

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	No. 05-0159
Proposed tariffs filed pursuant to Article IX of the	:	
Public Utilities Act defining a competitive supply	:	
procurement process and, pursuant to Section	:	
16-112(a) of the Act, establishing a market value	:	
methodology to be effective post-2006; providing	:	
for Power Purchase Options and for recovery of	:	
transmission charges post-2006; and enabling	:	
subsequent restructuring of rates and unbundling	:	
of prices for bundled service pursuant to	:	
Sections 16-109A and 16-111(a) of the Act.	:	

Surrebuttal Testimony of
ANDREW PARECE
Managing Principal
Analysis Group, Inc.

1 **I. INTRODUCTION**

2 Q. Please state your name and business address.

3 A. My name is Andrew Parece. My business address is 111 Huntington Avenue, Boston,
4 Massachusetts.

5 Q. On whose behalf are you submitting surrebuttal testimony?

6 A. I am submitting surrebuttal testimony on behalf of Commonwealth Edison Company,
7 hereafter referred to in my testimony as ComEd.

8 Q. Are you the same Mr. Andrew Parece who previously submitted rebuttal testimony in this
9 proceeding?

10 A. Yes.

11 Q. What is the purpose of your testimony?

12 A. I was asked by ComEd to respond to the rebuttal testimony of two witnesses in this
13 proceeding: Dr. Arthur Laffer (BOMA Ex. 3.0) and Dr. David Salant (ICC Staff Ex.
14 11.0).

15 **II. RESPONSE TO REBUTTAL TESTIMONY OF DR. ARTHUR LAFFER**

16 Q. Please respond to Dr. Laffer's assertion that his proposed auction approach, which he
17 refers to as a descending clock, pay as bid auction, is not equivalent to a sealed bid
18 auction. (BOMA Ex. 3.0, 3:51)

19 A. In Dr. Laffer's rebuttal testimony he refers to three significant differences between his
20 proposed approach and the ComEd proposal:

21 The first difference is that under our descending clock, pay as bid approach, the
22 tick-down in price and bidding do not stop when the tranches of electricity supply
23 bid equal ComEd's full supply requirements and only cease when no bidder is

24 still willing to bid. Why on earth would anyone ever prohibit a supplier from
25 offering a lower price? The second difference is that under our pay as bid
26 approach we would not provide bidders with information that would facilitate
27 implicit collusion on a high price. The third difference is that the tick-down in
28 price from round to round would be made in equal decrements, rather than being
29 adjusted based on the excess supply remaining in the auction and other factors.
30 Like the second difference from ComEd's proposed auction described above, this
31 third difference also is designed to preclude the dissemination of information that
32 would facilitate any form of implicit collusion. (BOMA Ex. 3.0, 4:80-91)

33 In fact, Dr. Laffer's rebuttal testimony introduces another important difference
34 between his approach and the ComEd proposal not identified in his direct testimony, that
35 is, the ability of the bidder to re-enter the auction after they have stopped bidding
36 (BOMA Ex. 3.0, 2:42-45, 3:58-63, 20:470-471). This is an important difference between
37 the two auction formats. It violates the activity rules of ComEd's proposed auction
38 approach (ComEd Ex. 11.4) and it results in the only information, other than the round
39 price, that would be made available to bidders during the auction under Dr. Laffer's
40 approach. The fact that the auction has not closed only provides information to bidders if
41 they are allowed to re-enter the auction after not bidding in previous rounds. Without the
42 ability to re-enter the auction, as introduced in Dr. Laffer's rebuttal testimony, his
43 approach is equivalent to a sealed bid as no information is provided to bidders during the
44 auction that would affect their bidding behavior. Even allowing bidders to re-enter the
45 auction, his approach is unlikely to differ substantially from a sealed bid auction as
46 explained below.

47 In his rebuttal testimony, Dr. Laffer claims that "Our descending clock, pay as bid
48 auction would be like a sealed bid auction in the sense that bidders would not be provided
49 any information which would allow bidders to discern the bidding strategy of other
50 bidders. However, unlike a sealed bid auction our approach would utilize an auction
51 manager who actively manages the bidding during the auction" (BOMA Ex. 3.0, 3:53-

52 58). Taking quantity bids over the course of multiple rounds as price is reduced by equal,
53 pre-determined decrements is not actively managing the bidding. Further, the “dynamic
54 information” that Dr. Laffer describes – that bidders would know that there was at least
55 one bidder in the previous round if a new round of bidding is opened (BOMA Ex 3.0,
56 2:37 - 3:47) – is insignificant for the purposes of informing their opportunity cost of
57 bidding (bidders would know only that there is at least one bid, but not the number of
58 bids or the volume associated with the bids). With this limited information enabling
59 price discovery, a bidder’s strategy is unlikely to change over the course of the auction,
60 and each bidder may as well submit a sealed bid schedule of prices and associated
61 quantities that the bidder would be willing to supply.

62 The “dynamic information” that Dr. Laffer proposes, however, could be
63 damaging to the auction process and lead to gaming. For example, bidders may choose
64 to bid only in the initial round and then wait to re-enter the auction at a lower price (if all
65 bidders do this, there would be no bidding after the first round and the auction would be
66 oversubscribed for at least some products). Furthermore, knowing that the auction has
67 not closed could be used to enforce collusive agreements, in contradiction to Dr. Laffer’s
68 reasoning behind excluding “information which would allow bidders to discern the
69 bidding strategy of others”. Consequently, the information available to bidders that Dr.
70 Laffer proposes is too weak to be particularly useful to bidders, invites gaming and
71 contradicts his stated objective of preventing collusion.

72 Other witnesses to this proceeding, including Dr. LaCasse for ComEd (ComEd
73 Ex. 11.0, 74:1750) and Dr. Salant for the ICC (ICC Staff Ex. 11.0, 71:1619-1620), have
74 testified that Dr. Laffer’s approach is equivalent to a sealed bid auction.

75 Q. Do you agree with Dr. Laffer's assertion that in the paper "Auction Design for Standard
76 Offer Service" (ComEd Exhibit 12.2) for which you are a co-author, "he (Mr. Parece)
77 recommends a pay as bid format such as I (Dr. Laffer) have recommended on the grounds
78 that this is the best way to determine competitive supply prices." (BOMA Ex. 3.0,
79 17:385-387)?

80 A. No. Dr. Laffer appears to have overlooked a note in my testimony wherein I explicitly
81 address the important difference between his suggested descending clock, pay as bid
82 auction format, and the approaches recommended in the paper "Auction Design for
83 Standard Offer Service" (ComEd Ex. 12.0, p. 40, ftn 25):

84 Pay-as-bid pricing in Prof. Laffer's suggested approach is fundamentally different
85 from an SMR auction wherein information is made available to bidders and there
86 is price discovery as the auction progresses. In a clock auction with price
87 discovery, all winning bids will have the same bid price and the uniform price
88 will equal the pay-as-bid price, except for possibly any rationed bids. Even if the
89 auction involves bidding a supply schedule, price discovery over the course of
90 several rounds will result in small differences between uniform, or market
91 clearing prices, and the actual prices bid for winning bids. A pay-as-bid approach
92 in an auction with price discovery is described in "Auction Design for Standard
93 Offer Service," Peter Cramton, Andrew Parece and Robert Wilson, Working
94 Paper, University of Maryland, September 1997. (Exhibit 12.2)

95 The critical point here is that in Dr. Laffer's suggested approach, useful
96 information is not made available to bidders, violating a condition under which I
97 recommend pay-as-bid pricing (as described in the paper cited above). With such
98 information, the winning bids would be expected to be very close to uniform prices, as
99 explained in the paper (ComEd Ex. 12.2, p 18). Dr. Laffer suggests that no information
100 be provided to bidders between rounds other than the predetermined price for the next
101 round. Dr. Laffer's claim that "pay as bid" auction approaches are similar to one another,
102 without reference to other key auction design elements, is incorrect.

103 Q. What are the key differences between Dr. Laffer’s auction approach and the approach
104 developed in the paper you co-authored, “Auction Design for Standard Offer Service”
105 (ComEd Ex. 12.2)?

106 A. The paper referred to by Dr. Laffer discussed two approaches. One is an ascending clock
107 auction (similar to a descending clock auction, but with bids defined as discounts from
108 stipulated, or “reserve” prices). There is no “pay as bid” element to the ascending clock
109 approach recommended in the paper, other than for bids that are rationed, which would
110 be close to the uniform price (i.e. within one bid increment set by the auction manager).

111 The second approach discussed in the paper, the bid schedule approach, is a pay
112 as bid format, but unlike Dr. Laffer’s auction approach, bidders provide a set of price and
113 quantity bids in each round. After each round a “clearing discount” is defined as the
114 highest discount (lowest price) at which the targeted supply can be obtained when bids
115 are ranked highest to lowest. The clearing discount determines winning and losing bids
116 at each round of the auction and at the auction’s completion. Unlike Dr. Laffer’s pay as
117 bid approach, the approach recommended in the paper requires losing bids, i.e. those for
118 which discounts are lower than the clearing discount in any round, to be improved in the
119 next round in order for the bid to remain active. Losing bids are improved by increasing
120 the discount bid above the clearing discount by a minimum bid increment, which is set by
121 the auction manager and is expected to decrease in later rounds. This information about
122 whether a bid is a winning or losing bid in any round, and whether the bid must be
123 improved in the next round, fosters competition in the auction, and is absent in Dr.
124 Laffer’s approach.

125 The two auction formats described in the paper “Auction Design for Standard
126 Offer Service” (ComEd Ex. 12.2) are quite different from Dr. Laffer’s suggested
127 approach and will result in different outcomes. An auction with no price discovery, such
128 as Dr. Laffer’s suggested approach, requires bidders to guess at what price they could be
129 winners, creating uncertainty that leads them to add a premium to (i.e. increase) their
130 bids. Bidders in this type of auction will use a different bidding strategy than in an
131 auction with information provided to bidders that results in price discovery. Because of
132 the increased uncertainty in Dr. Laffer’s suggested approach, it is unlikely that the
133 quantity-weighted average of the bids resulting from his recommended pay as bid
134 approach with no information revealed to bidders would be equal to the uniform price
135 resulting from the proposed CPP Auction. To summarize, Dr. Laffer’s multi-round,
136 descending clock auction with no information provided to bidders is substantially
137 different from a multi-round auction using bid schedules wherein bidders are informed
138 about whether bids are winning or losing bids that need to be improved during the
139 auction (as described in the paper “Auction Design for Standard Offer Service,” ComEd
140 Ex. 12.2).

141 Q. Is the example of a pay-as-bid auction contained in the paper “Auction Design for
142 Standard Offer Service” (ComEd Ex. 12.2, p. 12) similar, as suggested by Dr. Laffer, to
143 the example of a pay as bid auction Dr. Laffer provides in his rebuttal testimony as
144 BOMA Exhibit 3.1? (BOMA Ex. 3.0, 18:403-404)

145 A. No. The examples are completely different from one another. In his rebuttal testimony,
146 Dr. Laffer conveniently omits a critical sentence in the description of the example from
147 the paper “Auction Design for Standard Offer Service.” His citation from the paper “All

148 other bids are designated losing bids...After the final round of bidding, all winning bids
149 are awarded at the discounts bid” (BOMA Ex. 3.0, 18:408-411), substitutes “...” for the
150 sentence: “The winning bid with the smallest discount defines the clearing discount.”
151 (ComEd Ex. 12.2, p. 12) The concept of a clearing discount that separates winning and
152 losing bids during the auction, as described above, is a critical difference between the
153 approach recommended in the paper and Dr. Laffer’s recommended approach. The
154 example contained in the paper demonstrates how this clearing discount is determined
155 and how it is used to define winning and losing bids at any round in the auction. The
156 clearing discount provides useful information to bidders for informing their opportunity
157 costs and fosters competition in the auction, and is not included in Dr. Laffer’s example
158 (BOMA Ex. 3.1).

159 Q. Please comment on Dr. Laffer’s assertion that his pay as bid approach contains an
160 identical feature to the approach recommended in the paper “Auction Design for Standard
161 Offer Service” (ComEd Ex. 12.2):

162 In our descending clock, pay as bid auction, bidding continues until no bidder is
163 willing to supply a tranche of electricity at a lower price (BOMA Exhibit 1.0,
164 page 11, lines 251-252). Mr. Parece’s recommended auction design contains an
165 identical feature: “Suppliers bid for shares of the service responsibility over a
166 series of rounds until no bidder is willing to improve any of its bids.” (ComEd
167 Exhibit 12.2, page 5). (BOMA Ex. 3.0, 18:415-420)

168
169 A. In both approaches recommended in the paper “Auction Design for Standard Offer
170 Service” (ComEd Ex. 12.2), bidders must *improve* their bids in each round. For example,
171 in the bid schedule approach bidders must increase their bid to at least the clearing
172 discount determined by bids in the previous round, plus a minimum bid increment. As
173 explained above, the information provided to bidders about the clearing discount and
174 minimum bid increment will be used by bidders to gauge other bidders’ valuations, and

175 their bids in the next round will generally be no greater than the minimum required to
176 maintain a winning bid in that round (the clearing discount plus the minimum bid
177 increment) (see ComEd Ex. 12.2, p. 18) Dr. Laffer's approach is not identical as he
178 suggests (BOMA Ex. 3.0, 18:417-418), as it does not require bidders to continually
179 improve their bids. The only information provided to bidders is the price in the current
180 round, which is a fixed decrement from the previous round's price throughout the
181 auction, and the fact that the auction is still open.

182 Q. Can you address the issue that Dr. Laffer raises in his rebuttal testimony with respect to
183 the comparison of the FCC spectrum auctions with his suggested descending clock, pay-
184 as-bid auction?

185 A. Dr. Laffer points to my rebuttal testimony wherein I refer to the recommended auction
186 approaches from "Auction Design for Standard Offer Service" (ComEd Ex. 12.2) as
187 "similar to the successful FCC auctions for radio frequency." As described above, Dr.
188 Laffer's recommended approach is not similar to the approaches recommended in the
189 paper, as Dr. Laffer's intent is to prevent essentially all information from being provided
190 to bidders during the auction, and therefore I believe that Dr. Laffer's recommended
191 approach is not similar to the FCC spectrum auctions in this respect.

192 Q. Please respond to Dr. Laffer's assertion that "Mr. Parece's argument against our approach
193 does not make sense because bidders can participate in the spot market under either our
194 proposed pay as bid auction or ComEd's proposed uniform price auction. (BOMA Ex.
195 3.0, 15:345-347)

196 A. Dr. Laffer is correct that bidders have the option to participate in the spot market whether
197 his auction approach or ComEd's proposed CPP Auction approach is used. However,

198 under Dr. Laffer’s recommended approach, no information is provided to bidders during
199 the auction, resulting in more uncertainty for bidders about other bidders’ estimates of
200 market prices. As a result, as explained in my testimony (ComEd 12.0, 41:865-867) they
201 will be more likely to add a premium to (i.e. increase) their bids in his recommended
202 approach, or not bid at all (exercising the option to participate in the spot market or
203 contract outside of the auction) than would be the case with ComEd’s proposed CPP
204 Auction. Adding a premium due to the added uncertainty makes it likely that the spot
205 market option is more attractive to bidders under Dr. Laffer’s proposed auction approach.

206 **III. RESPONSE TO REBUTTAL TESTIMONY OF DR. DAVID SALANT**

207 Q. Please respond to the rebuttal testimony of Dr. Salant that the New Jersey BGS Auctions
208 do not represent “industry best practice” (ICC Staff 11.0, 63:1427-1429) because there
209 have been only a limited number of changes in the New Jersey BGS auction rules in three
210 additional auctions subsequent to the first BGS auction (ICC Staff 11.0, 63:1438-1448),
211 and his statement the New Jersey BGS auction process should be improved upon by
212 taking advantage of advances in auction technology (ICC Staff 11.0, 63:1448-1449).

213 A. I believe that the New Jersey BGS auction represents industry best practice, i.e. the best
214 approach that is currently being used in practice in the industry. This is different from
215 “state of the art” which is perhaps what Dr. Salant has in mind when referring to
216 improvements that draw upon advances in auction technology. Although some of the
217 enhancements to the auction design that Dr. Salant suggests in his testimony may be
218 novel, to my knowledge they have not been used in practice in auctions within the
219 electricity industry for competitive power procurements. Furthermore, there have been
220 many significant modifications to the NJ BGS auction design and process over time to

221 improve the auction and address the needs of bidders. These include: auctioning products
222 with different terms and inclusion of hourly priced products, changes to switching rules,
223 bid decrement methodologies, rules regarding exit prices, credit requirements in the
224 master supplier agreements and communications protocols.

225 Q. Does this conclude your testimony?

226 A. Yes.