

DIRECT TESTIMONY

of

PETER LAZARE

Senior Economic Analyst
Rates Department
Financial Analysis Division
Illinois Commerce Commission

Proposed General Increase in Electric Distribution Rates
Commonwealth Edison Company

Docket No. 07-0566

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1 **I. Introduction**

2

3 **Q. Please state your name and business address.**

4 A. My name is Peter Lazare. My business address is 527 East Capitol Avenue,
5 Springfield, Illinois 62701.

6

7 **Q. What is your present position?**

8 A. I am a Senior Rate Analyst with the Illinois Commerce Commission
9 (“Commission”). I work in the Financial Analysis Division on rate design and
10 cost-of-service issues.

11

12 **Q. What is your experience in the regulatory field?**

13 A. My experience includes fifteen years of employment at the Commission where I
14 have provided testimony and performed related ratemaking tasks. My testimony
15 has addressed cost-of-service, rate design, load forecasting and demand-side
16 management issues that concern both electric and gas utilities.

17

18 Previously, I served as a Research Associate with the Tellus Institute, an energy
19 and environmental consulting firm in Boston, Massachusetts. I also spent two
20 years with the Minnesota Department of Public Service as a Senior Rate Analyst,
21 addressing rate design issues and evaluating utility-sponsored energy
22 conservation programs.

23

24 **Q. Please discuss your educational background.**

25 A. I received a B.A. in Economics and History from the University of Wisconsin and
26 an M.A. in Economics from the University of Illinois at Springfield in 1996.

27

28 **Q. What is the subject of your testimony in this proceeding?**

29 A. I examine issues related to the Company's proposed rate base additions for 2005
30 and 2006. I examine the assets being added to the system and the costs
31 associated with those assets. I then seek to determine whether the costs are
32 commensurate with the assets.

33

34 **Q. Please summarize your findings concerning ComEd's proposed increase in
35 rate base.**

36 A. Based on the available evidence, I find that the Company's proposed 2005 and
37 2006 rate base additions for underground lines and services are overstated. As a
38 result, I propose adjustments of \$74.69 million for underground lines and \$36.26
39 million for services, or a combined \$110.95 million for these two sets of costs.
40 Without further evidence from the Company to support these costs, the proposed
41 rate base additions for underground lines and services should be reduced by
42 these amounts.

43

44 **Q. How is the remainder of your testimony organized?**

45 A. I discuss the relationship between the Company's assets and its proposed rate
46 base. I begin by analyzing the Company's discussion of the issue, identify

47 problems with the Company's evidence and arguments, and then propose
48 adjustment for those accounts where the alignment of additional assets and
49 costs has not been established.

50

51 **Q. Please summarize ComEd's proposed increase in rate base for this**
52 **proceeding.**

53 A. The Company proposes an increase of \$1,698.7 million in rate base. (ComEd Ex.
54 4.0 at 5:96) That includes \$536,886,415 and \$587,709,888 in distribution plant
55 rate base additions for 2005 and 2006, respectively. (Company Response to
56 Staff Data Request PL 1.06)

57

58 **II. Relationship of Assets to Costs**

59

60 **Q. What is the issue pertaining to assets and costs that you seek to explore?**

61 A. The issue is whether the proposed dollars in rate base are commensurate with
62 the amount of assets on the system.

63

64 **Q. What is the starting point for your discussion of this issue?**

65 A. I begin with the testimony of Company witness Williams (ComEd Ex. 4.0). He
66 discusses both the assets currently in place as well as those assets added since
67 ComEd's last rate case. Furthermore, he discusses why the costs of ComEd's
68 assets have risen in recent years.

69

70 **Q. What argument does Mr. Williams make to explain the increase in costs**
71 **associated with these assets?**

72 A. He focuses on the increases in the cost of materials for these assets. Mr.
73 Williams argues that ComEd has experienced greatly increased costs for
74 important components of its distribution system. (ComEd Ex. 4.0 at 36:711-712)¹

75

76 **Q. Have you identified any problems with this discussion?**

77 A. Yes. I have identified the following problems.

- 78 • Much of the data concerning ComEd's assets presented in Mr. Williams'
79 testimony is incorrect, unclear or out-of-date. Given that the proposed dollars
80 in rate base reflect the assets on the ComEd system that are used and useful,
81 the problems in this data raise general questions about the accuracy of the
82 attendant costs being requested.
- 83 • Mr. Williams focuses on materials costs. However, materials costs account for
84 less than 30% of distribution rate base additions for 2005 and 2006. Mr.
85 Williams fails to explain the role of non-materials costs which comprise more
86 than 70% of these additions in determining the levels of 2005 and 2006 rate
87 base additions.
- 88 • A specific issue arises concerning the relationship of assets and dollars of
89 rate base additions for underground lines and services. I find the growth in
90 rate base is unwarranted given the levels of assets being added. This finding
91 will provide the basis for an adjustment of the Company's proposed rate base

¹ When citing testimony, I have provided citations to the page number(s) and line number(s) in the form of

92 additions.

93

94 **III. Discussion of ComEd Assets**

95 **Q. What data does Mr. Williams provide on the assets used by ComEd?**

96 A. Mr. Williams states that the Company:

- 97 • Operates and maintains 43,900 circuit-miles of overhead conductors and
98 46,300 miles of underground cable
- 99 • Operates and maintains 265 major high voltage substations and 777 local
100 lower voltage substations
- 101 • Uses 587,000 distribution class transformers outside these substations
- 102 • Uses 1,364,000 distribution poles

103 (ComEd Ex. 4.0 at 9:163-172)

104

105 **Q. With regard to plant additions, does Company witness Williams provide**
106 **examples of the Company's additions to distribution plant since 2004?**

107 A. Yes, Mr. Williams presents a list of assets added to the system. His list consists
108 of the following:

- 109 • 9 new substations in 2005 - 2006; 12 more in 2007
- 110 • 75 new substation transformers in 2005 - 2006; 20 more in 2007
- 111 • 27,912 wooden poles purchased in 2005-2006
- 112 • Approximately 3,246 miles of overhead conductors
- 113 • Approximately 4,967 miles of underground cables

114 • 32,577 primary distribution transformers.

115 (ComEd Ex. 4.0 at 44-45:863-873)

116

117 **Q. Do you have any concerns with these figures provided by Mr. Williams?**

118 A. Yes, I am concerned by his claim that ComEd operates and maintains 265 major
119 substations and 777 local substations on its system. (ComEd Ex. 4.0 at 9:168-
120 169) These figures correspond to a total of 1042 substations on the ComEd
121 system. However, the Company indicated in response to discovery that it had a
122 total of 732 distribution substations as of 12/31/2006. (Company Response to
123 Staff Data Request PL 5.03(c)) The Company sought to reconcile the two
124 numbers in response to Staff data Request PL 9.03 by first stating that ComEd,
125 in fact, had 732 distribution substations as of 12/31/2006. Nevertheless, the
126 Company sought to explain Mr. Williams' number accordingly:

127 In George Williams' testimony, the 265 major substations and 777 local
128 substations is from the ComEd Annual Distribution System Data Book.
129 The 265 number represents the number of terminals at major substations
130 that step down 138 kV or 69 kV to 69 kV, 34 kV or 12 kV levels as of
131 12/31/2005. The 777 represents the number of terminals at local
132 substations that step down 34 kV or 12 kV to 12 kV or 4 kV levels as of
133 12/31/2005. A terminal is an interconnected set of transformers and other
134 equipment of the same voltage level that are operated together. For the
135 sake of efficiency, ComEd may locate more than one terminal at a single
136 physical substation location, even though they – electrically – perform the
137 same function as two distinct substations. These numbers, therefore more
138 accurately describe the capabilities of the system. ComEd may propose a
139 revision to Mr. Williams testimony to make this distinction clear. (ComEd
140 response to Staff Data Request PL 9.03)

141 Despite this explanation, the fact remains that the information in Mr. Williams'
142 testimony concerning the number of substations was incorrect.

143

144 **Q. Do you have any other concerns with these statistics for selected assets**
145 **on the ComEd system?**

146 A. Yes. The information Mr. Williams provides in his testimony for substations,
147 underground conductors and transformers reflect levels as of 12/31/2005.
148 (Company Responses to Staff Data Requests PL 9.02, 9.03 and 9.04) The
149 Company filing uses an historical 2006 test year for its cost of service, so more
150 recent data was clearly available at the time he prepared his testimony. The use
151 of older data produces a less precise picture of the current state of ComEd's
152 system. This can be significant since assets are being retired as well as added.

153

154 **Q. Do you have any concerns with the plant figures presented in Mr. Williams'**
155 **testimony?**

156 A. Yes, the concern pertains to his statement that ComEd added a total of 9 new
157 substations in 2005 and 2006. (ComEd Ex. 4.0 at 44:866) The Company
158 indicated in the discovery process that only 6 substations were added over this
159 period. (Company Response to Staff Data Request PL 9.12)

160

161 **Q. Does Mr. Williams present incorrect information in his direct testimony**
162 **concerning the number of new substation transformers added in 2005 and**
163 **2006?**

164 A. Yes. He states that ComEd added 75 new substation transformers in 2005 and
165 2006. (ComEd Ex. 4.0 at 44:866) However, the Company subsequently indicated

166 in discovery that Mr. Williams was incorrect and, in fact, 82 new substations were
167 added over that period. (Company Response to Staff Data Request PL 9.13)

168

169 **Q. Does Mr. Williams provide incorrect information about the number of**
170 **substation transformers to be added in 2007?**

171 A. Yes, he states in his testimony that another 20 substation transformers will be
172 added in 2007. (ComEd Ex. 4.0 at 44:866-867) However, in discovery the
173 Company indicates that, in fact, a total of 51 substation transformers are to be
174 added in 2007. (Company response to Staff Data Request PL 9.15)

175

176 **Q. Does Mr. Williams present conflicting information in his direct testimony**
177 **concerning the miles of overhead and underground cable installed since**
178 **2004?**

179 A. Yes. Company witness William presents a list of assets added since 2004 which
180 includes approximately 3,246 miles of overhead conductions and 4,967 miles of
181 underground cables. (ComEd Ex. 4.0 at 44-45:865-873) However, in discovery
182 the Company indicated that only 2,334 miles of underground and 370 miles of
183 overhead were installed between January 1, 2005 and November 8, 2007
184 (Company responses to Staff Data Requests PL 9.09 and PL 9.10)

185

186 **Q. Did the Company subsequently indicate that the figures of 3,246 miles of**
187 **overhead conductors and 4,967 miles of underground cables cited in Mr.**
188 **Williams' testimony were the amounts purchased, rather than installed?**

189 A. Yes. (See Company responses to Staff Data Requests PL 9.09 and PL 9.10)
190 Thus, the Company argues that there is no conflict in the figures. However, the
191 contention that the 3,246 miles of overhead and 4,967 miles of underground cited
192 in Mr. Williams' testimony represent purchases rather than installations is
193 contradicted by the Company's response to the City of Chicago's Data Request
194 No. COC 3.084 concerning the references on lines 871-872 of Mr. Williams'
195 testimony to the 3,246 miles of overhead and 4,967 miles of underground. That
196 response states that, "[t]he referenced portions of Mr. Williams' testimony states
197 the total estimated number of miles of overhead conductor and underground
198 cable installed by ComEd since 2004 and included in rate base."

199
200 Thus, the Company's position remains unclear as to whether the 3,246 and
201 4,967 mile figures reference purchases or installations.

202
203 **Q. Are there potential discrepancies in the numbers provided for transformers**
204 **in Mr. Williams' direct testimony?**

205 A. Yes. The numbers provided by the Company in testimony and in response to
206 discovery reflect the number of transformers "issued from stock". With respect to
207 transformers issued from stock, Company witness Williams provides figures that
208 differ from numbers provided in response to discovery. According to Mr. Williams,
209 the Company added 32,577 primary distribution transformers in 2005 and 2006
210 (ComEd Ex. 4.0 at 45:873 and Company Response to PL 9.11). However, the
211 Company's response to Staff Data Request PL 1.11 indicates that ComEd issued

212 a total of 35,843 transformers from stock in those two years (18,194 in 2005 and
213 17,849 in 2006). This amounts to a difference of 3,266 between the two figures. It
214 should be noted that ComEd indicates the 32,577 figure is net of any
215 transformers returned to stock (Company Response to PL 9.11) while there is no
216 indication whether the figures provided in response to Staff Data Request PL
217 1.11 are net or absolute numbers.

218
219 Thus, similar to other problems with Company information discussed above, the
220 Company has failed to establish that the two sets of figures are, in fact,
221 consistent.

222

223 **Q. Has Company witness Williams subsequently made corrections to certain**
224 **figures presented in his direct testimony?**

225 A. Yes. In an errata filing on February 4th, the Company made three corrections to
226 Mr. Williams' testimony. The first correction addressed Mr. Williams' original
227 incorrect reference to the number of distribution substations on the ComEd
228 system. The revised language indicated that the figures, in fact, represent the
229 number of terminals at distribution substations rather than to the number of
230 substations themselves. Mr. Williams also made corrections to the number of
231 substations as well as the number of substation transformers added by ComEd
232 since the 2004 test year for ComEd's previous rate case, Docket No. 05-0597.

233

234 **Q. Does this errata filing fully resolve the issue concerning the incorrect**
235 **information presented in Mr. Williams' testimony?**

236 A. No, it does not. The Company has failed to resolve all issues concerning the
237 numbers provided for distribution transformers and overhead and underground
238 lines on the ComEd system, which were not addressed in the errata filing.

239
240 In addition, the errata filing fails to demonstrate that the costs associated with the
241 data cited originally in Mr. Williams' testimony were accurately calculated.

242
243 **Q. Can you provide an example to illustrate the questions that remain**
244 **concerning the data originally presented in Mr. Williams' testimony?**

245 A. Yes. Mr. Williams stated in his direct testimony that the Company added 9 new
246 substations in 2005 and 2006. (ComEd Ex. 4.0 at 44:866-867) In the errata filing,
247 he revised this figure down to 6. This change in testimony begs the question
248 whether or not the original figure of 9 was tied in any way to the dollar amounts of
249 plant additions proposed by ComEd in this case. If so, then any revisions to the
250 number of substations in Mr. Williams' original testimony would impact the dollar
251 amounts of plant additions proposed by ComEd.

252
253 **Q. What conclusion have you reached regarding the assets and plant**
254 **additions that have been presented in both the testimony of Mr. Williams**
255 **and the responses to your data requests?**

256 A. The Company has failed to clarify the relationship between the assets on its
257 system and the costs associated with those assets. If changes are required in the
258 estimates of assets on the system, then the question arises concerning the
259 impact of those changes on the associated costs. That is a question for the
260 Company to address in the course of this proceeding.

261

262 **IV. Increases in Asset Costs**

263 **Q. Please explain how Company witness Williams ties the issue of assets to**
264 **costs in his testimony.**

265 A. Mr. Williams presents data showing how the costs of certain key materials
266 associated with distribution assets have increased over the last five years. He
267 goes on to state, “[w]ith respect to each of the assets that are already in service,
268 the cost at which ComEd acquired and installed the asset was reasonable and
269 prudent.” (ComEd Ex. 4.0 at 39:757-758)

270

271 **Q. What data does Mr. Williams provide to support this argument?**

272 A. He provides evidence showing the increases in costs for certain materials that
273 are employed on the ComEd system. He presents charts focusing on the time
274 period 2002-2006 which depict increases in both unit costs and units for
275 substation transformers, overhead conductors, underground cables and poles.
276 (ComEd Ex. 4.0 at 14:262; 36-37:717-719)

277

278 **Q. What does Mr. Williams indicate in his charts concerning the direction of**

279 **distribution plant costs?**

280 A. Mr. Williams' charts indicate that substation transformers and overhead
281 conductor costs both increased by 110% between 2002-2006, while underground
282 cable and poles increased by 60% and 30%, respectively, over this period. (*Id.*)

283

284 **Q. Does this discussion provide a full explanation of the changes in these**
285 **costs over this time?**

286 A. No, it does not. The discussion by Mr. Williams focuses on material costs only.
287 However, material costs account for only a minority of costs associated with plant
288 additions according to data provided by the Company. For these other non-
289 materials costs which comprise a majority of plant additions costs, Mr. Williams
290 provides no information concerning the level of increase.

291

292 **Q. What is the basis for your statement that materials costs comprise only a**
293 **minority of plant additions costs?**

294 **A.** It is based on Company data which presents total material costs and total
295 distribution plant additions for 2005 and 2006. In 2005, material costs accounted
296 for \$122,972,000 out of a total of \$536,886,415 in distribution plant additions. In
297 2006, materials costs comprised \$187,798,132 of the \$587,709,888 in
298 distribution plant additions. (Company Response to Staff Data Request PL 1.06,
299 Attachment 1) Thus, materials costs represented approximately 23% and 32% of
300 plant additions in 2005 and 2006, respectively. Collectively, materials costs
301 accounted for \$310,770,132, or 27.6%, of \$1,124,596,303 in total distribution

302 plant additions for 2005 and 2006 combined.

303

304 These figures demonstrate the limits to which material costs drive overall plant
305 additions. Most of the costs associated with plant additions are driven by other
306 factors.

307

308 **V. Proposed Adjustments**

309 **Q. Have you developed any adjustments to the Company's proposed level of**
310 **plant additions?**

311 A. Yes. I have developed adjustments to ComEd's proposed levels of 2005 and
312 2006 plant additions for underground lines and services.

313

314 **Q. What is the basis for your adjustment?**

315 A. I have examined the increase in assets alongside the increase in costs for these
316 two plant items, and found that costs have increased at a significantly higher
317 rate. In the absence of further information from the Company that would explain
318 the increase in these costs, I have concluded that an adjustment to the
319 Company's proposed plant additions for underground lines and services would
320 be appropriate.

321

322 **Q. What are your specific concerns with the level of rate base proposed by**
323 **ComEd in this case?**

324 A. I am concerned by increases in distribution rate base accounts pertaining to
325 underground lines and services for 2005 and 2006.

326

327 **Q. What is the basis for your concern?**

328 A. For each of these cost components, there is a divergence between the numbers
329 of assets being installed on the system and the increased dollar amounts of plant
330 additions being requested. As a result, the unit costs for these items has grown
331 significantly and the evidence presented by the Company does not fully explain
332 the level of this increase.

333

334 **Q. Please explain the issue as it pertains to underground lines.**

335 A. There has been a significant increase in the unit costs associated with
336 underground lines that is not fully explained by the information presented in Mr.
337 Williams' testimony. The issue is presented in the attached Schedule 5.01 which
338 shows: (1) the miles of underground primary conductors installed over the years
339 2000 – 2006; (2) the amount of ComEd's plant additions associated with
340 underground conduit, conductors and devices for each of those years; and (3)
341 the per-mile cost of those plant additions during that period.

342

343 **Q. What does that schedule demonstrate?**

344 A. It demonstrates that the per-mile cost for the installation of underground lines has
345 risen significantly over this period. The average per-mile cost increased from

346 \$164,642 for the years 2000-2004 to \$245,170 for 2005-2006. This amounts to
347 an increase of \$80,528, or 48.9% over the averages for these two time periods.

348

349 **Q. How much of this increase is explained by the evidence ComEd has**
350 **provided on material costs for underground lines?**

351 A. ComEd only explains a fraction of the increase. According to Company witness
352 Williams, ComEd's material cost for underground cable increased from \$1,650 to
353 \$2,600 per mile from 2002 to 2006. (ComEd Ex. 4.0 at 36:717) This amounts to
354 an increase of \$950, or approximately 60%, per mile from 2002-2006.

355

356 **Q. Are the unit costs identified by Company witness Williams the only**
357 **materials costs to consider in assessing this increase?**

358 A. No, they are not. According to the Company, other materials costs to consider
359 include manholes, concrete, ventilation equipment, sump pumps, temporary
360 installations for the permanent installation of conduit, permits, municipal
361 inspections, insulated, submarine and lead cables (i.e. – secondaries), circuit
362 breakers, insulators, tie wires and clamps associated with the racking of cables,
363 lightning arresters, railroad or highway crossing guards, splices, switches, tree
364 trimming, permits and other line devices. (Company Response to Staff Data
365 Request PL 6.05) Furthermore, as noted previously, non-material costs comprise
366 a majority of 2005 and 2006 plant additions costs.

367

368 **Q. Does the Company present evidence concerning the amounts or costs of**
369 **the other materials identified above?**

370 A. No, it does not. Thus, it is not clear whether these other items comprise a
371 significant component of materials costs or whether the associated costs have
372 increased or decreased over the years 2000-2006. Thus, there is insufficient
373 evidence to assess the impact of these additional items on ComEd's costs for
374 underground lines over the years 2000-2006.

375

376 **Q. Why do you also have concerns about the Company's proposed additions**
377 **to services plant for 2005 and 2006?**

378 A. ComEd has also failed to provide a satisfactory explanation for a significant
379 increase in these costs for the years 2005-2006 compared with 2000-2004. The
380 growth of these costs is presented in Schedule 5.01. The schedule presents: (1)
381 the number of services installed each year from 2000 – 2006; (2) the amount of
382 ComEd's plant additions associated with services; and (3) the per-unit cost of
383 those plant additions for each of those years.

384

385 **Q. What does that schedule show?**

386 A. It shows that the per-unit cost of those plant additions has risen significantly over
387 this period. The average per-mile cost increased from \$552 for the years 2000-
388 2004 to \$1,014 for 2005-2006. This amounts to an increase of \$462, or 83.8%
389 over the averages for these two time periods.

390

391 **Q. What evidence does ComEd provide to support its proposed increase in**
392 **services costs?**

393 A. The most relevant cost information is provided by Company witness Williams. He
394 presents data on the increases in costs for overhead and underground wire,
395 which are both used in the installation of new services. That information indicates
396 that the costs of overhead and underground wire have increased by 110% and
397 60%, respectively, between 2002 and 2006. (ComEd Ex. 4.0 at 36:717; 37:718)

398

399 **Q. Are these costs pertaining to overhead and underground lines the only**
400 **materials costs to consider in assessing this increase?**

401 A. No, they are not. According to the Company, the costs to consider include
402 brackets, cable and wire, conduit, insulators, municipal inspection, pavement
403 cutting and replacement, permits, protection of street openings, service
404 switching, etc. and investments related to existing services. (Company Response
405 to Staff Data Request PL 6.01)

406

407 **Q. Does the Company present evidence concerning the amounts or costs of**
408 **the other materials listed?**

409 A. No, it does not. The contribution of each cost item to the total services costs over
410 the years 2000-2006 remains unclear. Thus, the extent to which each of these
411 cost elements explains the increase in services costs over this time cannot be
412 assessed.

413

414 **Q. Does the Company identify any other factor that might explain differences**
415 **in services costs over time?**

416 A. Yes. ComEd states that the method of allocating overhead and other costs to
417 Services Account 369 has changed over time. (Company Response to Staff Data
418 Request PL 6.01) However, the Company does not explain what this change is
419 or how it has impacted the level of services costs over time.

420

421 **Q. Are there other costs to consider for underground lines and services**
422 **besides materials over the years 2000 – 2006?**

423 A. Yes. As previously noted, materials costs account for a minority of plant
424 additions. Remaining non-materials costs which ComEd characterizes as either
425 “other direct costs” or “other costs” comprise most of the costs associated with
426 plant additions for 2005 and 2006. As previously noted, ComEd indicates that
427 approximately 27.6% of plant additions for 2005 and 2006 are materials costs
428 which means that the remaining 72.4% of the costs fall into these other
429 categories.

430

431 **Q. Does ComEd provide a more detailed breakdown of these other cost**
432 **categories?**

433 A. Yes, the Company indicates that “other direct costs” includes items such as
434 labor, contracting, engineering, departmental overheads, and other costs directly
435 associated with projects. ComEd also states that “Other costs” includes
436 allowance for funds used during construction, i.e. AFUDC, administrative and

437 general overhead costs, pension and benefits, taxes and other indirect costs.

438 (Company Response to Staff Data Request PL 1.06)

439

440 **Q. Does the Company present any further breakdown of these non-material**
441 **costs in this response to discovery?**

442 A. No, it does not.

443

444 **Q. Does this lack of detail present a problem?**

445 A. The lack of information on these non-materials costs makes it difficult to
446 understand how they contribute to the overall increase in plant additions for
447 underground lines and services from 2000-2004 to 2005-2006. Whether these
448 costs have increased and, if so, to what extent, are not explained by the
449 Company. This leaves unexplained the contribution of these non-materials costs
450 to the overall increase in plant additions over this time period.

451

452 **Q. What does this lack of information indicate about the increases proposed**
453 **for underground lines and services?**

454 A. Because a significant share (72.4%) of the increases in these cost components
455 remains unexplained, it means that the Company has failed to fully substantiate
456 the increases in these accounts.

457

458 **Q. What do you therefore recommend for underground lines and services?**

459 A. Until the Company provides a more thorough explanation for these increases, I
460 propose a downward adjustment in the proposed levels of proposed plant
461 additions pertaining to underground lines and services for the years 2005 and
462 2006.

463

464 **Q. How have you developed your recommended adjustment?**

465 A. My proposed adjustment seeks to limit recovery for these plant additions to those
466 costs for which support has been provided. That would include increases in
467 materials costs commensurate with the increases presented in Mr. Williams'
468 testimony as well as reasonable increases for non-materials costs.

469

470 My explanation of my recommended adjustments follows.

471

472 **Q. Please explain the process that you utilized to determine your**
473 **recommended adjustments to the Company's proposed rate base.**

474 A. I utilized a process for both underground lines and services that encompassed
475 several steps, which included:

- 476 • The average unit cost for plant additions over the years 2000-2004 and
477 2005-2006 were determined;
- 478 • Reasonable increases in plant additions from 2000-2004 to 2005-2006 were
479 calculated;
 - 480 ○ Per-unit plant additions for 2000-2004 were divided into two
481 categories, materials and non-materials costs;

- 482 ○ Reasonable increases as explained below were applied to both
483 materials and non-materials costs from the midpoint of 2000-2004 to
484 the midpoint of 2005-2006 to develop a reasonable level of these costs
485 in this latter period;
- 486 • The sum of the per-unit materials and non-materials costs were compared to
487 the average per-unit plant additions for 2005-2006 proposed by ComEd;
 - 488 • The difference on a per-unit basis was multiplied by the number of units to
489 determine an overall adjustment for each item.

490

491 **Q. How have you allocated plant additions for underground lines and services**
492 **into materials and non-materials components?**

493 A. I have used the breakdown between materials and non-materials costs provided
494 by ComEd for overall 2005 and 2006 plant additions. As previously noted, the
495 Company has determined that 27.6% of total 2005 and 2006 distribution plant
496 additions represent the cost of materials which would indicate that the remaining
497 72.4% pertain to non-materials costs.

498

499 Because this is the only available breakdown of distribution plant additions
500 between materials and non-materials costs, I have used these same percentages
501 for dividing all plant additions associated with both underground lines and
502 services into materials and non-materials components for each year 2000-2006.

503

504 **Q. How did you determine the percentage to increase materials associated**
505 **with underground lines between 2000-2004 and 2005-2006?**

506 A. I determined that all materials associated with underground lines have increased
507 by the same percentage as the 60% increase in underground line costs cited by
508 Mr. Williams. (ComEd Ex. 4.0 at 36:717)

509

510 **Q. How did you determine the percentage to increase materials associated**
511 **with services between 2000-2004 and 2005-2006?**

512 A. I reviewed the growth figures presented by Mr. Williams and determined that a
513 79.8% increase in materials costs for services is appropriate.

514

515 **Q. Please explain how you developed the 79.8% figure.**

516 A. Service lines can be installed both above and below ground. Thus, services costs
517 are influenced by cost increases related to both overhead and underground lines.
518 Company witness Williams indicates that the cost of overhead lines has grown by
519 110% from 2002-2006 and that underground lines have grown by 60% over this
520 period. (ComEd Ex. 4.0 at 37:718 and 36:717) I weighted the two growth figures
521 by the number of miles of overhead and underground lines added by the
522 Company since 2004 as presented in Mr. Williams' testimony. According to Mr.
523 Williams, the Company added 3,246 miles of overhead conductors and 4,967
524 miles of underground cables since 2004 (ComEd Ex. 4.0 at 45:871-872)
525 Assuming overhead lines increased by 110% and underground by 60% produces

526 a weighted average increase of 79.8% (See Schedule 5.2, p. 2 of 2). This is the
527 figure I used as a proxy for the increase in materials costs related to services.

528

529 **Q. How did you determine the increase in non-materials costs over this**
530 **period?**

531 A. I determined that non-materials costs have grown at an average of 3.5% per
532 year. This is the same 3.5% wage increase that ComEd employees have
533 averaged since 2004 over the years 2004-2006. But, this does not account for
534 any offsetting productivity gains in capitalized labor costs which are a component
535 of the non-materials costs associated with plant additions. It should be noted that
536 this figure could overstate the increase in non-materials costs because it does
537 not factor in productivity growth which would reduce the labor time necessary for
538 installing underground lines and services.

539

540 **Q. Have you calculated an adjustment to rate base for underground lines and**
541 **services which incorporates your allocation for materials and non-**
542 **materials costs?**

543 A. Yes, I have calculated an adjustment in the attached Schedule 5.02. The
544 resulting adjustment from my calculation reduces 2005 and 2006 rate base
545 additions for underground lines and services by \$74.69 million and \$36.26
546 million, respectively. This corresponds to a collective adjustment of \$110.95
547 million to these two sets of costs for the years 2005 and 2006.

548

549 The proposed adjustment includes adjustments to proposed levels of
550 accumulated depreciation, depreciation expense and deferred income taxes.

551

552 **Q. Please summarize why your proposed adjustments to these plant additions**
553 **are reasonable.**

554 A. The adjustments are reasonable given the fact that ComEd has failed to provide
555 sufficient evidence, as explained above, to justify the 2005 and 2006 levels of
556 plant additions for underground lines and services. In the absence of more
557 correct and more complete data and information from the Company, my
558 recommended adjustments to plant additions for these accounts provide the
559 most reasonable alternative for the Commission to adopt.

560

561 **Q. Does this complete your direct testimony?**

562 A. Yes, it does.

Determination of Unit Costs

	2000	2001	2002	2003	2004	2005	2006	Total 2005-2006
Plant Additions 1/								
366 underground conduit	5,435,219	16,306,978	37,666,109	17,996,205	34,861,318	7,174,488	12,687,796	
367 underground conductors and devices	153,029,566	171,879,068	177,925,830	193,341,789	206,741,922	242,903,029	218,994,403	
369 services	22,025,625	19,015,996	28,141,766	21,722,379	71,274,417	60,034,967	66,917,604	
Assets Added 2/								
Miles of underground conductors	1,643	989	989	1,356	1,189	1,109	856	1,965
Services	49,165	48,551	58,485	68,346	69,338	63,578	61,596	125,174
Unit Costs Underground (\$/mile)	96,448	190,279	217,990	155,854	203,199	225,498	270,657	
Unit Costs Services (\$/Unit)	448	392	481	318	1,028	944	1,086	

	Average 2000-2004	Average 2005-2006	Change	Percent Change
Plant Additions				
366 & 367 Underground conduit, conductors and devices	203,036,801	240,879,858	37,843,057	18.6%
369 services	32,436,037	63,476,286	31,040,249	95.7%
Assets Added				
Miles of underground conductors	1,233	983	(251)	-20.3%
Services	58,777	62,587	3,810	6.5%
Unit Costs				
366 & 367 Underground conduit, conductors and devices	164,642	245,170	80,528	48.9%
369 services	552	1,014	462	83.8%

1/ Company Response to ICC Staff Data Request PL 1.16.

2/ Company Response to ICC Staff Data request PL 1.11.

Commonwealth Edison Company Adjustments to Underground Lines and Services

For the Test Year Ending December 31, 2006
 (In Thousands)

Line No.	Description (a)	Amount (b)
1	Underground Lines and Services Adjustment per Company	\$ -
2	Underground Lines and Services Adjustment per Staff	<u>110,954</u>
3	Proposed Adjustment	<u>\$ (110,954) (1)</u>
4	Corresponding Adjustments:	
5	Accumulated Depreciation	\$ 5,481 (2)
6	Accum. Deferred Income Tax	\$ 873 (3)
7	Depreciation Expense	\$ (2,741) (4)

Note:

(1) Page 2

(2) Line 7 times two years

(3) Line 3 times (ComEd Sch B-2 line 11 Col (B) divided by line 4 Col (B))

(4) Line 3 x composit depreciation rate, .0247

Calculation of Proposed Adjustments

	Average 2000-2004	Increase	Average 2005-2006
Adjustment of Underground Costs			
Unit Costs	164,642		
Materials (27.6%)	45,441		
Non-Materials (72.4%)	119,201		
60% Increase in Materials Costs	45,441	27,265	72,706
3.5% per year increase in Other Costs (72.4%)	119,201	15,252	134,453
Total Calculated Per-Unit Costs			207,159
Average Per-Unit Cost of Company-Proposed Plant Additions			245,170
Per-Unit Adjustment from Company-Proposed Unit Costs			(38,011)
Total Miles added 2005-2006			1,965
Total Underground Adjustment (Unit Adjustment x total 2005-2006 miles added)			(74,691,934)
Adjustment of Services Costs			
Unit Costs	552		
Materials (27.6%)	152		
Non-Materials (72.4%)	400		
79.8% Increase in Materials Costs 1/	152	122	274
3.5% per year increase in Other Costs	400	51	451
Total Calculated Per-Unit Costs			725
Average Per-Unit Cost of Company-Proposed Plant Additions			1,014
Per-Unit Adjustment from Company-Proposed Unit Costs			(290)
Total Units added 2005-2006			125,174
Total Services Adjustment (Unit Adjustment x total 2005-2006 miles added)			(36,262,103)
Combined Adjustment Underground Lines and Services)			(110,954,037)

1/ Calculation of 79.8% figure

	Miles Added	Cost Increase Share 2002-2006	Increase
Overhead	3246	39.5%	110%
Underground	4967	60.5%	60%
Total	8213	100.0%	79.8%