

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

COMMONWEALTH EDISON COMPANY :
: **Docket No. 10-0467**
Proposed general increase in electric :
rates :

Direct Testimony and Exhibits of

Robert R. Stephens

On behalf of

Illinois Industrial Energy Consumers

Project 9351
November 19, 2010



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Direct Testimony of Robert R. Stephens

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A My name is Robert R. Stephens and my business address is 16690 Swingley Ridge
3 Road, Suite 140, Chesterfield, Missouri 63017.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and a principal of Brubaker &
6 Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPER-**
8 **IENCE.**

9 A The relevant educational and professional background information is set forth in
10 Appendix A to my testimony.

11 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

12 A I am testifying on behalf of the Illinois Industrial Energy Consumers (“IIEC”). IIEC
13 members have facilities and operations located in the Commonwealth Edison
14 Company (“ComEd” or “Company”) service territory and are customers of the utility.

15 **Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?**

16 A In addition to introducing the other IIEC witnesses and the topics they cover, I will
17 address revenue allocation, rate design issues and one cost allocation issue.

18 The fact that I do not address an issue should not be interpreted as tacit
19 approval for any position taken by ComEd.

20 **Q WHAT OTHER WITNESSES ARE TESTIFYING ON BEHALF OF IIEC IN THIS**
21 **PROCEEDING?**

22 A My BAI colleagues, Michael Gorman and David Stowe, are also testifying. Mr.
23 Gorman (IIEC Exhibit 1.0) has addressed issues related to ComEd's proposed
24 revenue requirement, including its return on equity and overall rate of return and a
25 corrective adjustment to ComEd's pro forma test year rate base adjustment for post-
26 test year plant additions. In accordance with the schedule set forth by the
27 administrative law judges in this case, Mr. Gorman's direct testimony and exhibits
28 were prefiled on October 26, 2010. Mr. Stowe (IIEC Exhibit 3.0) addresses issues
29 related to ComEd's cost of service study, including refinements to ComEd's primary
30 and secondary voltage facilities analysis ("P/S analysis"), which is an important input
31 to the cost of service analysis.

32 **I. Summary of Testimony**

33 **Q PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

34 A My testimony can be summarized as follows:

- 35 1. With respect to interclass revenue allocation, I agree with ComEd witness
36 Alongi's proposal to continue the Commission's directive established in the
37 last ComEd rate case, Docket No. 07-0566, to move the Extra Large Load
38 Delivery Class ("ELL") and High Voltage Delivery Class ("HV") rates
39 toward cost of service in a four-step process. This means that, as the
40 second-step of the four-step process, the Distribution Facilities Charges
41 ("DFC") for these classes should be moved 33% of the remainder of the
42 way toward cost of service. However, I disagree with Mr. Alongi's
43 proposal to deviate from the Commission's process as relates to the
44 Railroad Delivery Class, where he proposes only 10% movement toward
45 cost of service.
- 46 2. In addition to the Commission's four-step process, it is important that
47 protections be put in place to ensure that undue rate impacts are avoided
48 with respect to all rate classes, not just the three classes mentioned
49 above. Accordingly, and consistent with the Commission's recent decision

50 involving the Ameren Illinois Utilities, in Docket No. 09-0306, *et al.*, I
51 recommend that the Commission approve a rate moderation plan whereby
52 no customer class or sub-class experiences an increase in delivery
53 charges of more than 150% of the overall ComEd revenue increase,
54 inclusive of the impact of the Illinois Electricity Distribution Tax ("IEDT").
55 For example, should the Commission approve a 20% increase in ComEd's
56 delivery revenues in this case, no class or sub-class should receive an
57 increase greater than 30% (20% x 1.50).

58 3. With respect to rate design, I recommend the Commission reject ComEd's
59 rates provided in direct testimony, as they are based on a cost of service
60 study that does not comply with the Commission's Order in Docket No.
61 08-0532 and do not recognize voltage differences in rates. In addition,
62 ComEd's cost of service study in its supplemental direct testimony does
63 not comply with the Commission's Order in Docket No. 08-0532, as
64 addressed by IIEC witness Stowe. I also recommend the Commission
65 reject ComEd's "exemplar" rates that result from the creation of a new
66 Primary Voltage Delivery ("PVD") Class as a method to comply with the
67 Commission's directive in Docket No. 08-0532 to present voltage
68 differentiated rates within the nonresidential classes. The exemplar PVD
69 Class, including the associated effects on existing delivery classes,
70 represent a poor way to implement the Commission's directive. It is
71 unnecessarily complex and leads to illogical rate relationships.

72 4. A simpler and better approach to implementing the Commission's directive
73 to present voltage differentiated rates is to acknowledge the delivery
74 voltage differences within the traditional nonresidential classes, and to
75 establish DFCs that reasonably reflect the differences in cost to serve.
76 Thus, in the nonresidential classes that are not exclusively, or nearly
77 exclusively, comprised of primary or secondary customers, I recommend
78 establishment of two subclasses for the purpose of DFC rates.

79 5. I have provided IIEC recommended rates, which are based on ComEd's
80 requested increase, IIEC's modified version of the cost of service study,
81 and the interclass revenue allocation and rate design approaches
82 mentioned above. These are shown on IIEC Exhibit 2.1.

83 6. Also with regard to rate design, I recommend against ComEd's proposal to
84 charge separately on customer bills for the IEDT. Special treatment for
85 this tax through itemization and separate collection on customers' bills is
86 unnecessary and unwarranted. There is no good reason to separately
87 identify and recover this expense, as compared to other utility expenses.
88 A better approach is simply to collect this utility expense as other utility
89 expenses are collected, namely, through ComEd's base rates.

90 7. Also, with regard to the IEDT, I recommend a different allocation approach
91 in the cost of service study, which would better reflect cost causation than
92 the energy allocator used by ComEd. My allocation method, which splits
93 the IEDT to distinguish the 1997 level of tax and the post-1997 change in

94 the level of tax, better reflects cost causation. My method allocates the
95 pre-1997 level of tax on the basis of plant in-service and the post-1997
96 level of tax on the basis of kWh delivered. It recognizes the basis for the
97 1997 level of tax, which was invested capital (with the tax allocated on the
98 basis of plant in-service), as well as the causes of growth in ComEd's tax
99 responsibility since 1997. This allocation is supported by the fact that a
100 utility's tax liability in any given year is not driven exclusively by its energy
101 deliveries. In fact, for ComEd, the correlation between its energy
102 deliveries and annual tax burden is relatively weak.

103 **II. Interclass Revenue Allocation**

104 **Q WHAT IS INTERCLASS REVENUE ALLOCATION?**

105 A The interclass revenue allocation is one of the steps in the Commission's rate setting
106 process. The rate setting process comprises three primary steps. First is the
107 **revenue requirements** step, in which the parties address, and the Commission
108 determines, the total amount of revenue that a utility should be able to recover
109 through rates, based on a test year. These determinations consider the appropriate
110 levels of expenses, rate base investments, and rate of return on rate base. Many
111 witnesses have provided testimony and exhibits related to revenue requirements in
112 this case, including IIEC's witness Mr. Gorman.

113 Once the total revenue requirement is determined for the utility, the
114 determination must be made regarding how much of the revenue requirement should
115 be recovered from each of the rate classes. I will refer to this process as the
116 **interclass revenue allocation**. In determining the proper interclass revenue
117 allocation, it is customary to utilize a class cost of service study for guidance. A
118 properly conducted class cost of service study will provide an objective and
119 reasonable estimate of the costs incurred by the utility to serve each of the customer
120 classes. Not surprisingly, class cost of service studies can be complex and, when

121 utilized as the basis for interclass revenue allocation and rate design, can be the
122 focus of disagreement among parties in the cases.

123 The final step of the rate setting process is **rate design**. In this step,
124 individual rate charges are established to recover the portion of the revenue
125 requirement that is allocated to each class, taking into account items such as rate
126 continuity, gradualism, and avoidance of rate shock. Equitable and efficient rates are
127 established when they are designed to collect revenues based on the costs caused
128 by each class, taking into account appropriate rate design criteria.

129 **Q WHAT DOES COMED PROPOSE WITH RESPECT TO INTERCLASS REVENUE**
130 **ALLOCATION?**

131 A ComEd's proposal is presented primarily by its witness Mr. Lawrence Alongi, in his
132 Direct Testimony, ComEd Ex. 16.0 2nd Revised (at pages 27-34). Also, in his
133 Supplemental Direct Testimony, ComEd Ex. 21.0 Revised (at pages 5-15), Mr. Alongi
134 indirectly addresses this rate setting step in the context of ComEd's modified P/S
135 analysis and the presentation of "exemplar" rates associated with its illustrative PVD.¹
136 I will respond to both testimonies, in turn.

137 With respect to the ELL and the HV, ComEd proposes to move the DFC 33%
138 of the way from current DFCs toward cost-based DFCs. This movement is the
139 second step in a four-step progression to cost-based DFCs that was begun in
140 ComEd's last (Docket No. 07-0566) rate case.

141 As Mr. Alongi explains at page 12 of his direct testimony, 33% movement
142 would correspond to the second step in the four-step process outlined by the

¹In addition, ComEd witness Mr. Robert Garcia addresses certain aspects related to interclass revenue allocation in his Supplemental Direct Testimony, ComEd Ex. 24.0; however, my testimony focuses on the overall approach outlined by Mr. Alongi in his direct testimony.

143 Commission in Docket No. 07-0566. According to Mr. Alongi, in that case, the
144 Commission stated that:

145 “an allocation that more closely reflects a proper cost of service would
146 be reflected in a four-step, gradual movement toward rates based on
147 the ECOSS [Embedded Cost of Service Study] for Extra Large Load,
148 High Voltage, and Railroad Delivery Classes. Thus, the Commission
149 authorizes a 25% movement toward ECOSS based rates for these
150 customers.” (ComEd Ex. 16.0 2nd Revised at page 12)

151 With respect to the Railroad Delivery Class, ComEd proposes to lower the assumed
152 cost of service by \$452,000, within the cost of service study and to move the Railroad
153 Delivery Class’s DFC only 10% toward a “cost-based” rate from the currently effective
154 DFC. As indicated by Mr. Alongi, ComEd believes it is appropriate to move the
155 Railroad Delivery Class’s DFC to a cost-based rate very gradually.

156 **Q DO YOU AGREE WITH COMED’S APPROACH AS IT RELATES TO THE ELL AND**
157 **HV CLASSES?**

158 **A** Yes, I do. In addition, I believe the 33% movement should be applied to the Railroad
159 Delivery Class, as well, consistent with the Commission’s Order in the last rate case.
160 In establishing the four-step process in the last rate case, not only did the
161 Commission recognize that the problems with ComEd’s cost of service studies, which
162 made faster movement toward a flawed target inappropriate, it also recognized the
163 importance of gradualism in moderating rate impacts. Disturbing the Commission’s
164 four-step plan is not appropriate at this time. I acknowledge, however, that
165 exceptions may be needed to moderate large rate changes, depending on the cost of
166 service study ultimately utilized and the revenue requirement ultimately approved in
167 this case.

168 Q PLEASE EXPLAIN YOUR LAST POINT, THE POTENTIAL NEED TO MODERATE
169 LARGE RATE CHANGES.

170 A As mentioned previously, efficient pricing occurs when rates are based on cost of
171 service. I have no objection to the Commission's four-step plan, described above, to
172 move rates toward cost of service over time. However, it is also important that
173 protections be put in place to ensure that large rate impacts are avoided with respect
174 to all rate classes, not just the three classes mentioned above. In its recent Order in
175 Docket Nos. 09-0306, *et al.*, involving the Ameren Illinois Utilities, the Commission
176 stated:

177 "Mitigation strategies serve an important role in promoting rate
178 continuity and rate stability while considering potential bill impacts that
179 could result as rates are moved toward the actual cost of service."
180 (*Order*, Docket No. 09-0306, *et al.*, April 29, 2010, at page 287)

181 In the conclusion of its rate moderation discussion in the same Order, the
182 Commission made the following statement:

183 "It is a widely held ratemaking policy that rates should be designed to
184 reflect cost causation, maintain gradualism, and avoid rate shock."
185 (*Id.*, at page 295)

186 Accordingly, the Commission approved a rate moderation plan in Docket
187 No. 09-0306, *et al.*, whereby no customer class or sub-class experienced increases in
188 delivery charges more than 150% of the applicable utility increase, inclusive of the
189 impact of the revised PURA Tax² allocation. I recommend the same rate moderation
190 approach be adopted in this case. That is, no rate class or sub-class should receive
191 an increase in delivery rates greater than 150% of the ComEd system average
192 increase, including the effects of the IEDT. For example, should the Commission
193 approve a 20% increase in ComEd's delivery revenues in this case, no class or

²PURA Tax refers to the Public Utility Regulatory Act Tax, which is the same tax that ComEd refers to as the IEDT (Illinois Electric Distribution Tax), in this case.

194 sub-class should receive an increase greater than 30% (20% x 1.50). I note that this
195 approach (other than the element of applying the criterion at the sub-class level) is
196 consistent with the recommendation made by ICC Staff in the Ameren case.³

197 **Q WHAT IMPACT WOULD YOUR RATE MODERATION PLAN HAVE ON THE**
198 **RATES ULTIMATELY APPROVED BY THE COMMISSION IN THIS CASE?**

199 A It is impossible to know at this time. The impact will depend on many Commission
200 determinations related to revenue requirements, cost of service, and rate design. It is
201 possible that decisions in these areas could render the effect of this rate moderation
202 protection minimal or moot. However, having an improved rate moderation plan in
203 place will provide a level of protection, should a combination of Commission decisions
204 have large impacts on any particular rate class or sub-class.

205 **III. Rate Design**

206 **Q PLEASE DESCRIBE COMED'S PROPOSED RATE DESIGN IN THIS CASE, AS IT**
207 **RELATES TO LARGE NONRESIDENTIAL CUSTOMERS.**

208 A ComEd addresses rate design issues relating to large nonresidential customers in
209 both its direct testimony and its supplemental direct testimony, although ComEd does
210 not support the rate design presented in its supplemental direct testimony, as I will
211 discuss later.

212 ComEd witness Alongi addresses these issues, including his summary of
213 proposed charges on pages 12-23 of his direct testimony. In his direct testimony,
214 Mr. Alongi first addresses further movement to cost based rates for the ELL, HV and
215 Railroad Delivery Classes, as discussed earlier in this testimony. Next, he describes

³See *Id.*, at pages 289-291.

216 changes to the rates for the HV Class to reduce the number of customer charges,
217 standard metering charges and standard voltage DFCs. Mr. Alongi claims that these
218 proposed changes will make the rate structure simpler for customers to understand
219 and for ComEd to administer. Finally, he explains ComEd's proposal to establish and
220 to apply new per kWh charges to recover ComEd's IEDT expense.

221 Separately, at page 5 of his direct testimony, Mr. Along states that ComEd's
222 proposed rate design implements several, but not all, of the Commission's directives
223 in the Rate Design Investigation Order, Docket No. 08-0532. Mr. Alongi states that it
224 was impossible for ComEd to implement and incorporate all the Commission's
225 directives in the time between the Order and the filing of its rate case. As a result, he
226 described ComEd's plan to file supplemental direct testimony to address and
227 incorporate the Commission's directives not reflected in ComEd's initial filing.

228 **Q DO YOU HAVE ANY DISAGREEMENTS WITH THE THREE RATE DESIGN**
229 **CHANGES PROPOSED BY MR. ALONGI IN HIS ORIGINAL DIRECT**
230 **TESTIMONY?**

231 **A** First, as I have previously indicated, I agree with ComEd's proposal for further
232 measured movement toward cost based rates in accordance with the Commission's
233 four-step plan, as relates to the ELL and HV Classes. I disagree with the need for
234 deviation that Mr. Alongi proposes for the Railroad Delivery Class. Second, I have no
235 objection to Mr. Alongi's proposal to reduce the number of charges for the HV Class.
236 Finally, I object to ComEd's proposal to establish a separate charge for IEDT.

237 **Q WHY DO YOU DISAGREE WITH COMED'S PROPOSAL RELATED TO THE**
238 **RAILROAD DELIVERY CLASS?**

239 A As mentioned, I have no objection to a second step in movement toward cost based
240 rates, as the Commission directed in its last rate case. However, as Mr. Alongi
241 describes at pages 13-14 of his direct testimony, ComEd already proposes to
242 reallocate approximately \$452,000 away from the Railroad Delivery Class, to other
243 classes, and then to move the Railroad Delivery Class DFC only 10% toward a cost
244 based rate for the class. I did not find Mr. Alongi's reasons for his proposed deviation
245 from the Commission's Order in this regard to be persuasive. Moreover, if the
246 Commission accepts IIEC's suggested modifications to implement its Rate
247 Investigation Order, such special treatment will not be necessary. The Railroad
248 Delivery Class takes service at primary voltages, and a proper allocation of primary
249 versus secondary facilities would bring the Railroad Delivery Class's rates more in
250 line with cost, without the need for "special" protections. Furthermore, my
251 recommended rate moderation proposal would provide a level of protection from
252 large rate impacts for this class.

253 **Q WHY DO YOU DISAGREE WITH COMED'S PROPOSED CHANGE TO THE**
254 **COLLECTION OF THE IEDT?**

255 A The IEDT is a tax assessed on ComEd, like much income tax, property taxes, and
256 certain other taxes. It is not a tax on customers that the utility merely collects. Such
257 taxes constitute one category of expenses ComEd faces in the course of doing
258 business. Special treatment for this tax through itemization and separate collection
259 on customers' bills is unnecessary and unwarranted. Were separately identifying and

260 recovering this expense to become the standard for all utility expenses, even the
261 simplest customer bills would become several pages and hundreds of lines long.

262 **Q WHAT IS COMED'S RATIONALE FOR ESTABLISHING A SEPARATE PER KWH**
263 **CHARGE FOR IEDT?**

264 A ComEd's rationale is not stated in its testimony.

265 **Q ARE YOU AWARE OF ANY CHANGES IN THE LAW RELATED TO THE IEDT OR**
266 **IN COMMISSION RULES THAT WOULD MANDATE, OR WOULD HAVE**
267 **PRECIPITATED, A CHANGE IN COMED'S PROPOSED RECOVERY APPROACH**
268 **FOR THIS TAX?**

269 A No. However, I am aware that the Commission recently approved such a change in
270 the Ameren Illinois Utilities' rate cases, Docket No. 09-0306, *et al.*

271 **Q ARE YOU FAMILIAR WITH THIS ISSUE AS IT WAS LITIGATED IN THE AMEREN**
272 **ILLINOIS UTILITIES' CASE?**

273 A Yes, I am. I testified on behalf of IIEC in that case as to the proper allocation of what
274 ComEd refers to as the IEDT costs and the collection of same. My participation in
275 that case caused me to research and become familiar with the tax, including its
276 history and substantive composition. In Docket No. 09-0306, *et al.*, Ameren
277 proposed, for the first time, to allocate its distribution tax costs on the basis of energy,
278 rather than on the basis of plant in-service, which it had done in all previous delivery
279 service rate cases involving each of the Ameren companies. I testified against
280 Ameren's abrupt change in allocation and against the Staff proposal to establish a
281 separate per kWh charge related to recovery of this tax. I also proposed an

282 alternative allocation method that recognized both the history of the tax, the causative
283 elements of the tax imposed, and the potential for change in the future.

284 Unfortunately, my testimony and IIEC's argument did not prevail in the
285 Commission's Order in that docket. In this case, I have attempted to do a better job
286 in explaining to the Commission (a) why allocation of this tax purely an energy basis
287 is not reflective of cost causation, even though ComEd has allocated it this way since
288 1999,⁴ and (b) why there is no need or reason to collect it as a separate item on
289 customer bills. I will address the allocation subject in greater detail later in this
290 testimony.

291 **Q PLEASE DESCRIBE COMED'S SUPPLEMENTAL DIRECT TESTIMONY AS IT**
292 **RELATES TO RATE DESIGN ASSOCIATED WITH LARGE NONRESIDENTIAL**
293 **CUSTOMERS.**

294 **A** ComEd's testimony in this regard is contained in the Supplemental Direct Testimony
295 of ComEd witness Alongi, ComEd Ex. 21.0 Revised. The main rate design element
296 of Mr. Alongi's supplemental direct testimony regarding those customers is the
297 establishment of an "exemplar" PVD Class and the associated "exemplar" charges for
298 that hypothetical class. Mr. Alongi explains his rationale and method for establishing
299 the exemplar PVD Class at pages 15-17 of his supplemental direct testimony. The
300 charges for the PVD Class and the associated impacts on other classes caused by
301 establishment of the PVD Class are shown in Tables SD3, SD4 and SD5, on pages
302 9-15 of Mr. Alongi's supplemental direct testimony.

⁴In ComEd's first delivery service rate case, Docket No. 99-0117, as one of many new rate cost and rate elements, ComEd proposed, and the Commission accepted a change to the allocation of the distribution tax. To my knowledge, the issue has not been specifically litigated in any subsequent ComEd cases and, therefore, the Commission has not had to make specific findings on ComEd's allocation approach since the original delivery service rate case.

303 Q WHY DID COMED PRESENT AN EXEMPLAR PVD CLASS AND ASSOCIATED
304 EXEMPLAR CHARGES?

305 A As Mr. Alongi acknowledges on page 15 of his supplemental direct testimony, in the
306 Rate Design Investigation docket (08-0532) the Commission directed ComEd to
307 consider redefining its customer classes on the basis of voltage or equipment usage
308 to better reflect the cost of service. The Commission also directed that ComEd
309 identify customers receiving power at voltage levels of 4 kV or higher as primary
310 system customers and customers receiving power at voltage levels below 4 kV as
311 secondary system customers, and that rates should then be charged accordingly.

312 The relevant passages from the Commission's Order in the Rate Design
313 Investigation docket are excerpted below:

314 "Consistent with the foregoing, we direct ComEd to develop and
315 provide in its next rate proceeding: 1) direct observation or sampling
316 and estimation techniques of ComEd's system to develop more
317 accurate and transparent differentiation of primary and secondary
318 costs; 2) other utilities' methods of differentiating primary and
319 secondary systems and costs; 3) function based definitions of service
320 voltages for facilities other than the line transformers already
321 addressed; 4) an analysis of which customer groups are served by
322 which system service components; and 5) consideration of redefining
323 rate classes on the basis of voltage or equipment usage to better
324 reflect the cost of service." (Order, Docket No. 08-0532, April 21, 2010,
325 at page 40) (emphasis added)

326 Later, in its findings and ordering paragraphs, the Commission found and
327 ordered as follows:

328 "The Commission, having considered the entire record herein and
329 being fully advised in the premises, is of the opinion and finds that: ...
330 (4) the following decisions are final and should be reflected in the
331 ECOSS for consideration in any subsequent action in the Company's
332 next rate case:

333 a) customers receiving power at 4kV or higher are primary
334 system customers who should be identified. Rates charged to these
335 customers should be adjusted to reflect that they do not use the
336 secondary distribution system;

337 b) customers receiving power at levels below 4kV should be
338 considered secondary system customers and charged accordingly;...”
339 (*Id.*, at page 84) (emphasis added)

340 * * *
341 IT IS HEREBY ORDERED that the decisions set out in Finding (4)
342 hereinabove are final and should be reflected in the Company’s next
343 rate case.

344 **Q WHAT DO YOU CONCLUDE FROM THE COMMISSION’S DIRECTIVES**
345 **EXCERPTED ABOVE?**

346 A I conclude that the Commission wants rates in this case that distinguish between
347 customers served at primary voltage versus secondary voltage.

348 **Q DO THE EXEMPLAR RATES PROVIDED IN COMED’S SUPPLEMENTAL DIRECT**
349 **TESTIMONY ADEQUATELY ADDRESS THE COMMISSION’S DIRECTIVE?**

350 A No, I do not believe they do. First, I note again that ComEd distances itself from the
351 exemplar rates offered in its supplemental direct testimony. In response to a data
352 request, ComEd states:

353 “ComEd is not proposing that the exemplar rate design and structure
354 presented in its supplemental direct testimony (ComEd Ex. 21.0
355 Revised) should be adopted. ComEd’s proposed rate design and
356 structure is presented in ComEd’s direct testimony (ComEd Ex. 16.0
357 Revised).” (ComEd’s response to Data Request CG 2.10)

358 Thus, the rate design ComEd is actually proposing in this case is inconsistent with the
359 Commission’s directive in its Order in Docket No. 08-0532.

360 Second, ComEd’s establishment of an entirely new delivery class, the PVD
361 Class, and the associated effects on existing delivery classes is a poor way to
362 implement the directive for voltage differentiated rates. It improperly groups dissimilar

363 customers into the same class, is unnecessarily complex and leads to illogical rate
364 relationships. It should be rejected.

365 **Q WHY DO YOU BELIEVE COMED'S PROPOSAL IMPROPERLY GROUPS**
366 **CUSTOMERS?**

367 A ComEd established the PVD Class by pulling the customers taking service at primary
368 voltage from five different delivery classes, ranging from the Small Load Delivery
369 Class (below 100 kW), all the way up to the ELL Class (above 10 MW) and put them
370 into the same class. Then, ComEd established a customer charge, meter charge and
371 a single DFC applicable to all members of that class, for their load served at primary
372 voltage. This lumping together of customers so dissimilar in terms of size and load
373 characteristics, runs counter to ComEd's tradition and to sound rate design.

374 **Q WHY DO YOU BELIEVE THAT ESTABLISHMENT OF THE PVD CLASS CREATES**
375 **AN UNNECESSARY COMPLICATION?**

376 A ComEd's existing delivery classes, e.g., ELL, would become secondary service - only
377 classes, with fewer customers and significantly different delivery charges. As a result,
378 if ComEd's "exemplar" approach were to be implemented, some customers would find
379 themselves in an entirely different rate class and others, who were not moved to a
380 different rate class, would find themselves subject to significantly different rates.

381 ComEd's creation of a new PVD Class is not warranted. In addition, I will state
382 that it is far from what I had envisioned for voltage differentiation when I
383 recommended in the Rate Design Investigation docket that the Commission require

384 such rates to more fully reflect the differences in cost between primary and secondary
385 customers.⁵

386 **Q CAN YOU PROVIDE AN EXAMPLE WHERE COMED'S ESTABLISHMENT OF THE**
387 **PVD CLASS AND THE ASSOCIATED IMPACTS ON CHARGES CREATES**
388 **ILLOGICAL RATE RELATIONSHIPS?**

389 A Yes. This can be observed directly by viewing Mr. Alongi's Tables SD3 and SD4 in
390 his supplemental direct testimony. Consider, for example, a customer with demand
391 above 10 MW and served at either primary or secondary voltage. If served at primary
392 voltage, such a customer would be in the PVD Class of ComEd's exemplar rates. If
393 served at secondary voltage, the customer would be in the ELL Class. From Table
394 SD4, we can see that the DFC for such a customer served a primary voltage would
395 be \$4.53 per kW. Yet, as shown on Table SD3, if the same customer is served at
396 secondary voltage, the associated charge would be \$4.20 per kW. Thus, ComEd
397 would charge a higher price to the customer served at primary voltage than it would if
398 it was served secondary voltage, which is counter to the Commission's findings in
399 Docket No. 08-0532.

400 **Q DO YOU HAVE A RECOMMENDATION FOR A SIMPLER AND BETTER**
401 **APPROACH TO IMPLEMENTING THE COMMISSION'S DIRECTIVE TO PRESENT**
402 **VOLTAGE DIFFERENTIATED RATES?**

403 A Yes, I do. I recommend the Commission reject ComEd's exemplar PVD Class,
404 consisting of customers from several existing nonresidential classes. A simpler,

⁵I was the witness in Docket No. 08-0532 who originally suggested that voltage differentiated rates should be examined.

405 better, and less disruptive approach is to simply acknowledge the delivery voltage
406 differences within the existing nonresidential classes and to establish DFCs for
407 primary and secondary sub-classes within the Medium Load, Large Load, Very Large
408 Load and ELL Delivery Classes that reasonably reflect the differences in the cost of
409 service.⁶ For example, within the ELL Class, all customers would pay the same
410 customer charge, meter charge, and IEDT (if applicable). Only the DFCs would differ,
411 to reflect the differing costs to serve these sub-classes.

412 **Q IS THERE SUFFICIENT INFORMATION TO ALLOW THE VOLTAGE DISTINCTION**
413 **IN RATES WITHIN EXISTING CLASSES AS YOU PROPOSE?**

414 A Yes, the analysis ComEd performed in establishing the PVD Class is useful in this
415 regard. ComEd analyzed its customer set to determine which customers are served
416 at primary voltages and, thus, which to include in the PVD Class. This provides the
417 necessary information for determining the separation into sub-classes and
418 differentiation in DFCs within the existing classes.

419 **Q HAS COMED PROVIDED A COST OF SERVICE STUDY WITH PRIMARY AND**
420 **SECONDARY SUB-CLASSES WITHIN EXISTING CLASS DEFINITIONS IN ITS**
421 **TESTIMONY IN THIS CASE?**

422 A No.

⁶For each of these classes, a significant portion of the demand, i.e., greater than 1 percent, is associated with primary voltage customers. Another class, the Small Load Delivery Class has a very small fraction of customers, 0.04 percent, that take service at primary voltage, which comprise a very small fraction, 0.1 percent of the class load. Because of these very small fractions of customers and loads, and for the sake of simplicity, I recommend there be a single DFC for all customers in this class.

423 Q HAS IIEC CONDUCTED A COST OF SERVICE STUDY WITH THE VOLTAGE
424 DIFFERENTIATION OF SUB-CLASSES WITHIN EXISTING CLASS DEFINITIONS
425 AS YOU DESCRIBED?

426 A Yes. At my request, IIEC witness David Stowe analyzed the cost of serving each of
427 the classes and sub-classes, as I defined them. In his direct testimony in this case,
428 IIEC Exhibit 3.0, he explains the steps he took to analyze the costs of serving these
429 sub-classes and to develop appropriate allocation factors.

430 Q DO YOU HAVE A RECOMMENDED RATE DESIGN THAT REFLECTS YOUR
431 PROPOSAL FOR VOLTAGE DIFFERENTIATED RATES?

432 A Yes, I do. This is shown in IIEC Exhibit 2.1, attached. These rates were developed
433 using methodologies similar to those ComEd used in developing its rate design for
434 the various classes, including the movement of 33% of the way toward cost for the
435 ELL, HV, and Railroad Delivery Classes. Because the differentiation between
436 primary and secondary DFCs results in a reduction in the costs allocated to some
437 primary customers, moving only 33% of the way toward cost has the effect of
438 lowering the reduction (i.e., raising the rate) for these customers. However, as I
439 mentioned previously, this design is consistent with the four-step plan set forth by the
440 Commission in Docket No. 07-0566 which, in my opinion, should be maintained.

441 My recommendation rejects ComEd's "exemplar" rate design contained in its
442 supplemental direct testimony. Also, I note that my proposed rate design on IIEC
443 Exhibit 2.1 leaves the IEDT as a separate line item, for simplicity. If the Commission
444 accepts my recommendation to leave this expense in the DFCs, it would be a
445 straightforward matter to modify the rate design to incorporate this change, since the
446 tax is currently collected in that manner.

447 **IV. Allocation of IEDT Costs**

448 **Q EARLIER YOU STATED THAT YOU DISAGREE WITH COMED'S ALLOCATION**
449 **OF THE IEDT PURELY ON AN ENERGY BASIS, IN PART BECAUSE OF ITS**
450 **HISTORY. PLEASE PROVIDE BACKGROUND ON THE TAX REFERRED TO AS**
451 **IEDT BY COMED.**

452 A The IEDT is assessed to ComEd pursuant to the authority of the Public Utilities
453 Revenue Act. Prior to the 1997 deregulation law, the tax was imposed on electric
454 utility invested capital at a rate of 0.8% of the invested capital for the taxable period.
455 Since 1997, the IEDT is assessed using a tiered structure of rates for delivery
456 volumes that, in design and application, approximates the prior invested capital tax
457 responsibility of the utilities. Mr. Alongi states that the tax is imposed upon ComEd on
458 the basis of kWh delivered.⁷ However, this is far from the whole story as to the
459 "cause" of the tax, or as to the utility's tax liability in any given year.

460 **Q DO YOU HAVE AN UNDERSTANDING OF THE CHANGES MADE IN THE**
461 **DEREGULATION LAW OF 1997 TO THE TAX ON INVESTED CAPITAL?**

462 A Yes, while I am not an attorney, it is my understanding as a lay person that the 1997
463 change was designed to maintain "a comparable allocation among electric utilities in
464 this State for payment of taxes imposed to replace the personal property tax."
465 (35 ILCS 620/1a.). My understanding is bolstered by the existence of the cap on the
466 overall tax collections at the pre-1998 level of taxes, adjusted by inflation factors that
467 have nothing to do with kWh deliveries of energy.

⁷ComEd Ex. 16.0 Revised, at page 18.

468 Q HOW DO YOU RESPOND TO MR. ALONGI'S CLAIM THAT THE TAX IS IMPOSED
469 "ON THE BASIS OF KWH DELIVERED"?

470 A I disagree, at least in terms of cost causation. The current IEDT was not caused by
471 kWh sales or deliveries, and the amount of the tax for each utility is primarily a
472 function of the utility's past, i.e., 1997, levels of plant assets. The current IEDT
473 structure is designed to replicate the taxes imposed on invested capital that existed at
474 the time of the 1997 deregulation law, while maintaining a limited number of points of
475 collection. The levels of tax collected from the individual utilities today are attributable
476 primarily to the pre-1998 levels of invested capital of the Illinois utilities. Table 1,
477 below, shows the tiered IEDT quantification scheme.

	<u>Block Size</u> <u>(kWh)</u>	<u>Tax Rate</u> <u>(\$/kWh)</u>
First	500,000,000	0.00031
Next	1,000,000,000	0.00050
Next	2,500,000,000	0.00070
Next	4,000,000,000	0.00140
Next	7,000,000,000	0.00180
Next	3,000,000,000	0.00142
Over	18,000,000,000	0.00131

478 In terms of the quantification and assessment scheme, the level of the tax
479 caused the tiered kWh calculation scheme, not vice versa. The current tier levels and
480 rates appear custom-designed to collect approximately the same level of tax revenue
481 from each utility, and in total, as the utilities paid previously, based on invested

482 capital.⁸ Said another way, the higher a utility's level of invested capital in 1997, the
483 larger its IEDT responsibility today. Therefore, I disagree with the notion that kWh
484 sales cause the IEDT level for the ComEd. On a combined basis, the utilities in the
485 state paid about \$145 million in tax revenue in the 1997 time frame, which was based
486 on the prior tax on invested capital for all of the utilities. According to the Illinois
487 Department of Revenue, this amount would ensure that the new tiered quantification
488 mechanism was "revenue-neutral" to the prior method.

489 The growth in the IEDT levels above the pre-1998 levels is somewhat more
490 complicated in terms of cost causation. Because of the tiered rate calculation
491 scheme to determine the amounts due, increases in the IEDT could be said to be
492 caused by growth in kWh sales, but only to a point. A statutory cap on IEDT
493 revenues maintains the relationship to invested capital by limiting the overall
494 collections to the pre-1998 invested capital tax levels, i.e., the \$145 million, adjusted
495 for non-energy related inflation factors (lesser of 5% or Consumer Price Index). If the
496 cap is reached in any year, increases in the number of kilowatt-hours of energy
497 delivered by a utility do not translate directly to additional IEDT responsibility.
498 Revenues collected under the Public Utilities Revenue Act regulations in excess of
499 the cap in given year are refunded to all utilities in proportion to their payments.
500 Based on my information, through 2008, the cap has been exceeded in every year
501 since the 1997 change in the IEDT. This fact provides clear and unambiguous
502 evidence that the increase in kWh sales experienced by utilities in the State of Illinois
503 has not increased the real IEDT burden beyond the cap level, in any year since 1997
504 under the current structure. This is likely to be the case for the foreseeable future.

⁸As the only Illinois utility with deliveries over 18,000,000,000 kWh per year in 1997, the last block tax rate was only for ComEd and it, \$0.00131 per kWh, is ComEd's "marginal" tax rate.

505 The fact that the revenues collected from the restructured IEDT are capped to
506 equal those collected from the invested capital tax pre-1998 (adjusted for inflation),
507 indicates that the IEDT responsibility of a utility is caused primarily by that utility's
508 capital investment pre-1998, not by increases or decreases in kWh sales.

509 **Q IS IT POSSIBLE FOR A UTILITY'S IEDT BURDEN TO INCREASE OR DECREASE,**
510 **EVEN IF ITS LEVEL OF KWH DELIVERIES DOES NOT CHANGE?**

511 A Yes. In fact, this is precisely the case in years when the statewide cap is exceeded.
512 Furthermore, it is even possible for the utility's tax burden to go down, when its
513 deliveries go up, and vice versa. This further disproves the claim that the IEDT is
514 directly tied to kWh sales.

515 **Q CAN YOU ILLUSTRATE THIS PHENOMENON?**

516 A Yes. IIEC Exhibit 2.2 is an illustration of this phenomenon. This exhibit uses ComEd
517 as an example utility and combines the other utilities in the state for the sake of
518 illustration. In the Base Case, ComEd's calculated IEDT payment, based solely on
519 kWh deliveries, is \$100 million and the combination of the other utilities payments is
520 \$70 million. The total of all utilities, \$170 million, exceeds the "current" cap of
521 \$150 million by \$20 million, creating a refund situation.⁹ The \$20 million refund is
522 credited to the utilities in proportion to the amounts paid. Therefore, ComEd receives
523 a refund equal to 58.8% (i.e., $100 \div 170$) of \$20 million, or \$11.8 million. The other
524 utilities receive the remainder of the \$20 million refund (\$8.2 million). Considering the
525 refund, ComEd's actual tax burden for the Base Case is \$100 million (original

⁹Although the Base Case figures used are only for illustrative purposes, they are also reasonable approximations of the actual situation in 2009.

526 payment) minus \$11.8 million (refund), or \$88.2 million (net). IIEC Exhibit 2.2 then
527 shows 4 scenarios, increasing or decreasing ComEd's or the other utilities' payment
528 levels and shows the change in actual tax burden. These scenarios illustrate that
529 ComEd's actual IEDT burden can go up or down in ways that are not a direct result of
530 its delivery volumes and is largely dependent on the deliveries of the other utilities in
531 the state.

532 **Q WHAT DO YOU CONCLUDE FROM THIS ILLUSTRATION?**

533 A I conclude that in years when the statewide IEDT cap is exceeded, which, to my
534 knowledge, has happened in every year to date, a utility's tax burden is dependent
535 more on its proportional share of tax payments, considering the rest of the utilities,
536 than it is on changes in its own kWh deliveries. If the utility's same proportional share
537 of deliveries persists over time (59% in the illustration), it does not matter whether the
538 utility delivers more, or fewer kWh in a year, the tax burden stays the same, adjusted
539 only by the non-energy related factors of 5% or the CPI.

540 **Q HAS COMED'S IEDT BURDEN VARIED WITH ITS KWH DELIVERIES?**

541 A No, not with a high correlation. On IIEC Exhibit 2.3 to this testimony, I have provided
542 the IEDT levels as reported by ComEd for the years 2001 through 2009, and the
543 associated kWh deliveries. This information, along with additional information that I
544 will explain, is shown on page 1 of the exhibit. On page 2 of IIEC Exhibit 2.3 is a plot
545 of the IEDT levels against kWh sales, including a fitted linear regression line. If the
546 IEDT varied "on the basis of kWh delivered," one would expect a linear positive
547 relationship between IEDT and kWh deliveries, with little deviation from the
548 regression line and with the slope of the line representing the marginal (last block) tax

549 rate of \$0.00131 per kWh. However, as can be seen from the chart, this is not the
550 case. Furthermore, if this were the case, simple statistical analysis would indicate
551 that the two quantities (IEDT and kWh) would be highly correlated. That is, the linear
552 regression would exhibit a high coefficient of determination or "R-squared." The
553 R-squared value that results is only .56, (on a possible scale of 0 to 1). This indicates
554 a relatively weak explanative value of kWh deliveries for changes in the IEDT. (And
555 recall that the base IEDT amount is a function of ComEd's pre-1998 invested capital.)
556 Also, the slopes of the regressed lines are different from the ComEd's marginal tax
557 rate.

558 These results indicate that ComEd's kWh sales do not fully, or even
559 adequately, explain the levels of its IEDT burden. This supports my statement that
560 kWh sales is only one of several variables (and a minor one at that) that affect the
561 level of IEDT in any given year, particularly when the statewide cap is exceeded, as it
562 has been in every year so far.

563 **Q WHAT DO YOU CONCLUDE FROM THIS ANALYSIS?**

564 A The analysis essentially corroborates my claim that, notwithstanding the terms used
565 in the statute, the IEDT is not caused by kWh sales to major degree in a given year.
566 Under the right circumstances, kWh sales can have an impact, but that is only one of
567 several factors, and it is not the determinative factor.

568 ComEd's 1997 IEDT payment was \$99.5M. ComEd's proposed test year
569 amount is \$108.8 million. Thus, the 1997 level represents 91.5% of the test year
570 IEDT, and was inherited from the 1997 Invested Capital Tax. Therefore, of the
571 amount of the 2009 IEDT, only about 8.5% is above the amount of Invested Capital
572 Tax assessed to ComEd in 1997. It is unreasonable to allocate the IEDT entirely on

573 the basis of kWh delivered, when over 90% of the tax is incurred on the basis of utility
574 plant investment as of 1997.

575 **Q WHAT APPROACH DO YOU RECOMMEND FOR THE ALLOCATION OF THE**
576 **IEDT?**

577 A I believe there is no credible basis for claiming that the portion of ComEd's IEDT,
578 which corresponds to its Invested 1997 Capital Tax levels, varies by kWh sales.
579 However, I acknowledge that the growth in IEDT responsibility above the 1997 level
580 is to some degree affected by kWh sales. Therefore, I recommend an allocation
581 approach for IEDT that recognizes both the cause of most of the tax, i.e., the 1997
582 level of invested capital tax, and the kWh delivered, which partly affects changes in
583 the tax amount.

584 Specifically, I propose to create two separate cost categories for IEDT in the
585 cost of service study, with different allocation factors for each. The first cost category
586 would be the 1997 levels of IEDT for ComEd, i.e., \$99.5 million. This cost category
587 should be allocated on the basis of utility plant in-service, in recognition that the IEDT
588 structure as designed approximates ComEd's 1997 investment-based IEDT.¹⁰ This
589 amount of cost should be recovered in the distribution delivery charge, as is presently
590 the case.

591 The second category of costs would reflect IEDT amounts in excess of the
592 1997 levels, which would be subject to increase over time. This second category of
593 IEDT, the "Post-1997 IEDT," would be allocated based on kWh sales, using the same
594 allocation factors as ComEd uses in its cost of service study, in recognition that kWh

¹⁰Allocators based on current plant in-service are reasonable proxies for plant in-service in 1997, since most utility plant was/is allocated based on class demands in both time periods.

595 sales can be a factor, at least in some years. The Post-1997 increase in IEDT levels
596 for the test year is \$9.3 million, which is the difference between the test year IEDT,
597 \$108.8 million and the 1997 IEDT. This second category of IEDT, while allocated on
598 energy, could be collected from customers on a per kWh basis, but it would not be
599 necessary to do so.

600 In the interest of simplicity, I have not asked IIEC witness Stowe to build this
601 allocation approach into his cost of service analysis at this time. However, he has
602 assured me that the necessary information for such a change in allocation is readily
603 available in the cost of service study, should the Commission direct ComEd to do so.
604 Accordingly, I have not used my recovery recommendation in the class rates
605 presented on IIEC Exhibit 2.1.

606 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

607 **A** Yes.

Qualifications of Robert R. Stephens

608 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

609 A Robert R. Stephens. My business address is 16690 Swingley Ridge Road, Suite 140,
610 Chesterfield, MO 63017.

611 Q PLEASE STATE YOUR OCCUPATION.

612 A I am a consultant in the field of public utility regulation and a principal in the firm of
613 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

614 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

615 A I graduated from Southern Illinois University at Carbondale in 1984 with a Bachelor of
616 Science degree in Engineering. During college, I was employed by Central Illinois
617 Public Service Company in the Gas Department. Upon graduation, I accepted a
618 position as a Mechanical Engineer at the Illinois Department of Energy and Natural
619 Resources. In the summer of 1986, I accepted a position as Energy Planner with City
620 Water, Light and Power, a municipal electric and water utility in Springfield, Illinois.
621 My duties centered on integrated resource planning and the design and
622 administration of load management programs.

623 From July 1989 to June 1994, I was employed as a Senior Economic Analyst
624 in the Planning and Operations Department of the Staff of the Illinois Commerce
625 Commission. In this position, I reviewed utility filings and prepared various reports
626 and testimony for use by the Commission. From June 1994 to August 1997, I worked
627 directly with a Commissioner as an Executive Assistant. In this role, I provided

628 technical and policy analyses on a broad spectrum of issues related to the electric,
629 gas, telecommunications and water utility industries.

630 In May 1996, I graduated from the University of Illinois at Springfield with a
631 Master of Business Administration degree.

632 In August 1997, I joined Brubaker & Associates, Inc. as a Consultant. Since
633 that time, I have participated in the analysis of various utility rate and restructuring
634 matters in several states and the evaluation of power supply proposals for clients. I
635 am currently a Principal in the firm.

636 The firm of Brubaker & Associates, Inc. provides consulting services in the
637 field of energy procurement and public utility regulation to many clients, including
638 large industrial and institutional customers, some utilities, and on occasion, state
639 regulatory agencies. More specifically, we provide analysis of energy procurement
640 options based on consideration of prices and reliability as related to the needs of the
641 client; prepare rate, feasibility, economic and cost of service studies relating to energy
642 and utility services; prepare depreciation and feasibility studies relating to utility
643 service; assist in contract negotiations for utility services; and provide technical
644 support to legislative activities.

645 In addition to our main office in St. Louis, the firm also has branch offices in
646 Phoenix, Arizona and Corpus Christi, Texas.