

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY :
 :
Petition to approve proposed Federal Stimulus : No. 09-
Project and associated tariffs. :
 :

Direct Testimony of
HECTOR ARTZE
Director – Energy Practice
Navigant Consulting, Inc.

1 Q. What is your name, title, and business address?

2 A. My name is Hector Artze. I am a Director in the Energy Practice at Navigant Consulting,
3 Inc. (“Navigant”). My business address is 255 Alhambra Circle, Suite 810, Coral Gables,
4 Florida 33134.

5 Q. What is Navigant?

6 A. Navigant is a specialized, international consulting firm combining deep industry expertise
7 and integrated solutions to assist companies and their legal counsel in enhancing
8 stakeholder value, improving operations, and addressing conflict, performance, and risk
9 related challenges. Navigant focuses on industries undergoing substantial regulatory or
10 structural change, including financial services, insurance, healthcare, and energy.

11 Q. What is your personal educational and professional experience?

12 A. I hold a Bachelors of Science in B.S. Mechanical Engineering from the University of
13 Florida and a Masters of Science in Engineering Management from the University of
14 South Florida. I have over 22 years of experience working in the electric utility field in a
15 variety of engineering, management, and consulting roles. My complete resume is
16 attached hereto as ComEd Ex. 6.1.

17 Q. What is the purpose of your direct testimony?

18 A. The purpose of my testimony is to present to the Illinois Commerce Commission (“ICC”)
19 a report prepared by Navigant, under my direction and control, that quantifies – in some
20 cases within reasonable ranges – the benefits resulting from delivery grid modernization
21 projects that Commonwealth Edison Company (“ComEd”) proposes as part of the
22 Chicago Area Smart grid Initiative (“CASGrid”) that it has submitted with application

23 requesting federal assistance pursuant to the American Recovery and Reinvestment Act
24 of 2009 (“ARRA”). In particular, the report analyzes the benefits relating to ComEd’s
25 automated feeder switching and conservation voltage reduction (“CVR”) programs. The
26 report, entitled, Value Assessment – Distribution Automation and Conservation Voltage
27 Reductions Programs, is attached hereto as Exhibit 6.2.

28 Q. What, in sum, does your report conclude?

29 A. In brief, I conclude:

- 30 ▪ The annual value of ComEd’s automated feeder switching and CVR programs
31 ranges from \$53.6 to \$102.7 million; in the “base case” scenario they total
32 roughly \$76.4 million.
- 33 ▪ Automated feeder switching provides substantial benefits via the reduction of
34 sustained interruptions. When fully implemented, this portion of the CASGrid
35 program has the potential to reduce System Average Interruption Frequency
36 Index (“SAIFI”) by approximately 0.1, or approximately 8 percent of total
37 SAIFI. The value of avoided interruptions to ComEd customers accounts for
38 most of that dollar benefit – ranging from \$53.5 to \$102.3 million annually,
39 including reduced T&D restoration costs of \$8.7 to \$11.6 million.
- 40 ▪ The collective avoided demand and energy costs associated with CVR
41 produces annual benefits of approximately \$677,000 for the base case
42 scenario. On a per unit basis, this value is \$92/MWh.
- 43 ▪ The uncertainty of federal emissions regulations results in high variability of
44 CVR societal benefits in the sensitivity analysis.

45 Q. Do all the benefits you identify flow back to ComEd as either increased revenues or
46 decreased costs?

47 A. Absolutely not. Indeed, many of the most significant categories of benefits flow directly
48 to customers and/or to society generally. The fact that the CASGrid program has these
49 large benefits does not, therefore, imply that it is self-funding or that it will save ComEd
50 an equivalent amount of costs.

51 Q. Do you adopt ComEd Ex. 6.2 as part of your direct testimony?

52 A. Yes, I do.

53 Q. Does this complete your direct testimony?

54 A. Yes.