

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON )  
COMPANY )  
Proposed general increase in ) Docket No. 05-0597  
rates for delivery service. (Tariffs )  
filed on August 31, 2005) )

TESTIMONY ON REHEARING  
OF  
DR. DALE E. SWAN

ON BEHALF OF  
THE  
UNITED STATES DEPARTMENT OF ENERGY

OCTOBER 16, 2006

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**EXETER**  
ASSOCIATES, INC.  
5565 Sterrett Place  
Suite 310  
Columbia, Maryland 21044

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

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TESTIMONY ON REHEARING  
OF  
DR. DALE E. SWAN

1 Q. PLEASE STATE YOUR NAME, OCCUPATION AND ADDRESS.

2 A. My name is Dale E. Swan. I am a senior economist and principal with Exeter  
3 Associates, Inc. Our offices are located at 5565 Sterrett Place, Columbia,  
4 Maryland 21044.

5 Q. ARE YOU THE SAME DALE E. SWAN WHO SUBMITTED TESTIMONY  
6 ON BEHALF OF THE U.S. DEPARTMENT OF ENERGY (DOE) IN THE  
7 REBUTTAL PHASE OF THIS CASE?

8 A. Yes.

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THE REHEARING  
10 PHASE OF THIS CASE?

11 A. In its July 26, 2006 Order in this proceeding, the Commission clearly expressed  
12 its intent to address DOE's concern regarding the enormous increase in the  
13 Distribution Facilities Charge (DFC) for high-voltage customers above 10 MW  
14 that would result from Commonwealth Edison Company's (ComEd or the  
15 Company) rate design proposals. Indeed, at page 199 of that Order the

16 Commission states that, “Based on the Commission’s conclusion reached in the  
17 Very Large Load Customer section of this order, DOE’s concerns have been  
18 mitigated.” One purpose of my testimony is to demonstrate that the compliance  
19 rates filed by the Company do not mitigate DOE’s concern. The resulting  
20 increase in the DFC for high voltage customers above 10 MW is almost 60  
21 percent, still “enormous,” either in absolute terms or especially when compared  
22 to the average jurisdictional percentage increase of less than 1 percent allowed  
23 by the Commission.

24 A second purpose of my testimony is to place into proper context a  
25 proposal I made in my rebuttal testimony to ensure that the portion of high  
26 voltage customers’ loads that are actually served at low voltages not be blended  
27 into the calculation of the cost of serving high voltage loads. The Commission  
28 accepted my proposal to separate the charges for these high voltage and low  
29 voltage loads of high voltage customers, and it is possible that the Commission  
30 believed adoption of the DOE proposal mitigated DOE’s concern. I shall  
31 demonstrate that adoption of this minor adjustment has not mitigated DOE’s  
32 concern over the enormous increase for high voltage customers above 10 MW  
33 that results from the compliance rates filed by the Company.

34 Q. WHY DO YOU STATE THAT THE COMPANY’S COMPLIANCE RATES  
35 DO NOT SIGNIFICANTLY MITIGATE DOE’S CONCERN OVER THE  
36 ENORMOUS INCREASE FOR HIGH VOLTAGE CUSTOMERS ABOVE  
37 10 MW?

38 A. The Company has correctly followed the Commission’s Order in establishing a  
39 separate class of above 10 MW customers served at standard voltages, and has  
40 correctly increased the DFC for this class of customers in proportion to the

41 overall revenue increase approved by the Commission. That results in a DFC  
42 increase for these standard voltage customers over 10 MW of 1 cent per kW,  
43 from \$2.34/kW-month to \$2.35/kW-month. However, in its compliance filing, the  
44 Company has not established a separate over 10 MW class for high voltage  
45 customers. Rather, it has developed compliance rates for only one class of high  
46 voltage customers. Thus, customers in the 1 to 10 MW range are treated the  
47 same as customers with loads well in excess of 10 MW. All of those customers  
48 will pay a DFC of \$1.66 per kW-month. The result for customers in the 1 to 10  
49 MW range is a 50 percent decrease, while the rate for customers in excess of 10  
50 MW increases by 60 percent.

51 Q. HAVE YOU PREPARED AN EXHIBIT THAT SUMMARIZES THE DFC  
52 CHARGES FOR CUSTOMERS WITH LOADS FROM 1 MW TO OVER 10  
53 MW?

54 A. Yes. DOE Exhibit 2.1 shows the DFC charges for the eight groups of customers  
55 under the June 1, 2006 rates in effect at the beginning of this case, and the dollar  
56 and percentage changes in those rates that result from the Company's  
57 compliance filing in this case.

58 Q. PLEASE DESCRIBE AND EXPLAIN THE IMPLICATIONS OF DOE  
59 EXHIBIT 2.1.

60 A. The top panel of this exhibit shows the rate comparison for standard voltage  
61 customers. Under the Company's compliance rates, customers between 1 and  
62 10 MW would receive increases of about 6 percent to 10 percent. Above 10 MW  
63 customers would receive an increase of 0.4 percent, consistent with the  
64 Commission's Order. The bottom panel shows the charges for high voltage  
65 customers. The Company's compliance rates result in reductions of between

66 \$1.50/kW to \$1.68/kW, and percentage reductions approaching 50 percent for  
67 customers between 1 MW and 10 MW. On the other hand, customers above 10  
68 MW would receive a \$.62/kW increase, amounting to a 60 percent increase  
69 under the Company's compliance rates. Given the system average increase  
70 treatment of standard voltage customers above 10 MW, and the nearly 50  
71 percent reduction treatment of smaller high voltage customers, the 60 percent  
72 increase for above 10 MW high voltage customers can still be characterized as  
73 "enormous." It clearly demonstrates that the Company's compliance rates do not  
74 provide the mitigation of DOE's concern referred to in the Commission's July 26  
75 Order.

76 Q. DOES THE RESULTING STRUCTURE OF THE COMPANY'S HIGH  
77 VOLTAGE COMPLIANCE RATES MAKE INTUITIVE SENSE?

78 A. No. The reason there has been and should continue to be a difference between  
79 the DFC for standard and high voltage customers of the same size is the lower  
80 cost of serving high voltage customers because they do not use the Company's  
81 lower voltage distribution system. This difference can be referred to as a "high  
82 voltage credit." Generally, the larger the customer the higher the delivery  
83 voltage, the greater the savings, and the larger the high voltage credit, because  
84 less and less of the low voltage distribution system is being used.

85 The following table shows, in the first two columns, the high voltage credit  
86 of \$1.30/kW that was applied to the low voltage rates as of June 1, 2006. The  
87 resulting percentage credits were around 29 percent for customers up to 10 MW  
88 and about 56 percent for customers above 10 MW. This is what one would  
89 expect. The last two columns show the implicit high voltage credits under the  
90 Company's compliance rates, which is the difference between the low voltage

91 and the high voltage rates. Under the Company's compliance rates, customers  
 92 from 1 MW to 10 MW would get a \$3.26/kW or 66 percent credit. Customers  
 93 above 10 MW, where high voltage savings are likely higher, would get a  
 94 \$0.69/kW or 29 percent credit. In short, the structure of the Company's  
 95 compliance rates for high voltage customers makes no intuitive sense, and is not,  
 96 I believe, the result intended by the Commission.

<b>High Voltage Credits</b>				
<b>Class</b>	<b>6/1/06 Rates</b>		<b>Compliance Rates</b>	
	<b>\$/kW</b>	<b>%</b>	<b>\$/kW</b>	<b>%</b>
1-3 MW	\$1.30	29.1%	\$3.26	66.3%
3-6 MW	1.30	28.0	3.26	66.3
6-10 MW	1.30	29.0	3.26	66.3
>10 MW	1.30	55.6	0.69	29.4

97

98 Q. IS THERE ANOTHER REASON WHY YOU BELIEVE THE COMMISSION  
 99 DID NOT INTEND THAT HIGH VOLTAGE CUSTOMERS ABOVE 10 MW  
 100 RECEIVE A 60 PERCENT INCREASE?

101 A. Yes. The Commission gave two reasons why it ordered the Company to  
 102 maintain a separate class for customers above 10 MW and to increase current  
 103 charges for these customers in proportion to the overall increase approved in the  
 104 case. The first was the "adverse rate impacts that would be faced by the largest  
 105 customers." The second was that "the Commission is persuaded that the cost of  
 106 serving such very large customers is potentially lower than serving significantly  
 107 smaller customers." (Order, page 196.)

108 The two reasons apply equally to above 10 MW customers served at high  
 109 voltages and at standard voltages. There is no basis upon which to provide a  
 110 system average (0.4 percent) increase to above 10 MW customers served at

111 standard voltages, and a 60 percent increase for above 10 MW customers  
112 served at high voltages. Given the system average increase of less than 1  
113 percent, and given the treatment of the customers above 10 MW served at  
114 standard voltages, a 60 percent increase is simply inequitable. DOE raised  
115 serious concern about the enormous increase the Company proposed for the  
116 above 10 MW high voltage customers. The Commission stated that, "Based on  
117 the Commission's conclusion reached in the Very Large Load Customer section  
118 of the order, DOE's concerns have been mitigated." It is inconsistent with that  
119 language to contend that the Commission intended above 10 MW high voltage  
120 customers to receive a 60 percent increase.

121 Q. WHAT IMPACT WILL THE COMPLIANCE RATES FILED BY THE  
122 COMPANY HAVE ON THE DOE FACILITIES?

123 A. They will have a significant impact on Argonne National Laboratory. The  
124 Company's compliance rates will result in an annual increase of approximately  
125 \$330,000. While this amount may not seem large for a national laboratory, the  
126 increase needs to be considered in the context of the increasingly limited  
127 budgets for national science programs. When coupled with the rising cost of  
128 electric power faced by Argonne, it will add to the difficulty of competing with  
129 other DOE science facilities for limited funding and maintaining programs at the  
130 laboratory.

131 Q. DR. SWAN, PLEASE DESCRIBE THE PROPOSAL YOU MADE IN YOUR  
132 REBUTTAL TESTIMONY TO CHARGE DIFFERENT RATES FOR THE  
133 LOW VOLTAGE AND HIGH VOLTAGE LOADS OF CUSTOMERS  
134 TAKING SERVICE AT HIGH VOLTAGES?

135 A. In my rebuttal testimony I criticized the Company's slavish adherence to a  
136 mechanistic translation to rates of the unit costs it estimated in its embedded cost  
137 of service study (ECOSS), resulting in a proposed 160 percent increase for  
138 above 10 MW high voltage customers. I urged the Commission to adopt the IIEC  
139 proposal put forth by Mr. Robert Stephens in his direct testimony, which was to  
140 maintain the class of above 10 MW customers (served at both standard and high  
141 voltages) and to adjust their net charges (after any applicable high voltage credit)  
142 by the "overall revenue increase or decrease that results from the Commission's  
143 determinations in this case." (DOE Exh. 1.0, p. 10, lines 256-257)

144 I testified that, in the alternative, if the Commission were to decide to base  
145 rates for high voltage customers above 10 MW on a mechanistic translation of  
146 the Company's estimated unit average embedded costs, an adjustment be made  
147 to the estimate of embedded costs "to eliminate the allocation of costs of lower  
148 voltage facilities to customers who take service at voltage levels at or in excess  
149 of 69 kV and therefore do not use those facilities." (DOE Exh. 1.0, p. 11, lines  
150 275-277) This was an alternative proposal and I stated explicitly that, "If the  
151 Commission adopts my proposal regarding a system-wide average increase in  
152 the Distribution Facilities Charges for customers with loads in excess of 10,000  
153 kW, then this adjustment is moot." (DOE Exh. 1.0, p. 11, lines 279-282)

154 The Commission accepted this alternative proposal and concluded that  
155 "ComEd's proposal to extend the high voltage discount to service provided at  
156 standard voltage is rejected." (Order, p. 199) While DOE is pleased that the  
157 Commission agreed that it is inappropriate to provide high voltage discounts to  
158 that portion of a customer's load served at standard voltages, this minor  
159 adjustment in rates does not seriously mitigate DOE's concern regarding the

160 “enormous” increase for customers above 10 MW served at high voltages. That  
161 mitigation would be provided by treating high-voltage customers above 10 MW in  
162 the same manner as standard voltage customers above 10 MW are treated --  
163 specifically, by maintaining an above 10 MW high voltage customer class and  
164 applying the overall percentage increase allowed in this case to the net rate (after  
165 application of the high voltage credit) that these customers were paying on June  
166 1, 2006. That would result in a charge a \$1.05/kW-month (1.005 x \$1.04).

167 Q. IF THE COMMISSION ADOPTS YOUR PROPOSAL FOR THE  
168 CALCULATION OF THE DFC FOR HIGH VOLTAGE CUSTOMERS  
169 ABOVE 10 MW, HOW SHOULD IT TREAT THAT PORTION OF THE  
170 LOAD OF A HIGH VOLTAGE CUSTOMER THAT IS ACTUALLY  
171 SERVED AT A STANDARD VOLTAGE?

172 A. As I indicated earlier, DOE’s primary concern about the enormous increase for  
173 high voltage customers above 10 MW would be addressed, and it would be less  
174 important, from a parochial point of view, to ensure that standard voltage loads of  
175 high voltage customers not receive the high voltage discount. If, however, the  
176 Commission rightfully believes that this is the proper way to treat these standard  
177 voltage loads, there is a fairly straightforward way to accomplish that. That would  
178 be by simply applying the appropriate standard voltage rate to those standard  
179 voltage loads, which is the way high voltage customers have been billed  
180 historically. Thus, a high voltage customer would be billed at two rates for his  
181 usage. His high voltage load would be charged at the appropriate high voltage  
182 rate (up to 10 MW or above 10 MW), and his standard voltage load would be also  
183 charged at the appropriate rate (up to 10 MW or above 10 MW).

184

184 Q. DOES THIS CONCLUDE YOUR TESTIMONY ON REHEARING?

185 A. Yes, it does.

186

**COMMONWEALTH EDISON COMPANY**  
**Docket No. 05-0597**

**Comparison of Distribution Facilities Charges  
for Eight Groups of Non-Residential Customers  
Under Rates in Effect on June 1, 2006 and  
Under the Company's Compliance Rates**

**Standard Voltage Service**

<u>Class</u>	<u>6/1/06 Rates</u>	<u>Compliance Rates</u>	<u>Changes</u>	
			<u>\$</u>	<u>%</u>
1-3 MW	\$4.46	\$4.92	\$.46	10.3%
3-6 MW	4.64	4.92	.28	6.0
6-10 MW	4.48	4.92	.44	9.8
>10 MW	2.34	2.35	.01	0.4

**High Voltage Service**

<u>Class</u>	<u>6/1/06 Rates</u>	<u>Compliance Rates</u>	<u>Changes</u>	
			<u>\$</u>	<u>%</u>
1-3 MW	\$3.16	1.66	-\$1.50	-47.5%
3-6 MW	3.34	1.66	-1.68	-50.3
6-10 MW	3.18	1.66	-1.52	-47.8
>10 MW	1.04	1.66	0.62	59.6