

Revised Direct Testimony

of

David Rearden

Policy Program

Energy Division

Illinois Commerce Commission

Petition for approval of an Alternative Rate Regulation Plan pursuant to
Section 9-244 of the Public Utilities Act

Commonwealth Edison Company

Docket No. 10-0527

November 9, 2010

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1 **Introduction and credentials**

2 **Q. Please state your name, job title and business address.**

3 **A.** My name is David Rearden and I am a Senior Economist on the Staff of the
4 Illinois Commerce Commission (“Staff” or “Commission”) in the Policy Program.
5 My business address is 527 East Capitol Avenue, Springfield, Illinois 62701.

6 **Q. Please outline your education.**

7 **A.** I have a Ph.D. (1991) in economics (specialties in econometrics and
8 microeconomic theory) from the University of Kansas. I received a Bachelor’s
9 degree in economics and history from Eastern Illinois University in 1982, and
10 studied economics at the Southern Illinois University graduate school from 1982-
11 1984.

12 **Q. Please state your work background.**

13 **A.** Before joining Staff in 2002, I was a Manager of Regulatory Policy for Sprint
14 Corporation (“Sprint”) from 1998 until 2001. I wrote and defended testimony
15 before state regulatory commissions, helped develop policy for Sprint, provided
16 analysis and advice for the business units and supported other aspects of
17 Sprint’s external affairs activity.

18 I was a Managing Regulatory Economist at the Kansas Commerce Commission
19 from 1994 until 1997. I wrote and defended testimony on both energy and
20 telecommunications issues. I was promoted to Chief of Rate Design and
21 Managing Telecommunications Economist in 1997. I supervised five employees

22 that analyzed rate design for regulated energy companies in Kansas including
23 purchased gas adjustment (“PGA”) proceedings.

24 I taught economics at the undergraduate and graduate levels at the University of
25 Kansas (1992-1994) and Cleveland State University (1990-1992). Besides
26 introductory and basic intermediate courses, I taught public finance,
27 econometrics and graduate level microeconomics.

28 **Q. Have you filed testimony in Illinois before?**

29 **A.** Yes, I have prepared written testimony in several dockets and appeared on the
30 stand for cross examination. Most recently, I filed testimony in the Consumers
31 Gas Company 2006 Purchased Gas Adjustment (“PGA”) reconciliation case,
32 Docket No. 06-0744, and Atmos’ 2005 PGA reconciliation case, Docket No. 05-
33 0738.

34 **Q. What is the purpose of your direct testimony?**

35 **A.** I respond to Commonwealth Edison Company’s (“ComEd” or “Company”) direct
36 testimony concerning its alternative regulation proposal, which consists of a tariff
37 it calls Rate ACEP (for Accelerated Customer Enhancements Pilot). I analyze
38 whether the tariff complies with Section 9-244 of the Public Utilities Act (“PUA”).

39 **Q. What are your conclusions?**

40 **A.** I conclude that Rate ACEP does not comply with Section 9-244. The primary
41 reason for my conclusion is that Rate ACEP does not comply with 9-244(b)(1),
42 which mandates that the rates under the alternative regulation proposal must

43 likely be lower than they would be if the program's costs were recovered under
44 traditional rate of return regulation ("TR").

45 **Q. What are your recommendations?**

46 **A.** I recommend that the Commission reject Rate ACEP. A key component of Rate
47 ACEP is that ComEd determines its ultimate cost recovery by reference to a
48 budget pre-approved by the Commission for each project financed by Rate
49 ACEP. As I argue below, this is a grave structural flaw that I believe to be
50 impossible to overcome even with modifications to Rate ACEP.

51 **Q. Does the PUA authorize alternative regulation programs?**

52 **A.** Yes, Section 9-244 governs the Commission's review of alternative regulation
53 ("AR"). This section of the PUA allows the Commission to approve alternatives to
54 TR. It divides AR plans into two types: i) "alternatives to rate of return
55 regulation, including but not limited to earnings sharing, rate moratoria, price
56 caps or flexible rate options" and ii) "other regulatory mechanisms that reward or
57 penalize the utility through the adjustment of rates based on utility performance."

58 **Q. Which type of AR is Rate ACEP, according to ComEd?**

59 **A.** I am not certain. Staff issued Staff Data Request OGC-2.01 to ComEd to inquire
60 about ComEd's position for its classification of Rate ACEP under Section 9-
61 244(a). ComEd replied that "ComEd believes that Rate ACEP contains one or
62 more programs consisting of alternatives to rate of return regulation and one or
63 more programs consisting of regulatory mechanisms that reward or penalize the
64 Company through the adjustment of rates based on the Company's

65 performance.” (See Attachment 1) The Company further stated that it
66 “...expressly reserves its right to make these or any other lawful arguments in
67 support of the Petition and Rate ACEP that the evidence may support.”

68 **Q. Which type of AR is Rate ACEP, according to Staff?**

69 **A.** Staff believes that Rate ACEP is an AR plan under Section 9-244(a)(ii). AR plans
70 noted under Section 9-244(a)(i) generally apply to a utility’s overall earnings and
71 revenues. The second type does not refer to aggregate measures, and ComEd’s
72 results under Rate ACEP are affected by an incentive mechanism. The section
73 imposes the requirement that “the utility’s performance []be compared to
74 standards established in the Commission order authorizing the implementation of
75 other regulatory mechanisms.”

76 **Q. What standards does ComEd believe that AR has to meet?**

77 **A.** Staff Data Request OGC-2.01 asked for the “specific standard(s) by which the
78 Company is proposing that its performance be compared to.” ComEd replied
79 that “ComEd’s performance is being compared to the budgets for O&M expense
80 and capital investment approved by the Commission for each project being
81 conducted under the aegis of the rate.” (See Attachment 1) Thus, ComEd views
82 its budgets as the standard against which its projects should be compared.

83 **Q. Do you agree with the standard proposed by ComEd?**

84 **A.** No. As discussed below, comparing ComEd’s actual spending on a project to its
85 budget is an insufficient standard.

86 **Q. How is your testimony organized?**

87 A. First, I respond to the criticisms that Dr. Hemphill levels against traditional
88 regulation in his direct testimony. Second, I discuss the eight criteria of Section
89 9-244. Third, I explain why I believe that ComEd's AR plan does not satisfy the
90 eight criteria. Last, I discuss some other problems with Rate ACEP ~~and briefly~~
91 ~~discuss the Commission's experience with AR.~~

92 Q. **Please introduce the other Staff witnesses and provide a brief discussion**
93 **of their testimony.**

94 A. Staff testimony is as follows:

95 Staff Ex. 2.0 is testimony from Jennifer Hinman. She analyzes ComEd's
96 budget for the Electric Vehicle Pilot and finds it to be inflated. She
97 discusses the EV assets that ComEd has purchased under traditional
98 rate of return regulation. She briefly addresses the purported customer
99 benefits of the EV Pilot.

100 Staff Ex. 3.0 is testimony from Eric Schlaf. He explains why Rate ACEP
101 should not include terms applicable to the recovery of costs for smart
102 grid or distributed automation projects until ComEd offers specific
103 proposals for those projects. He also recommends that the Commission
104 require ComEd to conform future alternative regulation smart grid
105 proposals to any guidelines the Commission adopts in the upcoming
106 Smart Grid Policy docket.

107 Staff Ex. 4.0 is John Stutsman's testimony. He agrees that ComEd's
108 proposed underground electric replacement project has benefits for
109 ComEd's distribution system. He recommends that the Commission

110 order ComEd to undertake the project without using Rate ACEP. He
111 also notes the problems with using ComEd's budget to evaluate its
112 performance.

113 Staff Ex. 5.0 is testimony from Dianna Hathhorn. She criticizes various
114 elements of Rate ACEP and recommends changes to the rate, if the
115 Commission approves the rate.

116 Staff Ex. 6.0 is Cheri Harden's testimony. She criticizes the rate
117 treatment that ComEd proposes for Rate ACEP and recommends that
118 ComEd identify the charge on its bills.

119 Staff Ex. 7.0 is testimony from Harry Stoller. In opposition to ComEd
120 witnesses Hemphill and McMahan, he argues that rate of return
121 regulation is appropriate for the projects that ComEd is proposing in this
122 docket.

123 **Q. Do you agree with the standard proposed by ComEd?**

124 **A.** No. As discussed below, comparing ComEd's actual spending on a project to its
125 budget is an insufficient standard.

126 **Problems with TR, a response to Dr. Hemphill**

127 **Q. What does Dr. Hemphill say are the deleterious incentives in TR?**

128 **A.** Dr. Hemphill describes five problems with TR in his direct testimony. 1) TR does
129 not consider the "life cycle of a project"; 2) TR is "focused on costs already
130 spent"; 3) in TR, "individual programs get 'lost'"; 4) adversarial litigation is bad;
131 and 5) TR is also fraught with "the critical problem of regulatory uncertainty."
132 (ComEd Ex.1.0, 8:164-9:190)

133 **Q. Please respond to Dr. Hemphill's critical approach to TR.**

134 **A.** Dr. Hemphill's criticisms do not demonstrate that a utility regulated under TR is
135 necessarily less efficient than it would be under some form of AR. For decades,
136 regulatory bodies in both Illinois and other states, as well as at the federal level,
137 have regulated utility companies' rates based on their costs expended. Utilities,
138 regulated in the traditional manner, generally provide adequate, efficient and
139 sufficient service at reasonable rates and have generally received compensatory
140 revenues for their provision of service. In my view, even if Dr. Hemphill's
141 criticisms of TR have any validity, he neglects to mention their positive aspects
142 for ratepayers. Staff witness Harry Stoller also responds to Dr. Hemphill's
143 criticisms of TR.

144 **Q. Please respond to the first problem described by Dr. Hemphill.**

145 **A.** It is untrue that TR does not explicitly consider the "life cycle of a project." After
146 investment is held to be used and useful, the utility begins to recover its cost as
147 well as a return on it. It continues to recover its cost until it is fully depreciated.
148 This protects ratepayers by holding the utility to a prudence standard to induce
149 the utility to be careful about how it expends its resources, since ineffective and
150 inefficient projects are generally not recoverable. Ratepayers are further
151 protected, since the utility has to complete the project before it can recover its
152 costs. However, after a project has been depreciated on the books, a utility
153 continues to recover on that asset until it files a rate case that recognizes the
154 asset has been fully depreciated.

155 **Q. Please respond to the second problem described by Dr. Hemphill.**

156 A. Dr. Hemphill argues that TR is an inferior process because it “focuses on costs
157 already spent.” Again, this is not the complete story. Costs from a test year can
158 be adjusted for known and measureable differences between the test year and
159 future needs, though there are limits on how far beyond the test year those costs
160 can be recovered and there are restrictions on what can be included. Further, as
161 noted above, the used and useful and prudence standards protect ratepayers
162 from paying for projects that do not provide utility service or do so at excessive
163 cost. A prudent utility plans the best it can and invests efficiently. If the utility
164 cannot justify its expenditures, then it can be at risk for a disallowance. This is a
165 very important incentive for the utility and an important safeguard for ratepayers.

166 Q. **Please respond to the third problem described by Dr. Hemphill.**

167 A. Dr. Hemphill asserts that individual programs get lost in a rate case, since the
168 utility’s entire rate base and its expenses are examined. He further contends that
169 the Rate ACEP projects are incremental and so need to be individually
170 considered. It may be true that ComEd’s expenditures deserve more scrutiny,
171 but Commission engineers typically choose the largest projects to subject to
172 enhanced scrutiny in a rate case. It is unclear why the projects that ComEd
173 chose for its AR plan deserve more scrutiny than that accorded to expenditures
174 recovered in the rate case. In some sense, all projects are ‘incremental.’ The
175 Rate ACEP projects are no more incremental or necessarily more important than
176 new projects whose costs ComEd proposes to recover under TR.

177 Q. **Please address the fourth problem.**

178 A. Dr. Hemphill states:

179 In general rate cases, stakeholders litigate adversarially, and often
180 bitterly, over what a utility did (or committed to do). Our proposal is
181 geared to involve stakeholders collaboratively in an up-front process to
182 guide what should be done. It creates an ongoing process to keep the
183 Commission and stakeholders involved... (ComEd Ex. 1.0, 8:176-179)

184 Adversarial litigation, in fact, protects ratepayers. The degree to which litigation
185 is adversarial or bitter depends on many factors, some of which are under
186 ComEd's control. But the reason to have adversarial litigation is to test each
187 side's facts and logic to determined analysis. Adversarial litigation clarifies the
188 issues that the Commission must decide and provides it with a record that
189 supports those decisions. Absent that evidence, tested under litigation, the
190 Commission lacks the information and record to make informed decisions.

191 Collaborative processes can be a useful means to reach decisions that are in the
192 public interest and avoid needless litigation. But it now appears that ComEd
193 wants to develop a collective approach to its investment decisions. This involves
194 assessing each proposed project within the universe of many different
195 alternatives. This approach to approving ComEd's investment program places
196 unreasonable demands on the Commission, Staff and intervenors. Under TR,
197 the Commission evaluates the support that ComEd provides for the investment
198 and spending decisions that it has already made in the context of its operations.
199 This is a much more reasonable method for establishing recoverable rate base
200 and expenses. That is, it is easier for the Commission and stakeholders to stay
201 involved when they can observe ComEd's decisions based upon a clear record
202 testified to under oath. This necessitates adversarial litigation.

203 **Q. What does Dr. Hemphill say about regulatory uncertainty?**

204 **A.** Dr. Hemphill states (ComEd Ex. 1.0, 9:180-190):

205 Alternative regulation also addresses the critical problem of regulatory
206 uncertainty. Given the realities of test year ratemaking, ComEd's
207 financial situation, and the demands being placed on ComEd's budgets
208 that are functionally out of our control, ComEd cannot simply fund
209 beneficial Smart Grid deployment, Urban Underground Facility
210 Reinvestment, low-income assistance, or an EV pilot without regulatory
211 guidance and a means to recover our costs – provided we act
212 efficiently. Alternative regulation provides a balanced answer to that
213 dilemma. It does not shift risk to customers – ComEd retains
214 implementation and operational risk and the incentive features actually
215 make ComEd's responsibility for its own actions more consequential.
216 But alternative regulation does provide a way for ComEd to act with
217 guidance, at a lower regulatory risk, which benefits customers.

218 **Q. How do you respond?**

219 **A.** Dr. Hemphill appears concerned that ComEd would not be able to recover the
220 money it spends on the projects it is proposing for Rate ACEP if it relied upon
221 traditional regulation. He states that it “cannot simply fund” these projects
222 “without regulatory guidance and a means to recover our costs.” This
223 statement's meaning is ambiguous. It could mean that ComEd's rate of return
224 would become unacceptably low, but Dr. Hemphill does not make this contention.
225 Nor does he provide numerical analysis supporting his statement that ComEd
226 “simply cannot fund” these projects. Dr. Hemphill adds the caveat that he
227 expects recovery only if “we [the Company] act efficiently.” But ComEd can only
228 expect recovery under TR when it acts efficiently, so there is no difference in the
229 incentives between TR and Rate ACEP in that respect. Dr. Hemphill prefaces
230 this statement with the phrase, “Given the realities of test year ratemaking,
231 ComEd's financial situation, and the demands being placed on ComEd's budgets
232 that are functionally out of our control[.]” This phrase seems to imply that these

233 factors all hamstring ComEd's ability to recover its investment. But under TR, if
234 ComEd is not recovering its prudently incurred costs, then the rates are not
235 remunerative and ComEd is able to file with the Commission to raise rates.
236 ComEd's financial situation as it relates to its ability to recover its costs is not
237 specified in Dr. Hemphill's or any other witness' testimony and hence is in no way
238 demonstrated. And Dr. Hemphill simply does not explicate "...the demands
239 being placed on ComEd's budgets that are functionally out of our control..." (*Id.*)
240 or detail how large an imposition those demands impose on rates.

241 Dr. Hemphill goes on to state that Rate ACEP "does not shift risk to customers –
242 ComEd retains implementation and operational risk and the incentive features
243 actually make ComEd's responsibility for its own actions more consequential."
244 (*Id.*) I disagree. Rate ACEP does, in fact, shift risk to ratepayers. ComEd begins
245 cost recovery within three months of spending beginning, so it faces no risk that
246 its capital costs up to the budget can be declared imprudent. The remaining risk
247 to its cost recovery is only for expenditures above the budget, and only after the
248 project is complete. Only then must ComEd refund its costs above the budget.
249 This is true no matter when the project is completed or how well it is completed.
250 Only after ComEd unilaterally declares the project complete does it face any risk
251 of not recovering all capital costs. Even if expenditures for a project exceed its
252 budget, capital costs over the Rate ACEP budget could be recovered in a rate
253 case. Rate ACEP allows recovery of and on capital cost up to 100 percent of the
254 budget upon completion of the capital project. While under TR, the utility does
255 not receive a return of and on the cost of a project until it is included in rate base

256 in a rate case. Far from Rate ACEP putting the Company at risk, it actually
257 reduces risk versus a TR approach. The reduced risk is additional to the lowered
258 scope for the Commission to determine imprudence under Rate ACEP.
259 Dr. Hemphill concludes by stating that the lower regulatory risk benefits
260 customers. However, as argued here, given that ComEd's lower risk stems from
261 its shift onto ratepayers, this simply is not true.

262 **Evaluating Rate ACEP**

263 **Q. Please identify the eight criteria contained in Section 9-244(b) of the PUA.**

264 **A.** They are:

- 265 (1) the program is likely to result in rates lower than otherwise would have been
266 in effect under traditional rate of return regulation for the services covered by
267 the program and that are consistent with the provisions of Section 9-241 of
268 the Act; and
- 269 (2) the program is likely to result in other substantial and identifiable benefits
270 that would be realized by customers served under the program and that
271 would not be realized in the absence of the program; and
- 272 (3) the utility is in compliance with applicable Commission standards for
273 reliability and implementation of the program is not likely to adversely affect
274 service reliability; and
- 275 (4) implementation of the program is not likely to result in deterioration of the
276 utility's financial condition; and
- 277 (5) implementation of the program is not likely to adversely affect the
278 development of competitive markets; and
- 279 (6) the electric utility is in compliance with its obligation to offer delivery services
280 pursuant to Article XVI; and
- 281 (7) the program includes annual reporting requirements and other provisions
282 that will enable the Commission to adequately monitor its implementation of
283 the program; and

284 (8) the program includes provisions for an equitable sharing of any net
285 economic benefits between the utility and its customers to the extent the
286 program is likely to result in such benefits.

287 **Q. Does ComEd's Rate ACEP satisfy all eight criteria?**

288 **A.** No. I discuss each individual criterion in Section 9-244(b) below.

289 **Q. On which paragraph of Section 9-244(b) does your testimony focus?**

290 **A.** Although I discuss all eight criteria, I focus on paragraph (1). Section 9-244(b)(1)
291 mandates that the projects' costs must likely be lower under Rate ACEP than
292 under TR so that the AR is likely to result in rates lower than otherwise would
293 have been in effect under TR. ComEd's proposed program does not satisfy this
294 criterion.

295 **Section 9-244(b)(1)**

296 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(1)?**

297 **A.** Yes. At page 29, he states that, "Compared to implementing these programs
298 through traditional regulation, the proposal is likely – indeed, essentially certain –
299 to lower customers' rates." He reasons that Rate ACEP reduces ComEd's O&M
300 expenses by 5%, and he further argues that the budgeted O&M amount already
301 includes "known and measureable savings." And even though the 5% reduction
302 is restricted to \$2 million, total recovery is also limited to the budget.

303 **Q. Do you agree?**

304 **A.** No. While the 5% reduction in O&M expenses represents savings for some
305 portion of O&M costs, Dr. Hemphill's discussion on this point does not analyze

306 the effect that capital costs might have on customers' rates. Further, the
307 expense reduction is limited to \$2 million. And the limit applies to all projects
308 whose costs are recovered under Rate ACEP, not just the currently proposed
309 projects. Thus, the \$2 million limit would apply to the tariff if smart grid and
310 distribution automation costs are included in Rate ACEP in the future. (See
311 Company's response to Staff data request DLH 1.6, attached as Attachment 2) A
312 spending cap equal to the budget also imposes some restraint. However, the
313 arrangement presumes that the budget is the number. As discussed below,
314 ComEd has an incentive to set the budget for expenses as high as it can and it is
315 difficult to verify that the budget is correctly specified. In particular, it is extremely
316 difficult to determine that a given budget includes known and measureable
317 savings. In a rate case, that standard is intended to protect customers from
318 having costs included in rates that are not reasonably certain. It is impossible to
319 verify the claim that a given budget, including the 5% reduction, accurately
320 characterizes this standard. Further, these projects require expenditures past
321 the 18 month limit that applies to the 'known and measurable' standard in a rate
322 case.

323 **Q. How do you compare TR and Rate ACEP?**

324 **A.** First, I note that an important element for reaching a conclusion on this question
325 is the period of time to be considered. It seems obvious that customers pay
326 higher rates under Rate ACEP in the period from its inception until ComEd's next
327 rate case, because ComEd begins recovering its costs within three months from
328 when it begins the project under Rate ACEP. Under TR, ComEd's cost recovery

329 only begins after the next rate case accounts for those costs in rate base and
330 recoverable expenses. For that reason, costs should be compared over the life
331 of the equipment. Second, in order to simplify analysis, I initially assume that a
332 given project's cost is the same whether it's conducted under Rate ACEP or TR.
333 ComEd has proposed an incentive scheme in which it is possible that costs are
334 different under the two regimes. However, a simplified comparison sets the
335 stage for a more nuanced look at the tradeoffs between Rate ACEP and TR.

336 **Q. Please explain the incentive mechanism for investment costs.**

337 **A.** There is a deadband for investment costs from 95% to 105% of the budget. In
338 the deadband, customers pay ComEd's actual costs. However, when investment
339 costs exceed 105% of the budget or are less than 95% of the budget, then its
340 cost recovery differs from its actual expenditures. In particular, below the
341 deadband, an account is created that shares the difference between actual and
342 budgeted costs; while above the deadband, it must refund the difference
343 between its actual cost recovery and budgeted costs.

344 **Q. Please discuss the comparison when costs are within the deadband.**

345 **A.** Under TR, in the first rate case after an investment is made, the utility begins to
346 recover the depreciation on the plant (usually termed recovery of) and a
347 reasonable profit on the investment (recovery on). However, under Rate ACEP,
348 ComEd begins to recover these elements beginning only two months after Rate
349 ACEP is approved at the end of May 2010. (See Attachment 3, a timeline
350 received from ComEd) The costs recovered in the rate case stay the same until
351 the next rate case, at which time the accumulated depreciation is subtracted from

352 rate base in order to calculate the new recovery on, while ComEd continues
353 recovery of the investment at the same rate. In contrast, for Rate ACEP, the
354 accumulated depreciation is subtracted off every quarter, and just as in the case
355 for TR, ComEd continues recovery of the investment. Therefore, in this
356 simplified model, the difference in lifetime costs between the two approaches is
357 that under Rate ACEP, ComEd begins recovering of and on soon after incurring
358 costs, but depreciation accumulates every quarter; so revenues decrease over
359 time until the next rate case. Under TR, recovery of and on only begins after the
360 subsequent rate case and is constant until the rate case after that. After the
361 second rate case, cost recovery under the two approaches are equal.

362 **Q. If costs are the same whether under TR or Rate ACEP, will the rates that**
363 **customers pay be higher or lower?**

364 **A.** Over the life of the investment, the earlier recovery may raise rates to customers
365 under Rate ACEP more than it does under TR. If the investment expenditures
366 occur on the same schedule and the resulting costs are the same under TR and
367 Rate ACEP, then the benefits of each project must be identical between the two
368 cases. However, under Rate ACEP customers begin paying for the investment
369 and expenses only three months after they are incurred. Under TR, customers
370 do not begin paying those costs until after the next rate case in which the
371 investment is determined to be used and useful and the expenses approved.

372 **Q. Under what conditions might Rate ACEP comply with 9-244(b)(1)?**

373 **A.** Rate ACEP might comply with this condition if ComEd implements the program
374 more efficiently by spending less under Rate ACEP than it would if its costs were

375 recovered under TR. And the cost reductions are large enough to overcome the
376 quicker recovery that occurs under Rate ACEP.

377 **Q. Do you think that it is likely that the incentive effects are sufficiently strong**
378 **to overcome Rate ACEP's quicker cost recovery?**

379 **A.** No. ComEd witness Dr. Hemphill praises the strong incentives to restrain costs
380 that are present in Rate ACEP. (See ComEd Ex. 1.0, at 10:198-205) Dr. Hemphill
381 appears to contend that these incentives are effective in inducing ComEd to be
382 more efficient in its investments and so lower costs relative to TR. ComEd,
383 however, offers no persuasive evidence in its testimony that Rate ACEP's
384 structure provides those strong incentives. Investment implementation is largely
385 an engineering function that engineers presumably design using least cost
386 techniques. ComEd appears to argue that that is not sufficient incentive, and
387 that only when recovering its costs through Rate ACEP will it complete projects
388 more cheaply and run them more efficiently. Dr. Hemphill simply does not
389 support this contention in any substantive manner. It is not at all clear where this
390 leap in efficiency would come from. Theoretically, it is not impossible that these
391 incentives are sufficiently strong, but ComEd does not offer concrete evidence for
392 this contention.

393 **Q. Please discuss why using a budget rather than actual expenditure reduces**
394 **the likelihood that Rate ACEP meets 9-244(b)(1).**

395 **A.** ComEd has an incentive to overestimate the future, unknown market price of
396 investment equipment and exaggerate the amount of equipment that it will install.
397 The investment budget is estimated by summing the cost for equipment called for

398 by the project. The cost is the amount of equipment times the equipment's price.
399 For example, the budget for the Electric Vehicle Pilot ("EV Pilot" or "EVP")
400 calculates the number of EVs times the EV price. If the equipment's market price
401 differs from the price assumed for the budget, actual cost will deviate from
402 budgeted cost. When the market price is lower than that reflected in the budget,
403 then actual costs are lower than the budget. On the other hand, when the
404 budgeted price is higher than the realized price, then budgeted costs are higher
405 than actual costs. The same principle also applies to the number of pieces of
406 equipment that the budget assumes: if ComEd installs fewer (more) pieces than
407 budgeted for, actual costs are lower (higher) than the budget, all else equal.
408 Again, ComEd has an incentive to over-estimate its budget. Staff witness
409 Jennifer Hinman analyzes the EVP budget in ICC Staff Ex. 2.0 and concludes
410 that the prices appear to be higher than are currently available.

411 **Q. What other ways do the budgets affect Rate ACEP's evaluation?**

412 **A.** The Company's investment costs are subject to imprudence disallowance
413 subsequent to the project's approval only to the extent they exceed the
414 deadband. Additionally, expense recovery is restricted to the project's budget.
415 The way that ratepayers are protected from bearing excessive costs if the project
416 was not well-designed or was poorly executed is the incentive mechanism. But if
417 budgets are excessive, then that protection may not be effective. Also, ComEd
418 reserves the right to seek recovery in a rate case for expenses not recovered in
419 Rate ACEP. It can also seek recovery for capital costs above the budget in a
420 rate case as well.

421 The pre-approval process draws the Commission into a partnership with ComEd.
422 Dr. Hemphill implies that that will reduce unnecessary litigation and improve
423 efficiency by speeding up the delivery of beneficial projects. On the other hand,
424 neither the Commission nor its Staff has the intimate knowledge of ComEd's
425 distribution system necessary to oversee its design and upkeep on a detailed
426 and continuous basis. Staff is much better suited to reviewing ComEd's
427 decisions for whether it engaged in prudent planning and executed those plans
428 efficiently.

429 **Q. Is the budget a good way to evaluate ComEd's performance?**

430 **A.** No. As an example, consider the budget for the EVP. It is composed of some
431 number of EVs and so many charging stations. ComEd has estimated the cost
432 for each EV and each charging station. If ComEd mis-estimates the cost per
433 unit, then total cost estimates will be wrong. A market commodity's price is the
434 result of market forces that are largely beyond the control of ComEd. Therefore,
435 the cost per unit of an EV does not depend on what ComEd budgeted, but the
436 market. ComEd cannot purchase EVs at a better price than the market price. In
437 that case, if per unit prices are lower than budgeted, ComEd could earn more
438 than its costs without being particularly efficient. Further, since this is true,
439 ComEd has a strong incentive to overestimate the budget. It only recovers less
440 than its costs when it expends more than 105% of the budget, but it can share in
441 'savings' when its expenditures are less than 95% of the budget. The higher the
442 budget, the better it is for ComEd. Staff witness John Stutsman concludes in

443 Staff Ex. 5.0 that it is not reasonable to evaluate a project like UUFR with a fixed
444 budget.

445 **Section 9-244(b)(2)**

446 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(2)?**

447 **A.** Yes. ComEd is proposing to recover the costs of two projects (Underground
448 Urban Facilities Reinvestment (“UUFR”) and EVP) and to fund its low income
449 programs (Low Income Assistance (“LIAA”)) through Rate ACEP. Plus, it is
450 reserving the capability to fund Smart Grid and Distributed Automation projects
451 through the rate. Dr. Hemphill argues that all programs have benefits not
452 available under TR.

453 **Q. How do you respond to these statements?**

454 **A.** The only reason that any potential benefits are not available under TR is that
455 ComEd states that it will not proceed with the projects unless the costs to
456 implement them are recovered through Rate ACEP. In that sense, it is a
457 tautology that these programs meet this criterion. Further, it does not seem that
458 ratepayers as a whole receive “substantial benefits” from the LIAA, since it is a
459 simple transfer from one group of ratepayers to another. Also, the incentive
460 mechanism does not operate on LIAA costs, so Rate ACEP cannot generate any
461 benefits beyond the simple transfer of value from one group of ratepayers to
462 another.

463 **Section 9-244(b)(3), (4), (5), (6) and (7)**

464 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(3)?**

465 **A.** Yes. Dr. Hemphill states that ComEd exceeds ICC standards and argues that
466 Rate ACEP will improve reliability. Staff does not contest that ComEd currently
467 meets ICC standards, and it does not dispute that UUFR has a good chance to
468 improve reliability. However, as discussed in Staff witness John Stutsman's
469 testimony, there is a danger under Rate ACEP that this reliability program gets
470 shortchanged in order to bring it in under budget..

471 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(4)?**

472 **A.** Yes. In fact, he contends that ComEd's financial condition will deteriorate if it is
473 not granted approval for Rate ACEP and the proposed projects are funded
474 through TR. In this way, he attempts to bolster his case for Rate ACEP as
475 customer protection and to only engage in the program if Rate ACEP is granted.
476 Since, as argued above, it appears to Staff that Rate ACEP is not likely to lower
477 rates relative to TR (i.e., it will not likely lower ComEd's revenues), it does not
478 seem that Rate ACEP is likely to result in a deterioration of ComEd's financial
479 condition.

480 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(5), (6) and (7)?**

481 **A.** Yes. I do not dispute that these conditions are or can be readily met.

482 **Section 9-244(b)(8)**

483 **Q. Does Dr. Hemphill argue that Rate ACEP meets 9-244(b)(8)?**

484 **A.** Yes. He asserts that the 5% discount on O&M expenses and the cap on capital
485 costs relative to a budget both ensure that net benefits, if any, are fairly allocated.
486 With respect to the low income program, he argues that recipients immediately

487 benefit. Finally, he posits that other customers will benefit from “greater flexibility
488 and competitive opportunities” created via smart grid.

489 **Q. How do you respond?**

490 **A.** ComEd has not demonstrated that there are any net benefits to any of its
491 programs. ComEd has proposed budgets, which may or may not be accurate
492 cost estimates. Due to problems with using budgets to evaluate the utility’s
493 performance, I do not believe that Rate ACEP’s incentive mechanisms, by
494 themselves, guarantee that net benefits are fairly allocated. ComEd has
495 proposed to collect its costs through a per customer charge allocated by
496 customer class. Staff witness Cheri Harden addresses ComEd’s cost recovery
497 method in her testimony.

498 **General problems**

499 **Q. When are Rate ACEP projects completed?**

500 **A.** When ComEd declares them so. A given project’s budget is constructed by
501 summing up the estimated cost for its elements. But it appears that ComEd has
502 the sole authority to state that the project is complete, whether or not all the
503 elements of the project have been completed. Again, since the incentive effects
504 are based on a comparison to the overall budget, there appears to be nothing in
505 Rate ACEP to prevent ComEd from strategically declaring a project complete to
506 reap benefits from the incentive scheme.

507 **Q. What do you think of the incentive mechanism’s structure?**

508 A. The incentives are not well-designed. As discussed above, using a pre-approved
509 budget to evaluate performance is flawed. ComEd has an incentive to over-
510 estimate the budget, and it has the incentive to declare the project complete
511 before all the aspects of it are finished. But in addition, the incentive structure
512 has flaws. There is a deadband from 95% to 105% of the budget, in which
513 ComEd is entitled to recover exactly what it spends. Above the deadband,
514 ComEd must refund the difference between actual expenditures and the budget.
515 This means that if ComEd's expenditures are close to 105%, it should declare
516 the project complete, to avoid refunds. On the other hand, when its expenditures
517 are below 95% of the budget, ComEd has an incentive to declare that the project
518 is complete in order to generate returns above cost from the sharing mechanism.

519 Q. **Do you believe that there are any modifications that make Rate ACEP**
520 **compliant with Section 9-244?**

521 A. No, I do not believe that are potential modifications to Rate ACEP that would
522 enable it to comply with Section 9-244. The expense and investment budgets
523 associated with these projects require more support and far more documentation.
524 For example, ComEd must be able to demonstrate where and how it developed
525 each price for equipment that it intends to install. ComEd must have stronger
526 methods to evaluate its performance relative to what it should have achieved in
527 units of equipment installed, not just dollars expended. Also, the program
528 requires milestones and benchmarks so that ComEd can be objectively
529 evaluated. ComEd has simply not offered a good way to evaluate its
530 performance. Further, ComEd intends that a given project can be unilaterally

531 declared complete or that this declaration be subject to Commission approval.
532 This is one more way that the proposal is deficient. ComEd can simply recover
533 its costs when it begins to bump up against the budget.

534 **Q. Is there another reason why ComEd's budgets will tend to be over-**
535 **estimated?**

536 **A.** Yes, especially as applied to the EVP and the distributed automation and smart
537 grid projects. Technology tends to improve over time, so that a product, when it
538 is first developed, is generally inferior to and more expensive than later versions
539 that have been improved by manufacture and design. For example, each
540 succeeding generation of computers is both more powerful and less expensive
541 than the last. It is likely that this is true for digital inputs into electricity distribution
542 systems as well. In that case, unless the budget can foresee how that process
543 works out, it is likely that its effect is underestimated.

544 **Conclusion and Recommendations**

545 **Q. Please summarize your testimony.**

546 **A.** First, I introduce the subject of this docket. Next, I rebut Dr. Hemphill's critique of
547 TR, where I argue that he exaggerates the problems that TR causes and
548 underestimates the beneficial aspects of TR. I then discuss Section 9-244 of the
549 PUA, and I consider whether Rate ACEP satisfies the criteria that it imposes on
550 AR proposals. In the next section, I analyze other general problems that interfere
551 with Rate ACEP's ability to comply with Section 9-244. ~~Finally, I provide an AR~~

552 ~~example from Illinois that shows the incentive problems with which such~~
553 ~~programs can be fraught.~~

554 **Q. What are your recommendations?**

555 **A.** I recommend that the Commission reject Rate ACEP. Rate ACEP is not an
556 improvement on traditional rate of return regulation. In particular, I do not believe
557 that it complies with Section 9-244(b)(1) and (b)(2). And I cannot find
558 modifications that conforms the tariff to Section 9-244.

559 **Q. Does this conclude your direct testimony?**

560 **A.** Yes.