

OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
Petition to determine the applicability of	:	No. 11-0289
Section 16-125(e) liability to events caused	:	
by the July 23, 2010 storm systems.	:	
	:	

Rebuttal Panel Testimony of

WILLIAM J. GANNON, P.E.

Director of Capacity Planning and Reliability Programs,

and

JOHN MEHRTENS

Director of North Regional Operations,

Commonwealth Edison Company

TABLE OF CONTENTS

Section	Page
TABLE OF CONTENTS.....	i
I. Introduction.....	1
A. Identification of Witness.....	1
B. Summary of Rebuttal Testimony and Conclusions	1
II. ComEd’s Electric Distribution System.....	2
III. Definition of Interruption.....	5

1 **I. Introduction**

2 **A. Identification of Witness**

3 **Q. Gentlemen, what are your names?**

4 A. My name is William J. Gannon.

5 My name is John Mehrtens.

6 **Q. Mr. Gannon, are you the same William J. Gannon that filed direct panel testimony**
7 **with John Mehrtens on behalf of Commonwealth Edison Company (“ComEd”) in**
8 **this docket?**

9 A. Yes

10 **Q. Mr. Mehrtens, are you the same John Mehrtens that filed direct panel testimony**
11 **with William J. Gannon on behalf of ComEd in this docket?**

12 A. Yes.

13 **B. Summary of Rebuttal Testimony and Conclusions**

14 **Q. What is the purpose of your rebuttal testimony?**

15 A. The purpose of our testimony is to respond to the direct testimony of Staff witness Greg
16 Rockrohr, Staff Ex. 1.0. In particular, we address Mr. Rockrohr’s testimony regarding
17 ComEd’s lightning arrester program and the condition of ComEd’ electric distribution
18 system prior to the July 23-24, 2010 storm systems (“July 23 Storm Systems”). We also
19 respond to Mr. Rockrohr’s testimony regarding the definition of “interruption.”

20 **Q. What, in summary, are your conclusions?**

21 A. We conclude that ComEd's installed lightning arresters were functional during the July
22 23 Storm Systems and that ComEd's distribution electric system was in good condition
23 prior to the July 23 Storm Systems.

24 **II. ComEd's Electric Distribution System**

25 **Q. Mr. Rockrohr testifies that "ComEd attributes many interruptions to lightning, and**
26 **explains that its design specifies the installation of lightning arresters. However,**
27 **ComEd did not state, nor does Staff know, whether ComEd's lightning arresters**
28 **installed in the field were functional during the July 23 Storm Systems." How do**
29 **you respond?**

30 A. ComEd's installed lightning arresters were functional during the July 23 Storm Systems.
31 ComEd ensures that lightning arresters that it installs are functional during storms
32 through proper design, construction, inspections, and maintenance. Installation on
33 ComEd's distribution delivery system, including lightning arresters, is designed and
34 constructed in conformance with a detailed set of written ComEd Construction Standards,
35 which incorporate (1) the National Electric Safety Code ("NESC"), as adopted by Title
36 83 of Illinois Administrative Code, Part 305; (2) other Commission rules that establish
37 design and construction requirements; and (3) applicable American National Standards
38 Institute ("ANSI") standards and IEEE standards, which are accepted by utilities and
39 regulators across the United States.

40 As a result, ComEd's Construction Standards reflect the contributed knowledge
41 and experience of a broad range of industry participants and other experts. For example,
42 the NESC (listed more formally as ANSI C2) is developed from a consensus process that
43 includes representation from 25 different groups, including the National Association of

44 Regulatory Utility Commissioners, the National Society of Professional Engineers, the
45 National Safety Council, and the American Insurance Services Group, Inc. Section 9 of
46 the NESC entitled “Grounding”, and ComEd’s grounding standards meet or exceed the
47 requirements listed in that Section. The required size, length, and material of the ground
48 rod are listed in this Section. The ground connection requirements and any bonding
49 requirements between other ComEd facilities, or to other non-ComEd facilities on the
50 pole, such as telecommunication or cable television company equipment and conductors,
51 are also listed in this Section. In addition, although not directly required by the NESC,
52 ComEd Construction Standards and Engineering Standard Practice 5.7.5.5 specify the
53 installation of surge arresters on the distribution lines.

54 Arresters enhance the reliability of the lines by draining off a charge resulting
55 from lightning surges or surges from switching. The number of arrester installations
56 required by ComEd’s Standards is effectively double the number of grounds required by
57 the NESC.

58 **Q. When these standards first became effective, did ComEd install arresters**
59 **systemwide?**

60 **A.** No. These construction standards are intended to be applied to new or revised facilities.
61 It is not feasible to measure the compliance of existing facilities to the standards. Full
62 compliance with these standards in connection with applicable future projects is
63 expected.

64 **Q. How does ComEd identify and repair disconnected and /or blown arresters?**

65 A. For distribution components classified as critical, Performance Centered Maintenance
66 (“PCM”) templates have been developed to recommend preventive maintenance tasks
67 and frequencies. Recommendations contained in PCM templates utilize industry
68 experience and vendor recommendations to arrive at a program for specific distribution
69 components. ComEd performs Preventive Maintenance inspections per procedures CM-
70 CE-P321 “Overhead Distribution Circuit Inspection and Maintenance” and CM-CE-P322
71 “Overhead Distribution Circuit Thermography Inspection.” Preventive Maintenance
72 inspections include the identification of blown surge arresters. Maintenance and repairs
73 are then prioritized in accordance to Work Management procedure WM-ED-P014 “Work
74 Screening And Prioritization.”

75 **Q. Were these practices in place prior to the July 23 Storm Systems?**

76 A. Yes.

77 **Q. After questioning ComEd’s claims that the outages were not the result of poor**
78 **maintenance, Mr. Rockrohr provides photographs of distribution facilities in**
79 **ComEd’s electric distribution system that are need of repair. Staff Ex. 1.0, 20:451-**
80 **21:468. Do you have any comments?**

81 A. Yes. First, we note that these photographs were taken between June 13, 2011 and June
82 22, 2011, nearly a year after the July 23 Storm Systems and during a period of severe
83 storm activity from June 2011 that lasted through July 2011, which is the subject of
84 another proceeding, Docket No. 11-0588. It is not clear to us how Staff can assess the
85 condition of ComEd’s distribution system on July 23, 2010 based on photos taken nearly
86 a year later during a period of high storm activity. Further, as we stated in direct

87 testimony, prior to the July 23 Storm Systems, ComEd's vegetation management, line
88 inspection, repair and replacement, and substation equipment inspection, repair and
89 replacement were up to date. Second, for the July 23 Storm Systems, there are no
90 outages associated with these facilities.

91 **III. Definition of Interruption**

92 **Q. Mr. Rockrohr discusses his view that the process by which some customers may be**
93 **excluded under Section 16-125(f) of the Public Utilities Act in determining whether**
94 **an interruption affects 30,000 customers means that the term interruption cannot**
95 **refer to a single event. Rockrohr Dir., Staff Ex. 1.0, 9:199 – 10:222. From a factual**
96 **perspective, is Mr. Rockrohr's observation about excluding some customers**
97 **inconsistent with ComEd's view?**

98 **A.** It is not inconsistent. A simple analysis illustrates this point. Suppose a fire at a major
99 substation causes an interruption that affects 40,000 customers for a period of eight
100 hours. If the fire was caused by weather and ComEd demonstrates that it could not have
101 prevented this event from affecting 15,000 customers, those customers are subtracted,
102 resulting in the remaining number of customers affected falling below 30,000. Mr.
103 Rockrohr's claim that "[t]here would be no way to exclude only some of the customers
104 who experience an interruption with a waiver, as Section 16-125(f) contemplates"¹ is
105 simply wrong. Nothing in the process of excluding customers implies that more than one
106 interruption had to be involved.

107 Moreover, the language Mr. Rockrohr quotes as appearing in Section 16-125(f)
108 also appears in Section 16-125(e). In fact, the language in subsection (e) relates to an

¹ Rockrohr Dir., Staff Ex. 1.0, 10:217-20.

109 interruption, the issue we face here. We note this not to be hyper-technical, but rather
110 because subsection (f) deals with potential liability from a single “power surge or other
111 fluctuation.” Mr. Rockrohr’s belief that excluding certain customers from counting
112 toward the 30,000 customer floor only makes sense if the floor can be met by customers
113 affected by different interruptions is not consistent with the use of the same customer
114 exclusion language in subsection (f) with respect to a single fluctuation or surge.

115 Q. **Does this complete your rebuttal testimony?**

116 A. Yes.