 100% to  
145 shared primary voltage without additional allocation to secondary voltage. This  
146 recommendation is incorporated in the Staff-Sponsored REVISED ECOSS.

147 **B. AG**

148 **Q. Did Mr. Rubin in his rebuttal testimony resolve the differences noted in your**  
149 **rebuttal testimony, ComEd Ex. 7.0, regarding the illustrative ECOSS Mr. Rubin**  
150 **presented in AG Ex. 1.01 versus the corrected illustrative ECOSS presented in**  
151 **ComEd Ex. 7.01?**

152 **A.** Yes. Mr. Rubin states that he adopts ComEd Ex. 7.01 as an accurate depiction of the  
153 ECOSS he recommends in this case.

154 **C. IIEC**

155 **Q. Did IIEC witness Mr. Stephens change his recommendation for how much of the**  
156 **costs assigned to the Shared Distribution Lines sub-function should be reallocated to**  
157 **the Secondary Voltage Distribution Lines sub-function in ComEd's ECOSS?**

158 **A.** Yes, Mr. Stephens expanded his initial estimation from a 10% reassignment of costs to a  
159 20% reassignment of costs from the Shared Distribution Lines sub-function to the  
160 Secondary Voltage Distribution Lines sub-function after reviewing the direct testimony  
161 of REACT witness Mr. Harry L. Terhune.

162 **Q. What is the impact of Mr. Stephens expanded reassignment percentage?**

163 **A.** In response to Mr. Stephens' revised recommendation, ComEd revised ComEd Ex. 7.02,  
164 the "IIEC-Sponsored ECOSS" with the proposed 10% adjustment recommended by IIEC  
165 in their direct testimony, by changing the 10% reassignment to 20% for distribution

166 poles, overhead and underground conductor, and conduit in Schedule 1b at lines 33-50.  
167 This revised ECOSS is provided as ComEd Ex. 14.02, the “IIEC-Sponsored REVISED  
168 ECOSS”.

169 **Q. How do the results presented in Schedule 3 of ComEd Ex. 14.02 compare to the RDI**  
170 **ECOSS?**

171 A. As previously provided in Table BLB-SR2, Schedule 3 of ComEd Ex. 14.02 reflects an  
172 increase of \$52,566,000 and \$1,692,000 of ComEd’s revenue requirement allocated to  
173 the residential and lighting sectors, respectively, and conversely, a decrease of  
174 \$54,258,000 of ComEd’s revenue requirement allocated to the nonresidential sector. The  
175 largest percentage change occurred with the Dusk to Dawn delivery class in the amount  
176 of a 27.28% increase in revenue responsibility. The largest percentage change within the  
177 residential and nonresidential sectors occurred with an increase of 9.54% for the Single-  
178 Family with Electric Space Heating delivery class and a decrease of 14.32% for the  
179 Railroad delivery class, respectively.

180 **Q. With respect to the three customer sectors, how do the cost allocations in the IIEC-**  
181 **Sponsored REVISED ECOSS presented in ComEd Ex. 14.02 compare to the cost**  
182 **allocations in the RDI ECOSS?**

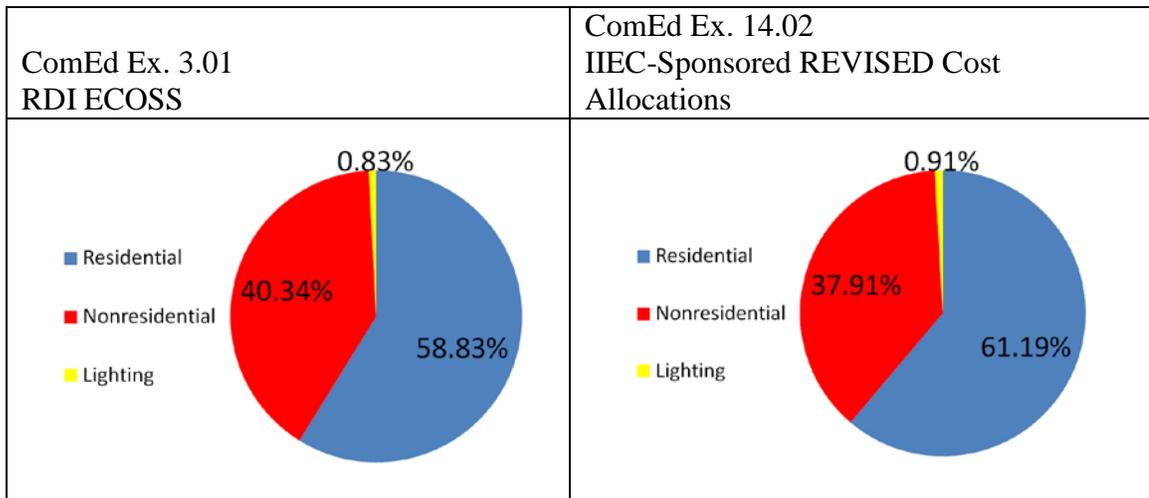
183 A. The cost allocations to the three customer sectors in the RDI ECOSS and the IIEC-  
184 Sponsored REVISED ECOSS presented in ComEd Ex. 14.02 are provided below in  
185 Table BLB-SR4, with arrows to indicate a change in allocation, and Figure BLB-SR2.

186

<b>Table BLB-SR4: RDI Cost Allocations and ComEd Ex. 14.02 IIEC-Sponsored REVISED Cost Allocations</b>						
Cost Category	ComEd Ex. 3.01 RDI ECOSS			ComEd Ex. 14.02 IIEC-Sponsored REVISED ECOSS		
	Resid. Sector	Nonres. Sector	Lighting Sector	Resid. Sector	Nonres. Sector	Lighting Sector
HV ESS	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%
HV Distribution Substations	46.32%	53.63%	0.05%	46.32%	53.63%	0.05%
HV Distribution Lines	45.18%	54.77%	0.05%	45.18%	54.77%	0.05%
Shared Distribution Substations	46.40%	53.55%	0.05%	46.40%	53.55%	0.05%
Secondary Voltage Distribution Substations	49.56%	49.53%	0.90%	49.56%	49.53%	0.90%
Shared Distribution Lines <sup>2</sup>	46.44%	53.51%	0.05%	46.44%	53.51%	0.05%
Secondary Voltage Distribution Lines	75.39%	23.51%	1.10%	75.44% ↑	23.53% ↑	1.04% ↓
Primary Voltage Transformers	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%
Secondary Voltage Transformers	49.56%	49.53%	0.90%	49.56%	49.53%	0.90%
Service Connections	91.77%	7.05%	1.18%	91.77%	7.05%	1.18%
Customer Installations Other	79.81%	19.84%	0.35%	79.81%	19.84%	0.35%
FIL	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
Metering Service	78.82%	20.89%	0.29%	78.82%	20.89%	0.29%
Billing Computation and Data	84.00%	15.85%	0.15%	84.00%	15.85%	0.15%
Bill Issue and Processing	90.36%	9.48%	0.17%	90.36%	9.48%	0.17%
Customer Service and Information	77.07%	22.53%	0.40%	77.07%	22.53%	0.40%
Revenue Related	58.48%	40.31%	1.21%	60.76% ↑	37.93% ↓	1.32% ↑
<b>Total</b>	<b>58.83%</b>	<b>40.34%</b>	<b>0.83%</b>	<b>61.19% ↑</b>	<b>37.91% ↓</b>	<b>0.91% ↑</b>

<sup>2</sup> Table BLB-SR4 shows the same allocation percentages by sector for Shared Distribution Lines and Secondary Voltage Distribution Lines but the table does not show that the IIEC-Proposed REVISED ECOSS shifts \$1,374,854,214 of direct assignment costs from Shared Distribution Lines to Secondary Voltage Distribution Lines. (See ComEd Ex. 14.02, Schedule 1b, Lines 33-50)

**Figure BLB-SR2: RDI Cost Allocations and  
ComEd Ex. 14.02 IIEC-Sponsored REVISED Cost Allocations**



188

189 **Q. Does Mr. Stephens conclude that the Commission should reject CA Distribution**  
 190 **Study’s recommendation to allocate pole costs for combination poles with both**  
 191 **primary voltage and secondary voltage facilities to 100% of costs to shared primary**  
 192 **voltage (“100/0”) rather than ComEd’s current allocation of pole costs of 50% to**  
 193 **shared costs and 50% to secondary voltage costs (“50/50”)?**

194 **A.** Yes, Mr. Stephens reaches this conclusion by focusing on the word “convenience” in the  
 195 following statement made by Mr. O’Sheasy in his rebuttal testimony:

196 The basis for this finding is that the pole exists, first and foremost, to  
 197 attach primary lines and to meet necessary safety clearances over  
 198 roadways and from buildings. The attachment of secondary lines is a  
 199 convenience for secondary service. (ComEd Ex. 11.0, 4:82-85)

200 Mr. Stephens goes on to assume that the use of the word “convenience” is analogous to a  
 201 hypothetical scenario where ComEd’s billing system prints and mails bills to residential  
 202 customers and nonresidential customers only receive their bills through electronic means.

203 Hence, Mr. Stephens argues that nonresidential customers should not pay for any of the  
204 costs for the billing system. Specifically Mr. Stephen claims:

205 “Mr. O’Sheasy’s logic would suggest that the entire billing system exists  
206 for the residential customers and therefore 100% of the cost should be  
207 allocated to them and that other customer classes should be excluded from  
208 paying the costs, as their use of the system is only a “convenience”.  
209 (IIEC Ex. 3.0, 13:11-14)

210 **Q. Is it true that if CA Distribution Study’s 100/0 cost split recommendation is**  
211 **followed, secondary customers would not pay their “fair share”?** (IIEC Ex. 3.0,  
212 **14:9-10)**

213 A. Ultimately, it is up to the Commission to decide what a “fair share” is. However, Mr.  
214 Stephen’s analogy seems to assume that secondary voltage customers would not pay any  
215 costs under his portrayal of the word “convenience” in his hypothetical scenario. It  
216 should be recognized that secondary voltage customers would be paying a share of pole  
217 costs under the 100/0 scenario where the entire costs for shared poles are assigned as a  
218 shared primary voltage cost. Indeed, Staff witness Johnson recognizes that fact and is the  
219 basis for Mr. Johnson supporting an allocation to 100/0 for combination poles. (Staff Ex.  
220 4.0, 2:34-38)

221 **Q. Is Mr. Stephens’ assertion that use of the concept of “allocation by exclusion” is**  
222 **“[c]ommon in the industry and, in fact, is utilized in ComEd’s own cost of service**  
223 **study” correct?** (IIEC Ex. 3.0, 19:7-8)

224 A. I am unable to determine if the use of the “allocation by exclusion” concept is common in  
225 the industry but I can comment on Mr. Stephens’ examples of what he says are examples  
226 of “allocation by exclusion” in ComEd’s ECOSS. The first two items in Table 1 on page

227 19 of Mr. Stephens' rebuttal testimony (1) High Voltage ESS and (2) Fixture Included  
228 Lighting are the result of direct assignment of costs to the High Voltage Delivery Class  
229 and Fixture Included Lighting Delivery Class, respectively. These two items involve  
230 types of equipment for specific facilities used to serve specific needs of only customers in  
231 these two classes that are beyond what is used in a typical electric distribution system and  
232 thus the associated costs are directly assigned to those two classes. The third item, (3)  
233 Secondary Voltage Distribution Lines are not allocated to the larger nonresidential  
234 delivery classes listed in his table because those delivery classes generally connect  
235 directly to a transformer and do not utilize the secondary voltage distribution wires. The  
236 fourth item (4) Primary Voltage Transformers have its costs allocated to a specific cost  
237 category so the costs can be used to determine the Primary Voltage Transformer Charge  
238 for customers that elect to receive service from a transformer that delivers a primary  
239 voltage on the low side of the transformer. The fifth and sixth items, (5) Secondary  
240 Voltage Distribution Substations and (6) Secondary Voltage Transformers are not  
241 allocated to the Railroad Delivery Class because the customers in the Railroad Delivery  
242 Class receive service at a primary voltage without the use of ComEd provided  
243 transformation at all of their service points.

244 The Commission's concern should not be whether "allocation by exclusion" is ever used  
245 in ComEd's ECOSS, the concern should be that any delivery class can claim that they do  
246 not use, or use a *de minimis* share, of certain facilities on ComEd's distribution system,  
247 which would result in multiple complicated cost allocation proposals. The multiple  
248 proposals could result in continued controversy with other parties trying to determine

249 what facilities they do not use, or use a *de minimis* share of, to offset the cost allocation  
250 change proposed by the opposing parties.

251 **D. City/CUB**

252 **Q. How does City/CUB witness Bodmer respond to your rebuttal testimony regarding**  
253 **ComEd's cost of service study that the customer related costs are only 37.9% of the**  
254 **total costs for the Multi Family Without Electric Heat?**

255 A. Mr. Bodmer is correct that he uses a different categorization of costs for comparing customer  
256 related costs to total costs. Mr. Bodmer states that "ComEd does not like the way that I have  
257 classified their accounts" (City/CUB Ex. 2.0, 45:833), however, the categorization of  
258 customer related costs used in ComEd's calculation reflect cost functionalization and  
259 allocation methodologies employed in a manner consistent with the Commission's Order  
260 in Docket No. 10-0467. Mr. Bodmer's approach excludes certain customer related costs  
261 and a portion of the total costs, e.g. Illinois Electric Distribution Tax (IEDT), and  
262 therefore increased the percentage to 51.69%.

263 **Q. Mr. Bodmer also states that he provided his calculations of "the carrying cost" of a**  
264 **meter that you previously stated were unverifiable in your rebuttal testimony. Is**  
265 **this correct?**

266 A. Yes, Mr. Bodmer provided his calculations as part of his work papers in his direct  
267 testimony and also in his response to a subsequent data request submitted by ComEd.  
268 However, I disagree with Mr. Bodmer's characterization of his calculations that this  
269 should be the only meter related costs associated with a customer account.

270 **Q. Can you explain?**

271 A. Yes. Mr. Bodmer explains in his rebuttal testimony that he is just focusing on the capital  
272 cost of the meter and not any associated “overhead costs”, which can be misleading when  
273 reviewing the values allocated through an ECOSS model. The overhead costs that Mr.  
274 Bodmer refers to would include but are not limited to: operations and maintenance,  
275 depreciation, labor, general plant, taxes, and rate of return. In Table 6 (City/CUB Ex.  
276 1.0, at 63:925) of Mr. Bodmer’s direct testimony, Mr. Bodmer claims that the capital  
277 costs of meters as a percent of the total delivery costs is 1.45% which is understated  
278 compared with 7.65% of total cost of service that are allocated to metering services in the  
279 ECOSS, Schedule 2a (Lines 257 divided by line 260 of column “Total ICC”) of ComEd  
280 Ex. 3.16. Aside from the argument previously addressed in Mr. Ron Donovan’s rebuttal  
281 testimony (ComEd Ex. 9.0, 18-19: 363-393) regarding Mr. Bodmer’s claims of “account  
282 costs”, just the purchase price of a meter does not include all the costs associated with the  
283 infrastructure, personnel and services associated with a meter in order to render the  
284 charges on a monthly bill.

285 **E. CTA/Metra**

286 **Q. What is your reaction to Mr. Bachman’s proposal to examine the costs causation**  
287 **impacts on ComEd’s ECOSS for costs in geographical regions that do not provide**  
288 **direct service to the Railroad Delivery Class customers?**

289 A. As previously stated in my rebuttal testimony, ComEd Ex. 7.0 (22-23:361-372). ComEd  
290 does not directly track costs for ComEd facilities that do not directly serve Railroad  
291 Delivery Class customers, so without such cost data, such a study would be very difficult,  
292 if not impossible, to complete.

293 **F. REACT**

294 **1. Mr. Terhune**

295 Q. **Mr. Terhune claims in his rebuttal testimony that ComEd concedes that both his**  
296 **methodology and the conclusions of his analysis are fundamentally sound. (REACT**  
297 **Ex. 5.0, 3:44-54) Do you agree?**

298 A. No, while Mr. Terhune repeats in his rebuttal testimony several statements from my  
299 rebuttal testimony and from my response to a data request in which I indicate that I do  
300 not dispute two of his mathematical computations, it is far overreaching to conclude that  
301 ComEd now agrees that his methodology and the conclusions of his analysis are  
302 fundamentally sound. In fact, Mr. Terhune conveniently does not include ComEd's  
303 response to data request REACT 5.04, provided in ComEd Ex. 14.03, which asks if  
304 ComEd believes Mr. Terhune's overall approach is reasonable. ComEd's concerns  
305 regarding Mr. Terhune's methodology and conclusions have not changed from my  
306 rebuttal testimony. (ComEd Ex. 7.0, 27:448-525)

307 **2. Mr. Merola**

308 Q. **REACT witness Merola claims that ComEd never complied with a Commission**  
309 **directive to revise the Switching Study analysis. (REACT Ex. 6.0, 7-8:141-157). Do**  
310 **you agree?**

311 A. No. ComEd did comply with this Commission directive. ComEd revised and provided  
312 the study in a response to a post record data request from the Administrative Law Judge  
313 in Docket No. 10-0467. That post record data request response together with the  
314 explanation that no costs needed to be reallocated as a result of the analysis was provided

315 in a work paper to the ICC Staff when ComEd made its compliance filing after the ICC  
316 entered its Order in that docket. That work paper was already provided to REACT  
317 attached to ComEd's response to data request REACT 4.03 in the instant proceeding. A  
318 copy of that data request response is attached to my surrebuttal testimony as ComEd Ex.  
319 14.04.

320 **III. STUDY TO FURTHER SEGMENT COMED'S DISTRIBUTION SYSTEM**

321 **Q. REACT witness Mr. Terhune argues that ComEd acknowledges it is feasible to**  
322 **perform a “[c]omprehensive approach to allocation for future rate design**  
323 **proceedings, involving a statistically valid sampling of the distribution delivery**  
324 **facilities used to provide delivery services to each customer class.” (REACT Ex. 5.0,**  
325 **13:262-265) Do you agree?**

326 **A.** No. Mr. Terhune did not provide any recommendation on what may be a valid sample  
327 size and he does not consider the size of ComEd's distribution system in which circuits  
328 are interconnected to provide a single reliable distribution system. Even if only 10% of  
329 the circuits are sampled, that is still 640 circuits comprising approximately 6,500 circuit  
330 miles and approximately 480,000 meter points. In addition, any such sampling process  
331 would not necessarily be the end of the review; if the results suggested any changes to  
332 cost allocations in the currently effective ECOSS, there would almost certainly be parties  
333 who disagree with the results.

334 **Q. IIEC witness Mr. Stephens argues Staff witness Mr. Peter Lazare's concerns related**  
335 **to cost assignment for secondary voltage customers (Docket 10-0467, Staff Ex. 26.0,**  
336 **16:355-358 and 17:384-369) are not well founded and the investigation proposed by**

337 **IIEC can address your concerns related to what Mr. Lazare identified. (IIEC Ex.**  
338 **3.0, 7:3-8) How do you respond?**

339 I think Mr. Stephens is over simplifying Mr. Lazare's concerns. Related to Mr. Lazare's  
340 points, there are cost allocation complexities related to extension of three-phase facilities  
341 that are not required to serve single-phase load. For example, consider an underground  
342 single-phase primary voltage loop through a residential single family subdivision. The  
343 expense ComEd incurs to extend the single-phase facilities through the subdivision is  
344 precisely the type of cost that Mr. Stephens and Mr. Terhune argue should not be  
345 allocated to the types of nonresidential customers they represent. On the other hand, if  
346 one considers a converse situation in which the local park district with three-phase load  
347 locates (or located when the subdivision was developed) a facility in the center of the  
348 subdivision resulting in ComEd extending a three-phase primary voltage conductor  
349 through this subdivision in addition to, or instead of, the lower cost single-phase primary  
350 voltage conductor for the residential single-phase load; one could argue that the  
351 additional higher cost of the three-phase primary should not be allocated, or only the  
352 single-phase cost equivalent should be allocated, to residential customers because the  
353 three phase conductor is not necessary to serve their single-phase load. As this example  
354 illustrates, it would be difficult, complex, and subjective to determine under what  
355 circumstances and how much three-phase facilities are used and not used by single-phase  
356 customers.

357 **Q. How does this compare to the point that was being made by Staff witness Mr.**  
358 **Johnson when he stated: "[t]he Commission should exercise caution when**

359 **considering a request for certain segments of the distribution system to be excluded**  
360 **from the revenue requirement for one class without applying the same approach to**  
361 **all other classes. The result may be the reallocation of costs between classes that is**  
362 **not equitable because each class' full responsibility for costs associated with the**  
363 **distribution system have not been precisely or accurately taken into account in a**  
364 **consistent manner. Accordingly, I recommend the Commission reject REACT's,**  
365 **IIEC's, and CTA/Metra's proposals regarding the allocation of the**  
366 **primary/secondary distribution system" (Staff Ex. 4.0, 18:423-431)**

367 A. Mr. Johnson's point is similar because an equitable cost assignment may not be easily  
368 measureable. Mr. Johnson is referring to a similar hypothetical scenario where an ELL  
369 customer locates near a secondary voltage customer and ComEd's facilities need to be  
370 larger or different to provide service to that ELL customer and the costs for those larger  
371 facilities could be incurred by residential customers. Consequently, Mr. Johnson  
372 suggests the Commission should exercise caution in trying to segment a precise cost  
373 assignment that may not result in equitable cost responsibility across all delivery classes.

374 Q. **Do you have any other examples related to Mr. Johnson's concern with equitable**  
375 **cost allocation?**

376 A. Yes, I have concerns with cost allocations related to circuits that operate at 12 kV versus  
377 4 kV. For ComEd's approximately 6,400 circuits, approximately 61% extend at only 12  
378 kV, 16% extend at a combination of 12 kV and 4 kV, 17% extend at only 4 kV, and  
379 roughly 6% extend at voltages higher than 12 kV.

380 It is important to recognize that even if one portion of the circuit operates at 12 kV and  
381 another portion operates at 4 kV, both portions are constructed with the same  
382 construction configuration (i.e., similar sized poles, wire, cross arms etc.) and  
383 consequently the cost to construct and maintain the 12 kV and 4 kV portion of circuits are  
384 almost identical. The customers that locate on the 4 kV portion of the circuit do not  
385 cause ComEd to incur any considerable cost differences to provide electric service versus  
386 a customer that locates a few hundred feet away on the 12 kV portion of the circuit. If  
387 ComEd were to segment costs between the different voltage levels, it is only fair to have  
388 a separate cost allocator for each of the voltage levels. This would require ComEd to  
389 assign all 4.8 million service points to one, two, or even three of such new voltage  
390 differentiated cost allocators (i.e., if the path of service to the meter point is 34 kV to 12  
391 kV to 4 kV then three allocators could apply). Trying to measure how much of each  
392 circuit is used by each delivery class and what voltage the circuit is operating at before,  
393 at, and after the service point to a customer's premises would be a labor intensive study  
394 that may ultimately result in no change in cost allocation because new cost allocators  
395 should be developed for each operating voltage to properly assign costs.

396 **III. CONCLUSION**

397 **Q. Does this complete your surrebuttal testimony?**

398 **A. Yes**