

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
Petition for approval of delivery services tariffs and	:	No. 01-0423
tariff revisions and of residential delivery services	:	
implementation plan, and for approval of certain	:	
other amendments and additions to its rates, terms,	:	
and conditions.	:	

Phase II Rebuttal Testimony of

RON WILLIAMS

Vice President
EXL Consulting, Inc.

1 Q. Please state your name.

2 A. My name is Ron Williams.

3 Q. Have you previously given direct testimony in Phase II of this proceeding on behalf of
4 Commonwealth Edison Company (“ComEd”)?

5 A. Yes.

6 Q. What are the purposes of your Phase II Rebuttal testimony?

7 A. The purposes of my Phase II Rebuttal testimony are to respond to pages 12 and 13 of the
8 Phase II direct testimony of David J. Effron (Exhibit GC 7.0) in which he expresses
9 support for The Liberty Consulting Group’s (“Liberty”) distribution operations and
10 maintenance (“O&M”) “trend line” analysis and the conclusions Liberty draws from it,
11 and, specifically (1) to reiterate my disagreement with Liberty’s assertion (supported by
12 Mr. Effron on page 12 of his testimony) that applying a 3.045% escalation rate to
13 ComEd’s 1991 Distribution O&M expenses produces a reasonable level of spending for
14 the year 2000, (2) to explain that the alternative methodologies suggested by Mr. Effron
15 for performing Liberty’s trend line analysis do not cure the fundamental flaws in
16 Liberty’s approach that were discussed in my direct testimony, and (3) to dispute Mr.
17 Effron’s implicit suggestion (through his endorsement of Liberty’s approach and
18 conclusion) that ComEd’s delivery system expenses in 2000 (which my analysis shows
19 were very reasonable when compared to comparable utilities) were at a level that is
20 atypical and non-recurring.

21 Q. On page 12 of his Phase II direct testimony, Mr. Effron supports Liberty’s assertion that
22 applying a 3.045% escalation rate to ComEd’s 1991 Distribution O&M expenses

23 produces a reasonable level of spending for the year 2000. Is Mr. Effron's analysis
24 sound?

25 A. No. Mr. Effron explains that by compounding the Gross Domestic Product – Implicit
26 Price Deflator with the annual increase in customers served, one can conclude that
27 3.045% is a reasonable general cost escalation rate from 1991. That sounds logical to
28 me, and if Mr. Effron had stopped there, I could accept the statement, as far as it goes.
29 However, Mr. Effron extends his testimony beyond confirming a reasonable level of
30 general cost escalation to assuming it is reasonable to apply that escalation rate to
31 ComEd's expenses. That's not right. If it were right, ComEd's spending for total
32 Electric Service Expenses¹ would have been over \$5 billion in 2000 instead of the actual
33 amount of about \$4.7 billion.

Year	ComEd Expenses	1991 at 3.045% per year
1991	\$3,845,216,498	\$3,845,216,498
1992	\$3,816,300,859	\$3,962,303,340
1993	\$4,084,347,839	\$4,082,955,477
1994	\$4,090,480,422	\$4,207,281,471
1995	\$4,207,824,303	\$4,335,393,192
1996	\$4,392,816,645	\$4,467,405,915
1997	\$5,016,395,109	\$4,603,438,425
1998	\$4,972,782,578	\$4,743,613,125
1999	\$4,636,071,552	\$4,888,056,145
2000	\$4,727,149,696	\$5,036,897,454

34
35 I do not want to misconstrue Mr. Effron's testimony. He did not say it would be
36 reasonable for total Electric Service Expenses to escalate annually at 3.045% -- but he did
37 not say it would be unreasonable either. Mr. Effron said it would be reasonable to apply

¹ As defined in my direct testimony (ComEd Exhibit 104.0) and here, total Electric Service Expenses include all Power Production, Transmission, and Delivery Service expenses (Distribution, Customer Accounts, Customer Service and Information, and Administrative and General ("A&G") expenses), including Depreciation and Amortization expenses).

38 the escalation rate to Distribution O&M and was silent about why it should not be applied
39 to any other ComEd expense.

40 Mr. Effron was also silent on the cost effects of changing work volumes or work
41 type over the past 12 years, even though those two considerations are also important to
42 understanding how costs reasonably should change over time. Mr. Effron may have
43 assumed that work volumes were driven by growth in customers and therefore included
44 in his analysis of the escalation rate. If so, he disregarded all other drivers of work
45 volume and cost such as infrastructure age, load growth per customer, higher customer
46 needs for information, service reliability, and power quality to name a few. This “tunnel
47 vision” produced an incomplete and therefore erroneous determination of “reasonable”
48 cost to operate and maintain the ComEd Distribution system in 2000.

49 The fatal flaw of using an escalation factor to determine reasonable year 2000
50 costs is that one must assume there are no cost drivers other than inflation and customer
51 growth. That is simply not true.

52 ? The age of ComEd’s massive infrastructure must be considered as a driver
53 of cost.

54 ? Customers are using more electricity, and we must consider the loss of
55 distribution system flexibility as a driver of cost.

56 ? Customers expect information that is real-time, accurate, and customized
57 to their needs. In 1991, there was no World Wide Web. We must
58 consider how the Web has changed customer expectations and how those
59 expectations have driven cost.

60 ? Service reliability and power quality have become more highly visible and
61 critical, as digital technologies have proliferated. We must consider how
62 the digital revolution has forced utilities to increase:

63 ? System protection devices and coordination of those devices on
64 electric feeders;

- 65 ? Automatic re-closing capabilities to allow temporary faults to self-
66 clear;
- 67 ? Sectionalizing to allow faults to be isolated to as few customers as
68 possible;
- 69 ? Automation to improve remote monitoring and control of system
70 conditions to assure power quality;
- 71 ? Increased mobilization of crews, logistical support and information
72 infrastructure to provide faster responses to outages;
- 73 ? System re-configurations to allow greater flexibility in response to
74 dynamic system conditions.

75 Resources are required to operate and maintain these capabilities. They drive up
76 cost and it is wrong to simply ignore them and assume utility costs only drift up with
77 inflation. Utility costs are driven by demand for utility service.

78 If Mr. Effron wanted to know the real reasonable cost escalation of work to
79 provide Delivery Services for ComEd customers, he should have analyzed the
80 performance requirements of ComEd's financial and service stakeholders and the
81 capacity, replacement, and maintenance needs of the ComEd electric, information, and
82 service provisioning infrastructure. He then would have identified the type of work,
83 volume of work, and cost of work needed to meet those requirements. That is what
84 prudent management does each year when they allocate budgets and through the year as
85 they authorize changes in budgets. Prudent management does not set next year's
86 spending by escalating the spending that occurred 12 years ago. But, accepting
87 Mr. Effron's conclusions presumes it is reasonable to do so. I believe it is unreasonable.

88 Q. Is Mr. Effron's conclusion valid when applied to lower level cost components?

89 A. As I stated, Mr. Effron asserts that reasonable costs for Distribution O&M in 2000 can be
90 found by escalating 1991 costs by 3.045%. No one probably believes that using the

91 3.045% escalation factor at a high level (total Electric Service Expenses) is reasonable. If
92 it were, ComEd costs at that level should have been \$5.0 billion instead of \$4.7 billion.
93 So, at what level of cost detail, if any, does 3.045% become reasonable?

94 Take, for example, Vegetation Management (“VM”), a cost component of total
95 Distribution O&M costs. VM costs are not high-level expenses as are total Electric
96 Service Expenses. They are low level. In 1991, ComEd spent \$24 million for Vegetation
97 Management. Escalating that amount by 3.045% per year results in “reasonable” (per the
98 application of Mr. Effron’s overall approach) spending of \$32 million in 2000. Liberty
99 estimates that \$39,244,906 is needed. (Liberty’s audit report (the “Audit Report”) at page
100 II-17). Even that \$39 million is too low and will not fund the VM work suggested to
101 ComEd by the Illinois Commerce Commission’s staff (“ICC Staff”). ComEd estimates
102 the reasonable amount needed to implement the work suggested by the ICC Staff for
103 Vegetation Management is \$45 million, as discussed at pages 34-35 of my direct
104 testimony (ComEd Exhibit 104.0). Clearly, the 3.045% escalation factor does not work
105 at a low level either.

106 Applying a general escalation factor does not work at a high level (total Electric
107 Service Expense), and it does not work at a low level (total Vegetation Management
108 Expense). There is no reason to believe it works at the Distribution O&M level.

109 Q. On pages 12 and 13 of his Phase II direct testimony, Mr. Effron discusses several
110 alternative “starting points” for Liberty’s “trend line” analysis. Would the use of any of
111 these alternative starting points cure the flaws in Liberty’s trend line analysis that you
112 discussed in your direct testimony?

113 A. No. Mr. Effron offers various alternatives to Liberty's use of 1991 as the starting point
114 including using 1989, 1990, 1991, 1992, and 1993 in various combinations or
115 individually as a "base year for calculating a normalized level of O&M expense."
116 (Exhibit GC 7.0 at 12). For the reasons described previously, these alternatives are not
117 acceptable because they do not address key drivers of cost other than inflation and some
118 aspects of customer growth.

119 By suggesting the revenue required to safely and reliably operate and maintain the
120 ComEd Distribution system, Mr. Effron is participating in one of the most important
121 tasks of management -- establishing optimum resource needs. Prudent management does
122 not do this by escalating costs of 12 years ago or by averaging costs of two or three
123 different years, all of which are at least ten years ago. Doing so would ignore too many
124 critical issues that need to be considered, such as current customer needs, current
125 maintenance needs, current operating risks, current work types, and current work
126 volumes. As indicated earlier, I believe use of escalation factors to determine current
127 reasonable needs is flawed because it ignores other important drivers of cost. Further,
128 because it ignores those other drivers and because those drivers evolve over time, a trend
129 established at a starting point 12 years ago or 10 years ago will inherently ignore 10 or 12
130 years of annual compounding associated with these cost drivers, rendering such a trend
131 invalid. To understand what it takes to safely and reliably operate and maintain the
132 ComEd Distribution system in 2000, look at what was actually spent. If that number is
133 somehow not trusted, perform an exception analysis or a zero-based budget. If those
134 analyses cannot be performed, look at how the key drivers of cost are affecting spending
135 in years near 2000.

136 Liberty and Mr. Effron suggest reducing Distribution O&M expenses by about
137 24%² based on using the 1991 starting point, and Mr. Effron describes how using a
138 couple years earlier or a couple years later would not greatly affect the outcome. So, Mr.
139 Effron suggests sticking with the 1991 starting point. Therefore, Mr. Effron supports
140 reducing Distribution O&M expenses by 24%. Mr. Effron offers no solutions to the
141 problem of how to safely operate and maintain the Distribution system with 24% fewer
142 resources. Perhaps he assumes that Liberty knows a way for ComEd to solve that
143 problem or Liberty would not have suggested it. Why would someone recommend a
144 level of resources without believing those resources were appropriate for the task at
145 hand? If Mr. Effron conducted a separate analysis to gain that confidence, it was not
146 discussed in his testimony. Therefore, I believe he has relied on Liberty to know that the
147 level of resources resulting from implementing their recommendation is the level
148 required for safe and reliable operation. That reliance is unwarranted. Liberty offers no
149 such solution. Where Liberty drills into the details of management, they contradict the
150 findings of their own trend-based recommendation.

151 Distribution O&M Labor expense identified in the Audit Report at II-18 was
152 approximately \$179 million in 2000, and was the single largest component of
153 Distribution O&M expenses. Nearly half of ComEd's 2000 Distribution O&M expenses
154 identified in the Audit Report were Labor. Mr. Effron suggests it is reasonable to apply
155 an escalation factor from 1991 to 2000 and disallow any ComEd spending above the
156 escalated amount. Mr. Effron therefore recommends reducing 2000 Distribution O&M
157 expenses by 24%. However, Liberty argued that Labor costs in 2000 were excessive by

² \$90 million reduction proposed by Liberty of ComEd's \$377 million request is 24%. (The \$377 M figure is what ComEd originally requested less \$41 M of incentive compensation. See Audit Report at page II-2.)

158 about 10%.³ If we accept Liberty's argument for the 10% amount, then implementing
159 Mr. Effron's recommendation will require the other components of Distribution O&M
160 expenses to be reduced much more than 24%. Using an escalation calculation to
161 determine reasonable cost requirements is not valid, and using a starting point ten years
162 ago while ignoring all other influences of cost is more invalid.

163 Q. Mr. Effron's Phase II direct testimony recommends significant disallowances of
164 ComEd's Distribution O&M expenses in 2000, implicitly suggesting that such expenses
165 were at a level that is atypical and non-recurring. Do you agree?

166 A. No. Mr. Effron accepts Liberty's recommendation to subsume any findings of atypical
167 and non-recurring expenses and recommend revenue requirements based on a general
168 escalation of 1991 ComEd expenses – while ignoring all other drivers of cost. In my
169 view, a revenue requirement should provide an adequate level of resources needed to
170 assure safe and reliable operation of the system. I have not performed an assessment of
171 ComEd to arrive at an opinion of resource requirements sufficient for safe and reliable
172 operation of the ComEd system. But I have compared ComEd expenses with other
173 utilities to enable this process to be informed by that comparison, which I believe to be
174 objective and fair.

175 No two utilities are identical, and comparing utilities is not exact. However, my
176 comparison relies on Federal Energy Regulatory Commission ("FERC") Form 1 data that
177 is publicly available, well-known, and understood in the industry, and I use major
178 categories of cost to minimize any differences of interpretation among utilities regarding

³ ComEd's Distribution O&M Labor identified in the Audit Report at II-18 was approximately \$179 million. Liberty argues that \$1.8 million is excessive due to inefficiencies, \$8.2 million is excessive due excessive

179 what is or is not included in minor accounts or sub-accounts. Further, I compare ComEd
180 Transmission and Delivery Service⁴ spending with the 30 largest utilities in the nation on
181 a customers served basis. And, to provide additional comparisons, I further compare
182 ComEd with the top 10, 20, and top 100 utilities. I compare all those utilities to ComEd's
183 cost-per-customer, as it would be with the ComEd filing and subsequent reductions
184 volunteered by ComEd. And, I compare all those utilities to ComEd's cost-per-customer,
185 as it would be if the Liberty/Effron disallowance were adopted. The details of this
186 comparison and a complete description of the methodology are included with my direct
187 testimony as ComEd Exhibit 104.1. The findings are provided in the table following the
188 text of my answer.

189 Mr. Effron would have ComEd resources near the bottom of the list of thirty
190 utilities. Liberty, in its June 2000 report on the investigation of the reliability of
191 ComEd's T&D systems at II-2, reported that "ComEd's operations and maintenance
192 expenses for T&D, on a per customer basis, declined from 1991 through 1997, and were
193 below the median of a large group of comparison electric utilities." In its Audit Report,
194 Liberty stated (at page I-3) that one of the two root causes of reliability problems
195 experienced by ComEd was that "ComEd simply did not spend the money required to
196 keep its T&D systems in shape to provide reliable service."

197 I believe that any decision that may reduce resources below that needed for the
198 ComEd system and its customers should be informed by a discrete analysis of resource

number of management personnel, and \$8.3 million is excessive due to excessive overtime. (Audit Report at pages II-18, II-19, II-23). The sum of Liberty's amounts is \$18.3 million or about 10%.

⁴ Transmission and Delivery Service expenses are total Electric O&M expenses, less total Sales Expenses, less total Power Production Expenses, plus total A&G and total Depreciation/Amortization, less A&G and Dep/Amort assigned to Power Production.

199 needs. Liberty and Mr. Effron did not do that. Failing a discrete analysis, an exception
 200 analysis should have been performed to identify atypical and non-recurring expenses.
 201 Liberty and Mr. Effron did not do that either. Instead, Liberty and Mr. Effron opted for a
 202 seriously flawed escalation factor. In doing so, Liberty and Mr. Effron urge driving
 203 ComEd spending far below the median of comparable utilities. Nothing I have seen by
 205 Liberty or by Mr. Effron leads me to believe that is in the interest of ComEd's customers.

**Transmission and Delivery Service Expenses per Customer
 Top 30 Utilities by Number of Customers Served in Year 2000**

Utility	Major Metro. Area Served	Year 2000
Niagara Mohawk Power Corp.	Syracuse, NY	\$549
PECO Energy Company	Philadelphia, PA	\$478
Duke Energy Corporation	Charlotte, NC	\$461
Georgia Power Company	Atlanta, GA	\$455
PacifiCorp	Portland, OR	\$442
Alabama Power Company	Jacksonville, AL	\$438
Massachusetts Electric Company	Worcester, MA	\$432
Connecticut Light and Power Company, The	Hartford, CT	\$417
Jersey Central Power & Light Company	Morristown, NJ	\$409
Pacific Gas and Electric Company	San Francisco Bay Area	\$396
San Diego Gas & Electric Company	San Diego, CA	\$395
TXU Electric Company	Dallas/Fort Worth	\$385
Virginia Electric and Power Company	Richmond, VA	\$353
ComEd's Filing plus Voluntary Adjustments	Chicago, IL	\$347
Consolidated Edison Company of New York, Inc.	New York City	\$345
Wisconsin Electric Power Company	Milwaukee, WI	\$345
Reliant Energy HL&P	Houston, TX	\$344
Union Electric Company	St. Louis, MO	\$339
The Detroit Edison Company	Detroit City	\$339
Baltimore Gas and Electric Company	Baltimore, MD	\$336
Northern States Power Company (Minnesota)	Minneapolis, MN	\$336
Carolina Power & Light Company	Raleigh, NC	\$318
Public Service Electric and Gas Company	Newark/Jersey City, NJ	\$318
Southern California Edison Company	Los Angeles County	\$316
Florida Power Corporation	St. Petersburg, FL	\$308
Ohio Edison Company	Akron, OH	\$301
PPL Electric Utilities Corporation	Allentown, PA	\$299
Liberty/Effron Recommendation for ComEd	Chicago, IL	\$293
Florida Power & Light Company	Miami, FL.	\$285
Consumers Energy Company	Battle Creek, MI	\$218
Public Service Company of Colorado	Denver, CO	\$208

206 Q. Does this conclude your Phase II rebuttal testimony?

207 A. Yes.