

# **Exhibit C**

# Commonwealth Edison Company's Multi-Year Performance Metrics Plan

Docket No. 11-0772  
ComEd Exhibit 1.0 Corrected

**December 8, 2011**



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An Exelon Company

**Commonwealth Edison Company's  
Multi-Year Performance Metrics Plan**

**INTRODUCTION**

On November 8, 2011, Commonwealth Edison Company (“ComEd”) filed its proposed performance-based formula rate, Rate DSPP – Delivery Service Pricing and Performance (“Rate DSPP”), with the Illinois Commerce Commission (“Commission”) in ICC Docket No. 11-0721 pursuant to Section 16-108.5 of the Public Utilities Act (“Act”). In making that filing, ComEd elected to become a “participating utility”, and committed to undertake the investments described in Section 16-108.5 of the Act.

To address the performance component of Rate DSPP, the Act requires that a participating utility improve its performance in a variety of categories. Specifically, subsections (f) and (f-5) of Section 16-108.5 of the Act require that ComEd make a filing within 30 days of filing Rate DSPP that includes two components – (i) 10-year performance metrics (“metrics”) demonstrating how ComEd will achieve improvement over baseline values in various categories during this period, and (ii) a tariff mechanism that applies any financial penalties assessed by the Commission for a failure to meet annual performance goals.

Accordingly, ComEd submits to the Commission for review and approval this Multi-Year Performance Metrics Plan (“Plan”), as well as Rider DSPM – Delivery Service Performance Metrics (“Rider DSPM”), which is attached to this Plan as ComEd Ex. 1.1. Importantly, ComEd’s Plan also recognizes that the Illinois General Assembly recently passed legislation entitled House Bill 3036 (“HB 3036”) that would modify the metrics provisions of subsections (f) and (f-5) of Section 16-108.5. Although this legislation is not yet law, it may become

effective shortly. Therefore, the Plan follows existing law while also including the information that would be called for if HB 3036 becomes effective. This includes an alternate version of the proposed Rider DSPM, which is attached to this Plan as ComEd Ex. 1.1 TB.

In the event that Section 16-108.5 becomes inoperative or Rate DSPP is terminated, then the Plan, including but not limited to all performance goals and penalties, and Rider DSPM also become inoperative and terminate immediately, except to the extent necessary to comply with the provisions of Section 16-108.5(f-5) of the Act, which provide that “the tariff mechanism established pursuant to subsection (f) of this Section and this subsection (f-5) shall remain in effect until any penalties due and owing at the time of such termination are applied.” 220 ILCS 5/16-108.5(f-5).

## **I. METRICS**

The first section of ComEd’s Plan presents ComEd’s proposed multi-year performance metrics, which are designed to achieve improvement over baseline values ratably (*i.e.*, in equal segments) over a 10-year period. Importantly, because performance will be reviewed, and any penalties assessed, on an annual basis, the metrics must identify annual performance goals that are “designed to demonstrate that the utility is on track to achieve the performance goal in each category at the end of the 10-year period.” 220 ILCS 5/16-108.5(f).<sup>1</sup> Section 16-108.5(f) of the Act identifies each of the metrics applicable to ComEd, as well as each of the associated overall improvement goals and baseline calculations.

Under existing law, Section 16-108.5(f) permits ComEd to elect a start date for all metrics no later than 14 months following the date on which it begins investing in the

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<sup>1</sup> In certain instances, the calculations of the annual performance goals are subject to rounding adjustments.

infrastructure investment program. Because ComEd will begin investment on or before January 1, 2012, it elects that the 10-year period for metrics begin on **January 1, 2013**.

In the event that HB 3036 becomes law, Section 16-108.5(f) will create two separate 10-year tracks – (i) for those metrics related to reliability and opportunities for minority-owned and women-owned business enterprises (Section 16-108.5(f)(1) through (4) and (9) of HB 3036), ComEd must elect a start date that is no later than 14 months following the date on which it begins investing in its infrastructure investment program, and (ii) for those metrics that utilize the technology or functionality that will be implemented under ComEd’s Advanced Metering Infrastructure Deployment Plan (“AMI Plan”) (Section 16-108.5(f)(5) through (8) of HB 3036), ComEd must elect a start date that is no later than 14 months following the Commission’s order approving the AMI Plan. Accordingly, if HB 3036 becomes law, ComEd elects a start date of **January 1, 2013** for the metrics set forth in Section 16-108.5(f)(1) through (4) and (9) of HB 3036 based on the fact that ComEd will begin investing in its infrastructure investment program no later than January 1, 2012. With respect to those metrics dependent upon approval of ComEd’s AMI Plan set forth in Section 16-108.5(f)(5) through (8) of HB 3036, ComEd will make a filing with the Commission within 30 days of the Commission’s order approving ComEd’s AMI Plan, which filing shall elect a start date for such metrics that is no later than 14 months following the entry of such order.

For each annual period, the determination of whether ComEd achieved an annual performance goal shall be based on ComEd's performance as of the end of the relevant 12-month period during that 12-month period. ComEd shall be deemed to have achieved an annual goal if

its performance during the relevant 12-month period is sufficient to have satisfied the specific annual goal for that annual period.

### **RELIABILITY-RELATED METRICS**

The first set of metrics in Section 16-108.5(f) relates to ComEd's provision of reliable electric service to its customers. For purposes of designing and calculating ComEd's performance under these metrics, the definitions set forth in 83 Illinois Administrative Code ("83 Ill. Admin. Code") Part 411.20 as of May 1, 2011 apply. In addition, ComEd may exclude up to nine Extreme Weather Event Days from the calculations related to these metrics. An Extreme Weather Event Day is a 24-hour calendar day beginning at 12:00 a.m. and ending at 11:59 p.m. during which any weather event caused interruptions of electric delivery service for 10,000 or more of its customers for three or more hours. (*See* Appendix 2). ComEd has excluded up to nine Extreme Weather Event Days from each year of the baseline calculations for the reliability-related metrics. (*See* Appendix 1). Moreover, when calculating ComEd's performance under each of the annual performance goals for these metrics, the same Extreme Weather Event Days shall be excluded from each calculation. However, the calculation for Southern Region SAIFI, and, if HB 3036 becomes law, the calculation for Northeastern Region SAIFI, excludes only those customer interruptions occurring in each of these respective regions.

#### **1. System Average Interruption Frequency Index (Section 16-108.5(f)(1)).**

**Definition.** The System Average Interruption Frequency Index ("SAIFI") is defined by 83 Ill. Admin. Code 411.20 as "the average number of interruptions per customer during the year. It is calculated by dividing the total annual number of customer interruptions by the total number of customers served during the year."

$$\text{SAIFI} = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

**Performance Goal.** ComEd must improve system-wide SAIFI (“System SAIFI”) by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the System SAIFI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>2</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the System SAIFI baseline value is 0.998. (See Appendix 1).

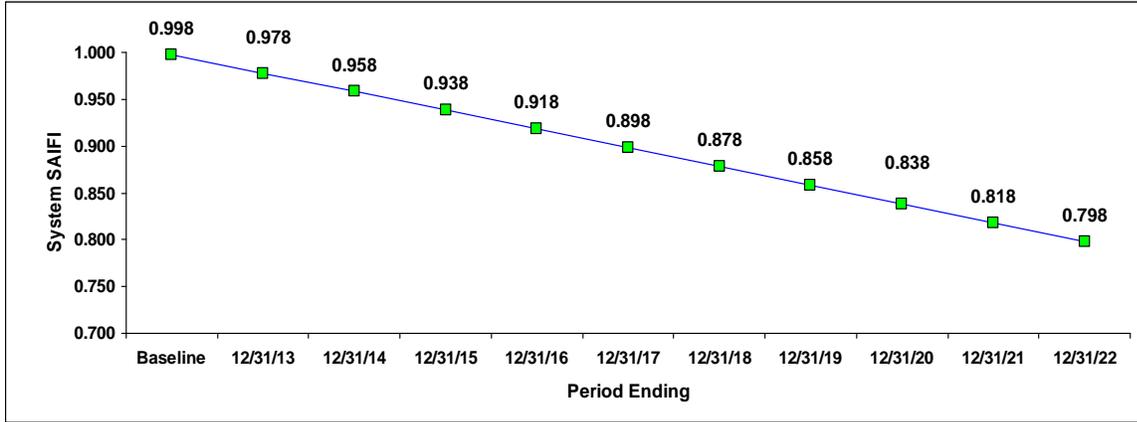
**Annual Performance Goals.** ComEd submits the annual System SAIFI goals set forth in Table 1, which are designed to improve System SAIFI by 20% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 0.020. Chart 1 presents a graphical depiction of the System SAIFI annual goals over the 10-year period.

**TABLE 1: SYSTEM SAIFI ANNUAL GOALS**

Year	SYSTEM SAIFI
Baseline (2001-2010)	0.998
1/1/13 – 12/31/13	0.978
1/1/14 – 12/31/14	0.958
1/1/15 – 12/31/15	0.938
1/1/16 – 12/31/16	0.918
1/1/17 – 12/31/17	0.898
1/1/18 – 12/31/18	0.878
1/1/19 – 12/31/19	0.858
1/1/20 – 12/31/20	0.838
1/1/21 – 12/31/21	0.818
1/1/22 – 12/31/22	0.798

<sup>2</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**CHART 1: SYSTEM SAIFI ANNUAL GOALS**



**2. Customer Average Interruption Duration Index (Section 16-108.5(f)(2)).**

**Definition.** The Customer Average Interruption Duration Index (“CAIDI”) is defined by 83 Ill. Admin. Code 411.20 as “the average interruption duration for those customers who experience interruptions during the year. It is calculated by dividing the annual sum of all customer interruption durations by the total number of customer interruptions.”

$$\text{CAIDI} = \frac{\text{Sum of all Customer Interruption Durations}}{\text{Total Number of Customer Interruptions}}$$

**Performance Goal.** ComEd must improve its system-wide CAIDI (“System CAIDI”) by 15%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the System CAIDI data reported to the Commission in ComEd’s annual reports to the Commission for the years

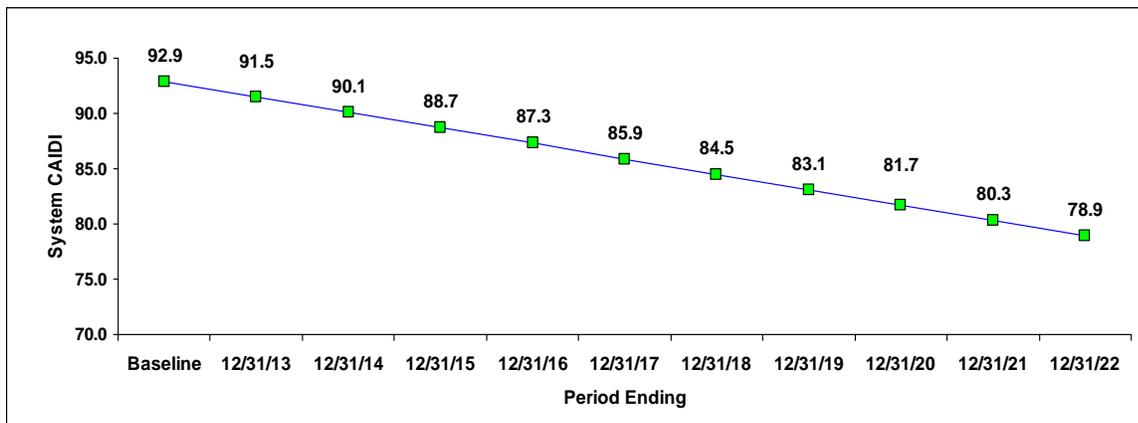
2001 through 2010.<sup>3</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the baseline value is 92.9 minutes. (See Appendix 1).

**Annual Performance Goals.** ComEd submits the annual System CAIDI goals set forth in Table 2, which are designed to improve CAIDI by 15% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 1.4 minutes. Chart 2 presents a graphical depiction of the System CAIDI annual goals over the 10-year period.

**TABLE 2: SYSTEM CAIDI ANNUAL GOALS**

Year	SYSTEM CAIDI
Baseline (2001-2010)	92.9
1/1/13 – 12/31/13	91.5
1/1/14 – 12/31/14	90.1
1/1/15 – 12/31/15	88.7
1/1/16 – 12/31/16	87.3
1/1/17 – 12/31/17	85.9
1/1/18 – 12/31/18	84.5
1/1/19 – 12/31/19	83.1
1/1/20 – 12/31/20	81.7
1/1/21 – 12/31/21	80.3
1/1/22 – 12/31/22	78.9

**CHART 2: SYSTEM CAIDI ANNUAL GOALS**



<sup>3</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**3. Southern Region SAIFI (Section 16-108.5(f)(3)).**

**Definition.** The term “Southern Region” has the meaning set forth in ComEd’s 2010 annual report to the Commission submitted pursuant to Section 16-125 of the Act. Accordingly, the Southern Region SAIFI is calculated as follows:

$$\text{S. Region SAIFI} = \frac{\text{Total Number of Southern Region Customer Interruptions}}{\text{Total Number of Southern Region Customers Served}}$$

**Performance Goal.** ComEd must improve SAIFI for its Southern Region by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the Southern Region SAIFI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>4</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the baseline value is 1.236. (See Appendix 1).

**Annual Performance Goals.** ComEd submits the annual Southern Region SAIFI goals set forth in Table 3, which are designed to improve the Southern Region SAIFI by 20% ratably over the 10-year period beginning January 1, 2013 through achievement of annual reductions of 0.025. Chart 3 presents a graphical depiction of the Southern Region SAIFI annual goals over the 10-year period.

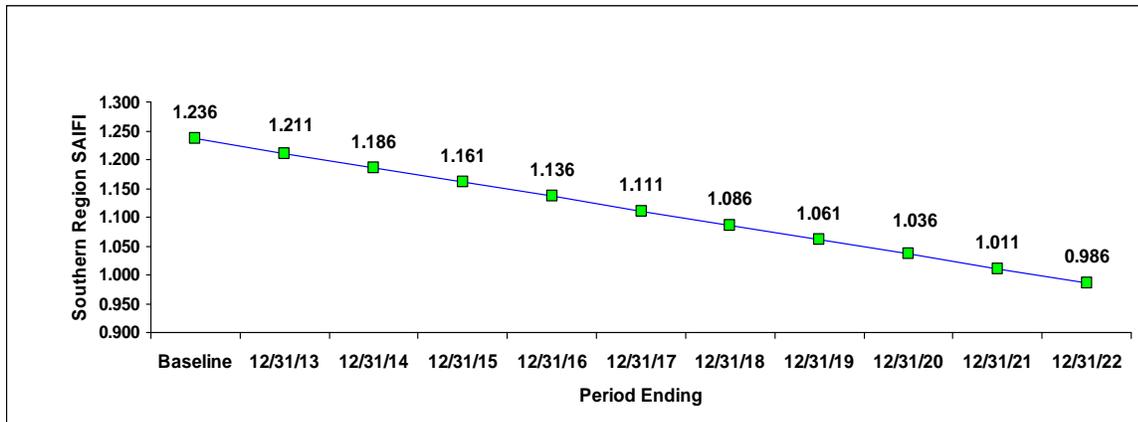
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<sup>4</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**TABLE 3: SOUTHERN REGION SAIFI ANNUAL GOALS**

Year	SOUTHERN REGION SAIFI
Baseline (2001-2010)	1.236
1/1/13 – 12/31/13	1.211
1/1/14 – 12/31/14	1.186
1/1/15 – 12/31/15	1.161
1/1/16 – 12/31/16	1.136
1/1/17 – 12/31/17	1.111
1/1/18 – 12/31/18	1.086
1/1/19 – 12/31/19	1.061
1/1/20 – 12/31/20	1.036
1/1/21 – 12/31/21	1.011
1/1/22 – 12/31/22	0.986

**CHART 3: SOUTHERN REGION SAIFI ANNUAL GOALS**



**4. Northeastern Region SAIFI (Section 16-108.5(f)(3.5) of HB 3036).**

In the event that HB 3036 becomes law, ComEd will be subject to an additional SAIFI metric related to its Northeastern Region. In such event, ComEd proposes the following:

**Definition.** The term “Northeastern Region” has the meaning set forth in ComEd’s 2010 annual report to the Commission submitted pursuant to Section 16-125 of the Act. Accordingly, the Northeastern Region SAIFI is calculated as follows:

$$\text{NE. Region SAIFI} = \frac{\text{Total Number of Northeastern Region Customer Interruptions}}{\text{Total Number of Northeastern Region Customers Served}}$$

**Performance Goal.** ComEd must improve SAIFI for its Northeastern Region by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the Northeastern Region SAIFI data reported to the Commission in ComEd's annual reports to the Commission for the years 2001 through 2010.<sup>5</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the baseline value is 1.006. (See Appendix 1).

**Annual Performance Goals.** ComEd submits the annual Northeastern Region SAIFI goals set forth in Table 4, which are designed to improve the Northeastern Region SAIFI by 20% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 0.020. Chart 4 presents a graphical depiction of the Northeastern Region SAIFI annual goals over the 10-year period.

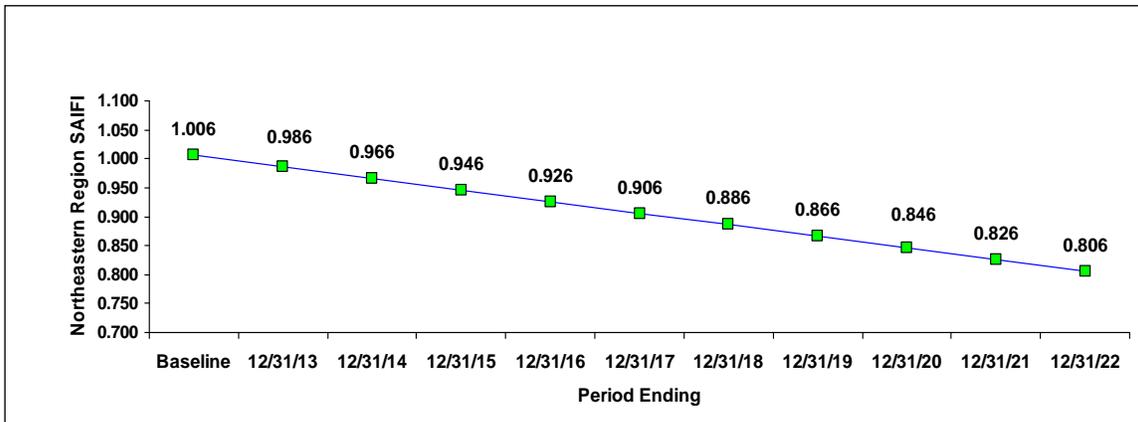
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<sup>5</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**TABLE 4: NORTHEASTERN REGION SAIFI ANNUAL GOALS**

Year	NORTHEASTERN REGION SAIFI
Baseline (2001-2010)	1.006
1/1/13 – 12/31/13	0.986
1/1/14 – 12/31/14	0.966
1/1/15 – 12/31/15	0.946
1/1/16 – 12/31/16	0.926
1/1/17 – 12/31/17	0.906
1/1/18 – 12/31/18	0.886
1/1/19 – 12/31/19	0.866
1/1/20 – 12/31/20	0.846
1/1/21 – 12/31/21	0.826
1/1/22 – 12/31/22	0.806

**CHART 4: NORTHEASTERN REGION SAIFI ANNUAL GOALS**



**SERVICE RELIABILITY TARGETS METRIC**

**5. Service Reliability Targets (Section 16-108.5(f)(4)).**

**Definition.** Section 16-108.5(f)(4) of the Act defines the service reliability targets as those set forth in subparagraphs (A) through (C) of paragraph (4) of subsection (b) of 83 Ill. Admin. Code 411.140. These targets are as follows:

- A) Customers whose immediate primary source of service operates at 69,000 volts or above should not have experienced:
  - i) More than three controllable interruptions in each of the last three consecutive years.
  - ii) More than nine hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.
- B) Customers whose immediate primary source of service operates at more than 15,000 volts, but less than 69,000 volts, should not have experienced:
  - i) More than four controllable interruptions in each of the last three consecutive years.
  - ii) More than twelve hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.
- C) Customers whose immediate primary source of service operates at 15,000 volts or below should not have experienced:
  - i) More than six controllable interruptions in each of the last three consecutive years.
  - ii) More than eighteen hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.

**Performance Goal.** ComEd must improve the total number of customers who exceed the service reliability targets by 75%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is the 2010 data reported to the Commission regarding performance under each of the service reliability targets.<sup>6</sup> The baseline value is 407 customers.

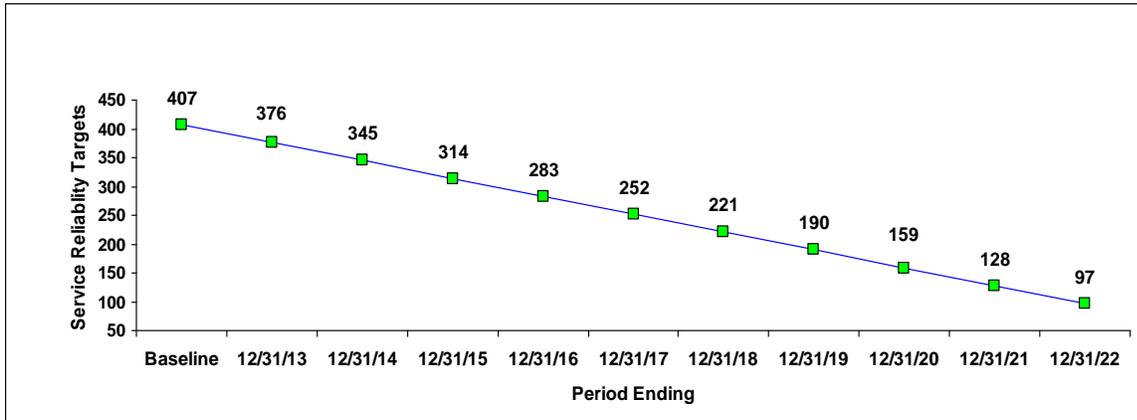
**Annual Performance Goals.** ComEd submits the annual service reliability targets goals set forth in Table 5, which are designed to improve the total number of customers who exceed the service reliability targets by 75% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 31 customers. Chart 5 presents a graphical depiction of the service reliability targets annual goals over the 10-year period.

**TABLE 5: SERVICE RELIABILITY TARGETS ANNUAL GOALS**

Year	SERVICE RELIABILITY TARGETS
Baseline (2010)	407
1/1/13 – 12/31/13	376
1/1/14 – 12/31/14	345
1/1/15 – 12/31/15	314
1/1/16 – 12/31/16	283
1/1/17 – 12/31/17	252
1/1/18 – 12/31/18	221
1/1/19 – 12/31/19	190
1/1/20 – 12/31/20	159
1/1/21 – 12/31/21	128
1/1/22 – 12/31/22	97

<sup>6</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**CHART 5: SERVICE RELIABILITY TARGETS ANNUAL GOALS**



**THE CUSTOMER BENEFITS METRICS**

This set of metrics is designed to reduce ComEd’s costs of providing electric service through achievement of reductions in the issuance of estimated electric bills, consumption on inactive meters, non-technical line loss unaccounted for energy (*i.e.*, losses not related to distribution and transmission losses), and uncollectible expense. Because the costs associated with these categories are recovered from customers, achievement of these metrics will realize tangible customer benefits in the form of reduced costs of electric service.

Each of the annual performance goals relating to these four metrics is based on the assumption that ComEd may fully implement Smart Grid technology, including utilizing the full functionality of the technology and that there is no requirement for on-site disconnection notification. Accordingly, the annual performance goals associated with these four metrics depend on the Commission’s approval of ComEd’s Advanced Metering Infrastructure Deployment Plan pursuant to Section 16-108.6 of the Act and on the Commission declining to otherwise impose an on-site disconnection requirement.

**6. Estimated Electric Bills (Section 16-108.5(f)(5)).**

**Definition.** ComEd renders an estimated monthly bill when a meter on an account was not read for the applicable monthly billing period. To reflect that the bill is estimated, the word “estimate” is plainly stated on the face of each such bill.

**Performance Goal.** ComEd must reduce the number of estimated electric bills by 90%, ratably over the 10-year period.

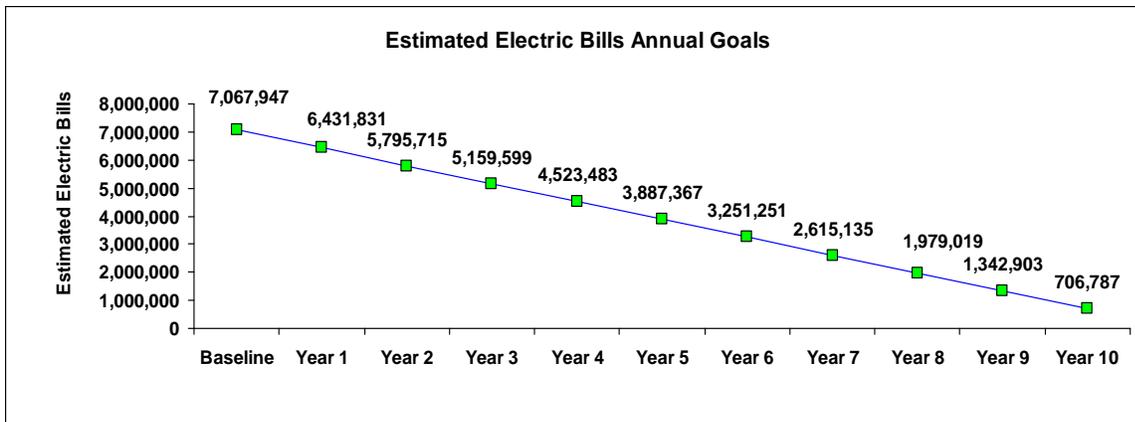
**Baseline Calculation.** The baseline is the average number of estimated electric bills for the years 2008 through 2010. The baseline value is 7,067,947.

**Annual Performance Goals.** ComEd submits the annual estimated electric bills goals set forth in Table 6, which are designed to reduce the number of estimated electric bills by 90% ratably over the 10-year period beginning January 1, 2013 or, if HB 3036 becomes law, beginning on a date within 14 months after the Commission approves ComEd’s AMI Plan, through annual reductions in estimated electric bills of 636,116. Chart 6 presents a graphical depiction of the estimated electric bills annual goals over the 10-year period.

**TABLE 6: ESTIMATED ELECTRIC BILLS ANNUAL GOALS**

Year	ESTIMATED ELECTRIC BILLS
Baseline (2008-2010)	7,067,947
Year 1	6,431,831
Year 2	5,795,715
Year 3	5,159,599
Year 4	4,523,483
Year 5	3,887,367
Year 6	3,251,251
Year 7	2,615,135
Year 8	1,979,019
Year 9	1,342,903
Year 10	706,787

**CHART 6: ESTIMATED ELECTRIC BILLS ANNUAL GOALS**



**7. Consumption on Inactive Meters (Section 16-108.5(f)(6)).**

*Definition.* Consumption on inactive meters (“CIM”) occurs when metered electricity has no customer on record to bill for usage. As a result, the costs for CIM are recovered from all ComEd customers receiving service under ComEd’s Rate BES – Basic Electric Service, rather than from the individual retail customer that is responsible for such usage. CIM generally occurs when the customer of record finalizes the account and there is no immediate successor customer that contacts ComEd to set up new service. ComEd tracks the total monthly kilowatthours

(“kWh”) of electricity categorized as CIM by way of the regular monthly meter reads and retains such information even though a bill is not generated.

**Performance Goal.** ComEd must reduce CIM by 90%, ratably over the 10-year period.

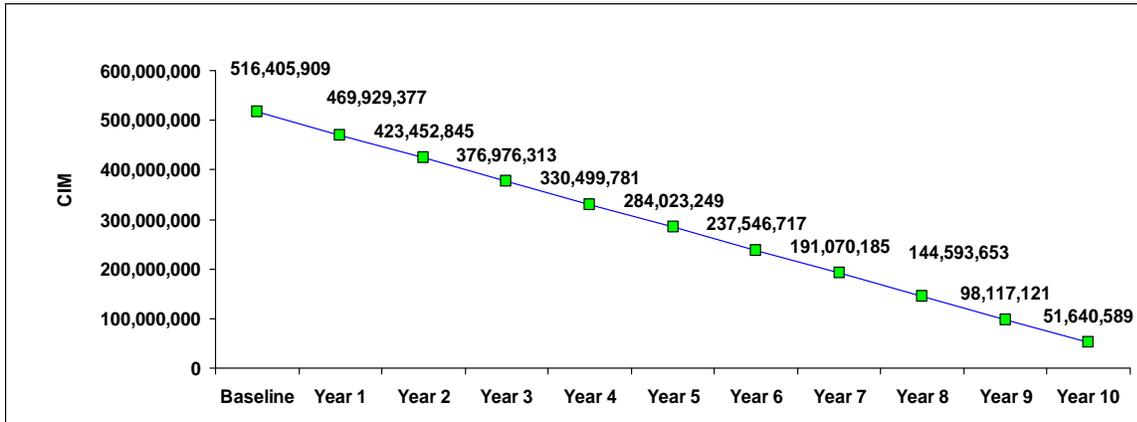
**Baseline Calculation.** The baseline is the average CIM for the years 2009 and 2010. The baseline value is 516,405,909 kWh.

**Annual Performance Goals.** ComEd submits the annual CIM goals set forth in Table 7, which are designed to reduce CIM by 90% ratably over the 10-year period beginning January 1, 2013 or, if HB 3036 becomes law, beginning on a date within 14 months after the Commission approves ComEd’s AMI Plan, through annual reductions in CIM of 46,476,532 kWh. Chart 7 presents a graphical depiction of the CIM annual goals over the 10-year period.

**TABLE 7: CIM ANNUAL GOALS**

Year	CIM (kWh)
Baseline (2009-2010)	516,405,909
Year 1	469,929,377
Year 2	423,452,845
Year 3	376,976,313
Year 4	330,499,781
Year 5	284,023,249
Year 6	237,546,717
Year 7	191,070,185
Year 8	144,593,653
Year 9	98,117,121
Year 10	51,640,589

**CHART 7: CIM ANNUAL GOALS**



**8. Unaccounted For Energy (Section 16-108.5(f)(7)).**

*Definition.* Unaccounted for energy (“UFE”) is unmetered electricity that is not billed to an individual retail customer, such as theft of service. As a result, the costs for such unmetered electricity are recovered from all ComEd customers, rather than from an individual retail customer that is responsible for such usage.

*Performance Goal.* ComEd must reduce UFE by 50%, ratably over the 10-year period.

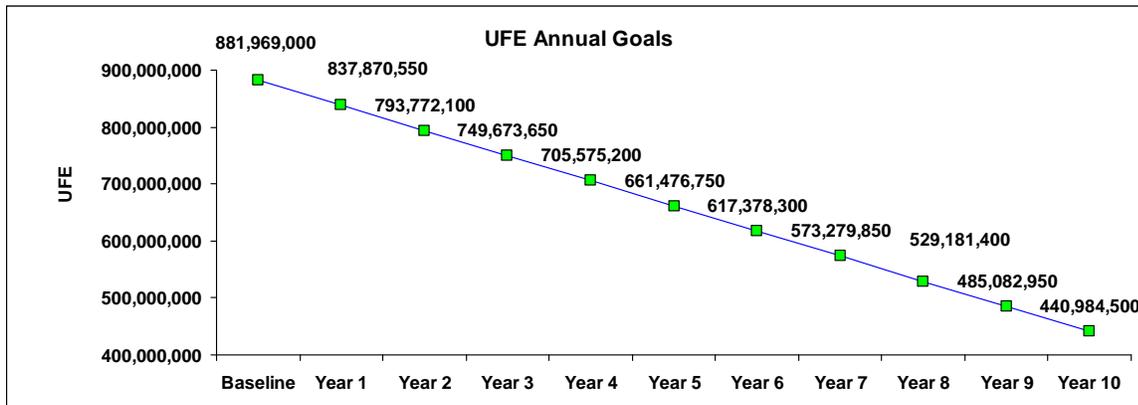
*Baseline Calculation.* The baseline is the UFE for the year 2009. The baseline value is 881,969,000 kWh.

*Annual Performance Goals.* ComEd submits the annual UFE goals set forth in Table 8, which are designed to reduce UFE by 50% ratably over the 10-year period beginning January 1, 2013 or, if HB 3036 becomes law, beginning on a date within 14 months after the Commission approves ComEd’s AMI Plan, through annual reductions in UFE of 44,098,450 kWh. Chart 8 presents a graphical depiction of the UFE annual goals over the 10-year period.

**TABLE 8: UFE ANNUAL GOALS**

Year	UFE (kWh)
Baseline (2009)	881,969,000
Year 1	837,870,550
Year 2	793,772,100
Year 3	749,673,650
Year 4	705,575,200
Year 5	661,476,750
Year 6	617,378,300
Year 7	573,279,850
Year 8	529,181,400
Year 9	485,082,950
Year 10	440,984,500

**CHART 8: UFE ANNUAL GOALS**



**9. Uncollectible Expense (Section 16-108.5(f)(8)).**

*Definition.* Uncollectible expense is the amount of expense recorded in the Federal Energy Regulatory Form 1 (“FERC Form 1”) Account 904.

*Performance Goal.* ComEd must reduce uncollectible expense by \$30,000,000, ratably over the 10-year period.

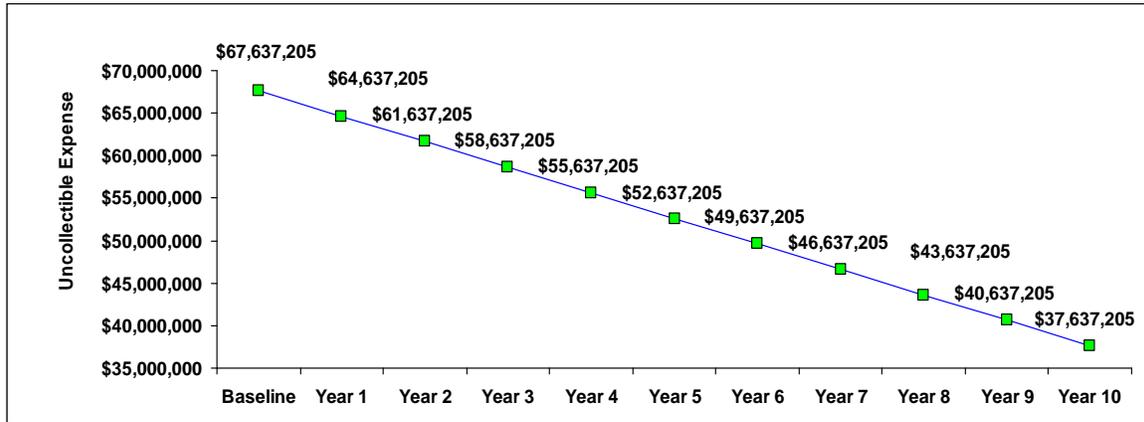
**Baseline Calculation.** The baseline is the average uncollectible expense set forth in Account 904 in ComEd’s 2008 through 2010 FERC Form 1 submittals. The baseline value is \$67,637,205.

**Annual Performance Goals.** ComEd submits the annual uncollectible expense goals set forth in Table 9, which are designed to reduce uncollectible expense by \$30,000,000 ratably over the 10-year period beginning January 1, 2013 or, if HB 3036 becomes law, beginning on a date within 14 months after the Commission approves ComEd’s AMI Plan, through annual reductions in uncollectible expense of \$3,000,000. Chart 9 presents a graphical depiction of the uncollectible expense annual goals over the 10-year period.

**TABLE 9: UNCOLLECTIBLE EXPENSE ANNUAL GOALS**

Year	Uncollectible Expense (\$)
Baseline (2008-2010)	\$67,637,205
Year 1	\$64,637,205
Year 2	\$61,637,205
Year 3	\$58,637,205
Year 4	\$55,637,205
Year 5	\$52,637,205
Year 6	\$49,637,205
Year 7	\$46,637,205
Year 8	\$43,637,205
Year 9	\$40,637,205
Year 10	\$37,637,205

**CHART 9: UNCOLLECTIBLE EXPENSE ANNUAL GOALS**



**OPPORTUNITIES FOR MINORITY-OWNED  
AND WOMEN-OWNED BUSINESS ENTERPRISES METRIC**

**10. Opportunities for Minority-Owned and Women-Owned Business Enterprises (Section 16-108.5(f)(9)).**

*Definition.* Section 16-108.5(f)(9) directs ComEd to design a performance metric regarding the creation of opportunities for minority-owned and women-owned business enterprises (“MWBE”) consistent with State and federal law. MWBE refers to a minority-owned or women-owned business that is a for-profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by minority group members or women. “Minority group members” refers to those individuals who are Asian, Black, Hispanic, or Native American.

Ownership by minority individuals or women means the business is at least 51% owned by such individuals or, in the case of a publicly-owned business, at least 51% of the stock is owned by one or more such individuals. Further, the management and daily operations are controlled by those minority group members or women.

**Performance Goal.** It is ComEd’s goal to increase its capital expenditures paid to MWBE by 15% over the 10-year period.

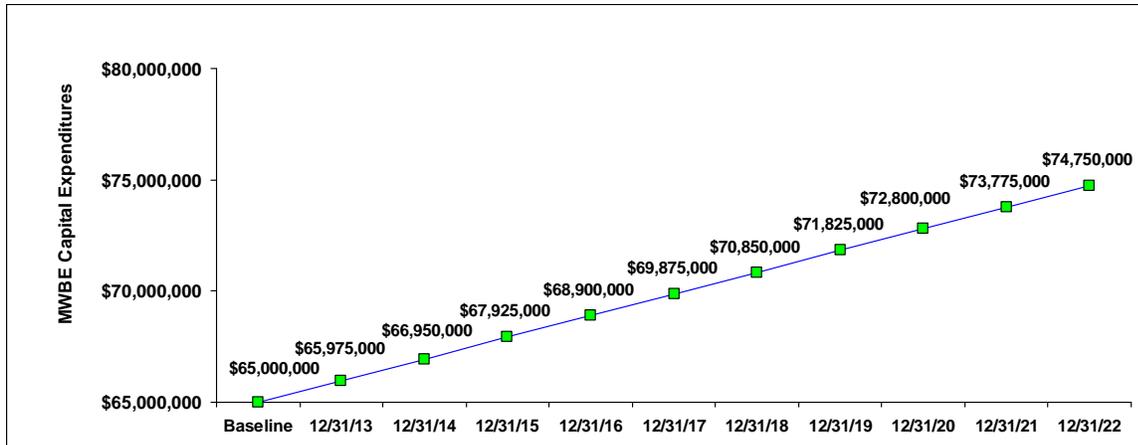
**Baseline Calculation.** The baseline is ComEd’s capital expenditures that were paid to MWBE in 2010. The baseline value is \$65,000,000.

**Annual Performance Goals.** The MWBE annual goals set forth in Table 1 reflect annual capital expenditures to be paid to MWBE, and are designed to increase such expenditures 15% ratably over the 10-year period beginning January 1, 2013 through annual increases in such expenditures of \$975,000. Chart 10 presents a graphical depiction of the MBWE annual goals over the 10-year period.

**TABLE 10: MWBE ANNUAL GOALS**

Year	Capital Expenditures Paid to MWBE (\$)
Baseline ( 2010)	\$65,000,000
1/1/13 – 12/31/13	\$65,975,000
1/1/14 – 12/31/14	\$66,950,000
1/1/15 – 12/31/15	\$67,925,000
1/1/16 – 12/31/16	\$68,900,000
1/1/17 – 12/31/17	\$69,875,000
1/1/18 – 12/31/18	\$70,850,000
1/1/19 – 12/31/19	\$71,825,000
1/1/20 – 12/31/20	\$72,800,000
1/1/21 – 12/31/21	\$73,775,000
1/1/22 – 12/31/22	\$74,750,000

**CHART 10: MWBE ANNUAL GOALS**



## **II. PENALTIES**

This section of ComEd’s Plan describes the tariff mechanism designed to apply the financial penalties described in Section 16-108.5(f-5), which take the form of a basis points (“bps”) reduction to the cost of common equity (“COE”) set by Rate DSPP for the relevant 12-month period.

### **A. Penalties under Current Section 16-108.5(f-5)**

Under the existing provisions of Section 16-108.5(f-5), the penalties are as follows and are applied only for the 12-month period in which the deficiency occurred:

*System SAIFI* – failure to achieve the annual goal shall result in a 5 bps reduction.

*System CAIDI* – failure to achieve the annual goal shall result in a 5 bps reduction.

*SAIFI for ComEd’s Southern Region* – failure to achieve the annual goal shall result in a 5 bps reduction.

*Customers Exceeding Service Reliability Targets* – failure to achieve the annual goal shall result in a 5 bps reduction.

*Reduction in Issuance of Estimated Electric Bills* – failure to achieve at least 95% of the annual goal shall result in a 5 bps reduction.

*Consumption on Inactive Meters, Unaccounted for Energy, and Uncollectible Expense* – each of the three goals shall be calculated in terms of the percentage of the goal achieved. The percentages shall be aggregated and averaged; if the utility does not achieve an aggregated average percentage value of at least 95% in a given year, then the COE shall be reduced by 5 bps.

***Aggregate Average Example:*** For example, ComEd's percent of goal achieved in a given year is 95% for CIM, 97% for UFE, and 96% for uncollectible expense. The aggregate average percent achievement of these three goals would then be  $(0.95 + 0.97 + 0.96)$  divided by 3, or 96%. In this example, the aggregate average percentage value of 96% achieves and exceeds the 95% requirement.

These penalties applicable pursuant to Section 16-108.5(f-5) are implemented through the proposed Rider DSPM, which is attached to this Plan as ComEd Ex. 1.1.

The total reduction to the COE for a given year is no more than a total of 30 basis points per year.

**B. Penalties under Section 16-108.5(f-5) if HB 3036 Becomes Law**

In the event that HB 3036 becomes law, the penalties under Section 16-108.5(f-5) are as follows and are applied only for the 12-month period in which the deficiency occurred:

***System SAIFI*** – failure to achieve the annual goal shall result in a 5 bps reduction for years 1 through 3; a 6 bps reduction for years 4 through 6; and a 7 bps reduction for years 7 through 10.

***System CAIDI*** – failure to achieve the annual goal shall result in a 5 bps reduction for years 1 through 3; a 6 bps reduction for years 4 through 6; and a 7 bps reduction for years 7 through 10.

***SAIFI for ComEd's Southern Region and SAIFI for ComEd's Northeastern Region*** – failure to achieve both annual goals shall result in a 5 bps reduction for years 1 through 3; a 6 bps reduction for years 4 through 6; and a 7 bps reduction for years 7 through 10.

***Customers Exceeding Service Reliability Targets*** – failure to achieve the annual goal shall result in a 5 bps reduction for years 1 through 3; a 6 bps reduction for years 4 through 6; and a 7 bps reduction for years 7 through 10.

***Reduction in Issuance of Estimated Electric Bills*** – failure to achieve at least 95% of the annual goal shall result in a 5 bps reduction.

***Consumption on Inactive Meters, Unaccounted for Energy, and Uncollectible Expense*** – each of the three goals shall be calculated in terms of the percentage of the goal achieved. The percentages shall be aggregated and averaged; if the utility does not achieve an aggregated average percentage value of at least 95% in a given year, then the COE shall be reduced by 5 bps.

***Aggregate Average Example:*** For example, ComEd's percent of goal achieved in a given year is 95% for CIM, 97% for UFE, and 96% for uncollectible expense. The aggregate average percent achievement of these three goals would then be  $(0.95 + 0.97 + 0.96)$  divided by 3, or 96%. In this example, the aggregate average percentage value of 96% achieves and exceeds the 95% requirement.

These penalties, which are only applicable if HB 3036 becomes law, would be implemented through the proposed Rider DSPM attached to this Plan as ComEd Ex. 1.1 TB.

If HB 3036 becomes law, the total reduction to the COE for a given year is no more than a total of 30 basis points for years 1 through 3; no more than a total of 34 bps for years 4 through 6; and no more than 38 bps for years 7 through 10.

**C. Impact of Smart Grid Functionality on Penalties**

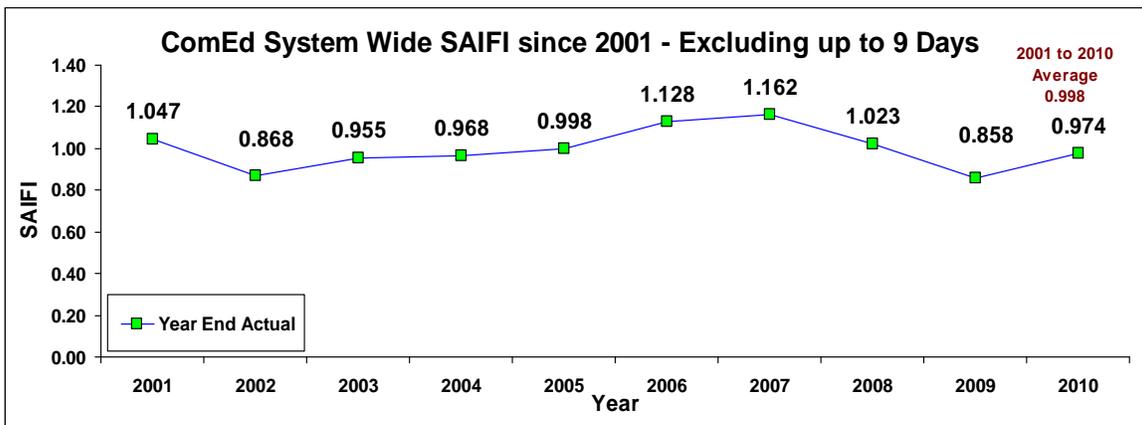
Under existing Section 16-108.5(f) or as modified by HB 3036, the metrics related to customer benefits (reduction in issuance of estimated electric bills, consumption on inactive meters, unaccounted for energy, and uncollectible expense) are based on the assumptions that ComEd may fully implement all Smart Grid technology, including utilizing the full functionality of such technology and that there is no requirement for personal on-site disconnection notification. As a result, if ComEd is unable to meet the metrics and performance goals for the customer benefits metrics because it was unable to fully implement all Smart Grid technology, and the Commission so finds after notice and hearing, then ComEd will be excused from compliance, but only to the limited extent achievement of the affected metrics and performance goals was hindered by less than full implementation.

## APPENDIX 1

### CALCULATION OF METRIC BASELINES

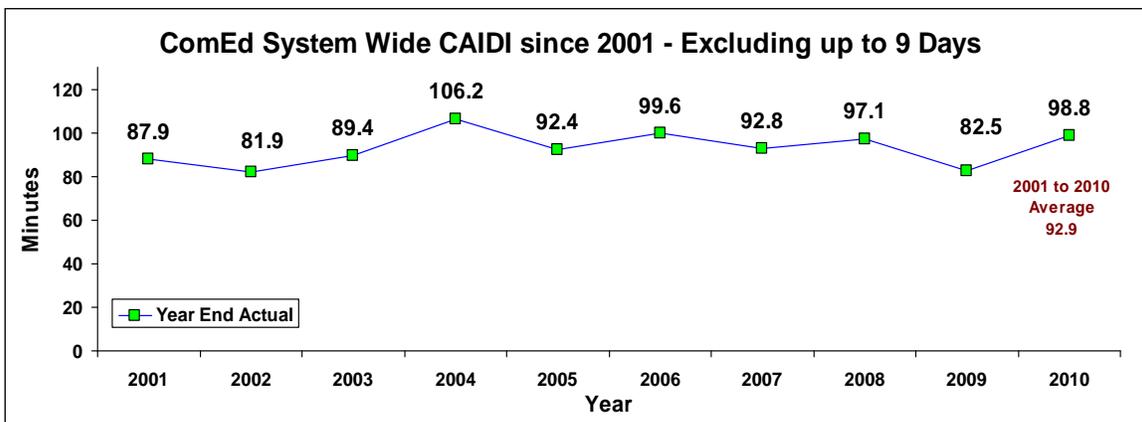
#### *System SAIFI*

The baseline is the 2001 through 2010 average System SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 0.998.



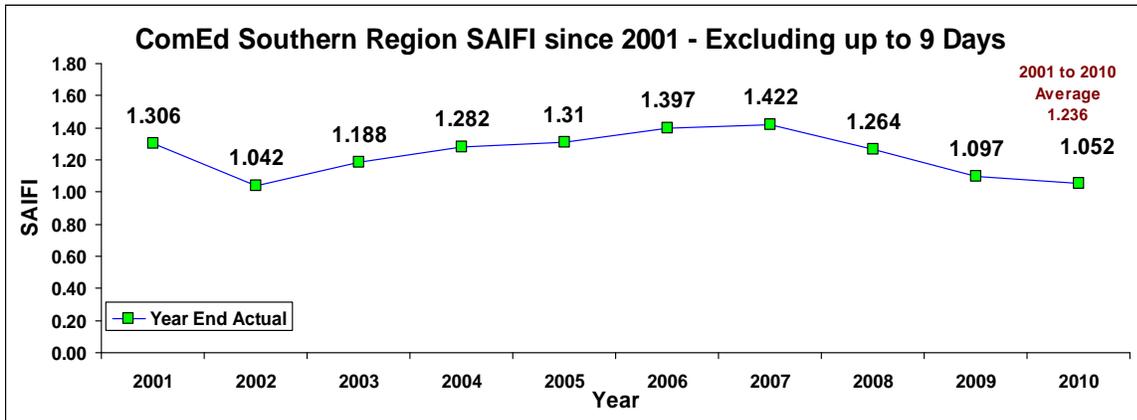
#### *System CAIDI*

The baseline is the 2001 through 2010 average System CAIDI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 92.9 minutes.



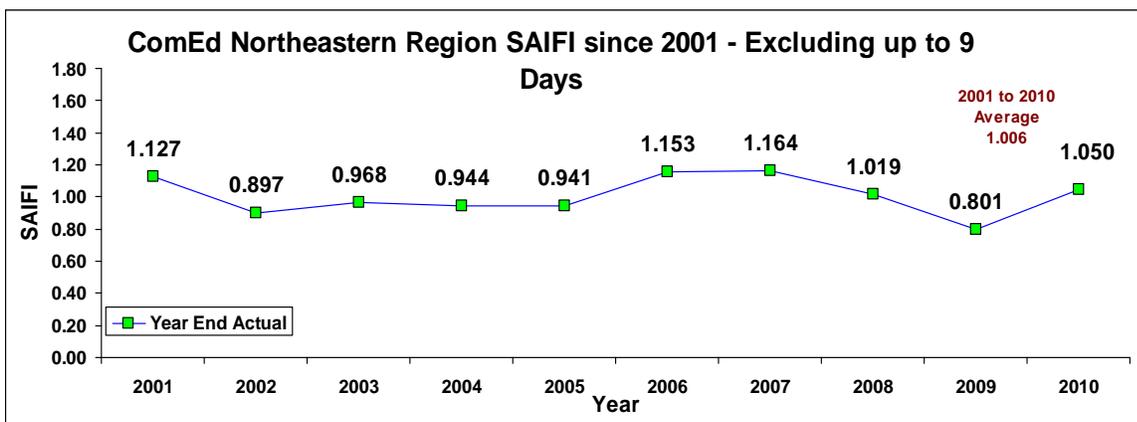
***Southern Region SAIFI***

The baseline is the 2001 through 2010 average Southern Region SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 1.236.



***Northeastern Region SAIFI***

In the event that HB 3036 becomes law, the baseline is the 2001 through 2010 average Northeastern Region SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 1.006.

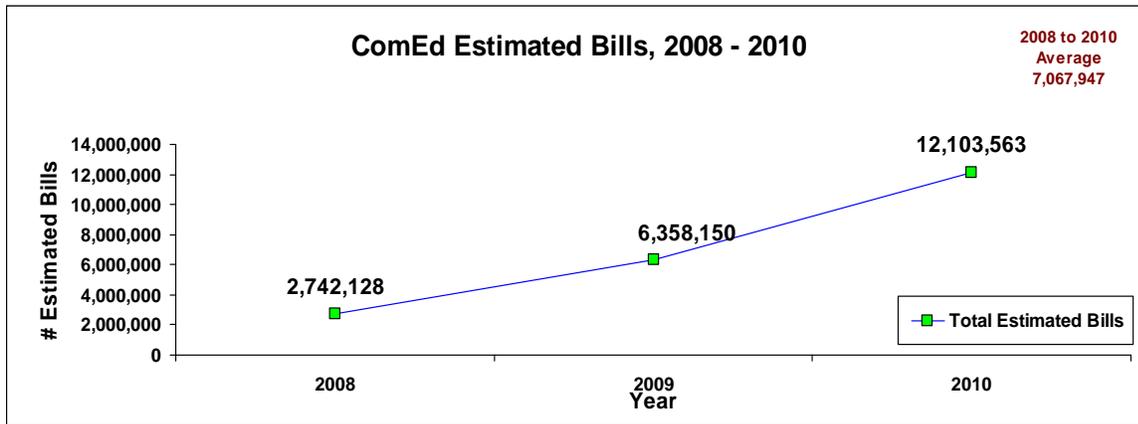


***Service Reliability Targets***

The baseline is the 2010 data reported to the Commission regarding performance under each of the service reliability targets. The baseline value is 407 customers.

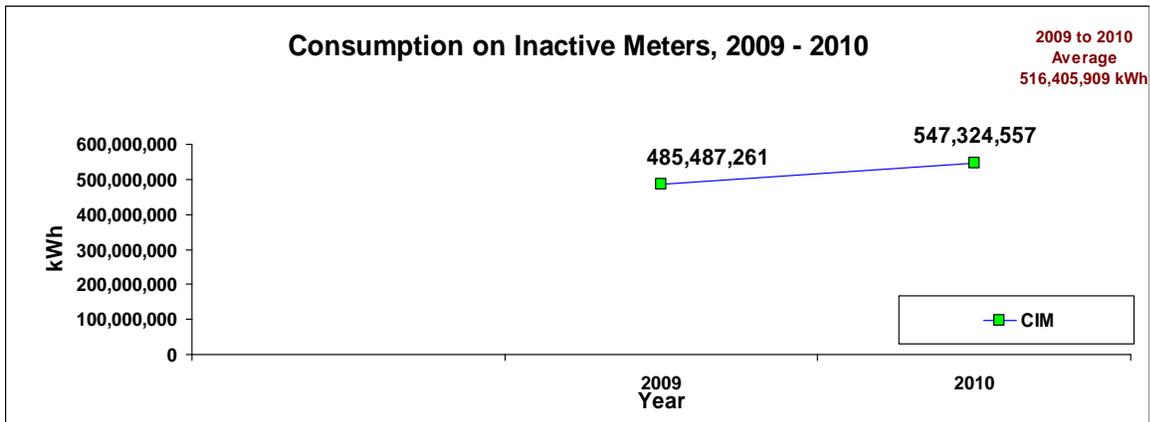
***Estimated Electric Bills***

The baseline is the 2008 through 2010 average number of estimated electric bills per year. The baseline value is 7,067,947.



***Consumption on Inactive Meters (CIM)***

The baseline is the average CIM for the years 2009 and 2010. The baseline value is 516,405,909 kWh.

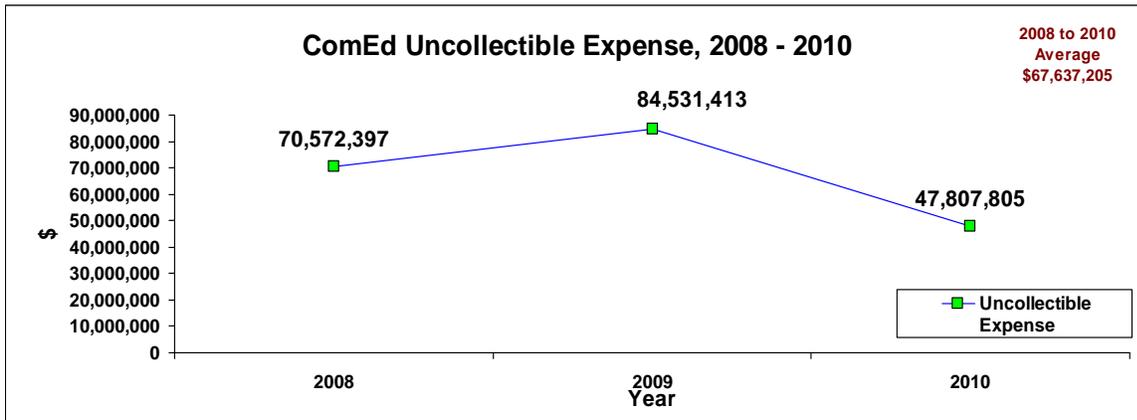


***Unaccounted For Energy (UFE)***

The baseline is the UFE for the year 2009. The baseline value is 881,969,000 kWh.

***Uncollectible Expense***

The baseline is the average uncollectible expense set forth in Account 904 in ComEd’s 2008 through 2010 FERC Form 1 submittals. The baseline value is \$67,637,205.



***Opportunities for Minority-Owned and Women-Owned Business Enterprises***

The baseline is ComEd’s capital expenditures that were paid to MWBE in 2010. The baseline value is \$65,000,000.

**APPENDIX 2**  
**IDENTIFICATION OF EXTREME WEATHER EVENT DAYS**

An Extreme Weather Event Day is defined as a 24-hour calendar day (beginning at 12:00 a.m. and ending at 11:59 p.m.) during which any weather event (*e.g.*, storm, tornado) caused interruptions of electric delivery service for 10,000 or more of the participating utility's customers for 3 hours or more.

Both the baseline calculation(s) and annual calculations must use the same exact methodology and exclude up to 9 Extreme Weather Event Days to ensure an equivalent baseline and annual measurement.

If there are more than 9 days that meet the definition of an Extreme Weather Event Day in a year, then the utility may choose no more than 9 Extreme Weather Event Days.

The same exact Extreme Weather Event Days must be excluded from the calculation of the System SAIFI, System CAIDI and Southern Region SAIFI. The same is true for the calculation of Northeastern Region SAIFI in the event that HB 3036 becomes law. However the calculations for Southern Region SAIFI and Northeastern Region SAIFI exclude only those customer interruptions occurring in each of these respective regions.

2001 to 2010 Extreme Weather Event Day Summary

Year	Extreme Weather Days Qualifying for Exclusion	Number of Extreme Weather Days Excluded	Customer Interruptions Excluded	Customer Interruptions Not Excluded (Exceeds 9 days)
2001	14	9	856,000	295,000
2002	8	8	692,000	-
2003	15	9	1,266,000	236,000
2004	13	9	898,000	146,000
2005	9	9	633,000	-
2006	14	9	1,120,000	217,000
2007	23	9	1,388,000	617,000
2008	17	9	1,166,000	360,000
2009	8	8	586,000	-
2010	16	9	1,428,000	327,000

2001 through 2004 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

2001		2002		2003		2004	
Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions
10/25/2001	131,139	3/9/2002	204,515	5/11/2003	264,399	7/21/2004	129,162
4/7/2001	115,487	8/19/2002	104,505	7/5/2003	221,019	7/22/2004	118,175
8/9/2001	100,347	10/4/2002	89,607	11/12/2003	193,669	5/21/2004	112,577
8/2/2001	94,713	6/10/2002	82,981	7/17/2003	152,349	3/5/2004	105,023
6/12/2001	93,431	8/22/2002	65,597	7/15/2003	109,510	5/30/2004	93,885
7/23/2001	85,574	6/25/2002	53,739	7/7/2003	103,410	11/24/2004	92,062
7/22/2001	81,461	7/9/2002	45,909	8/1/2003	86,346	6/12/2004	86,143
6/14/2001	80,497	8/21/2002	45,430	7/6/2003	74,456	8/27/2004	85,341
2/25/2001	73,819			7/27/2003	60,731	10/30/2004	75,679
8/22/2001	72,601			7/21/2003	56,096	8/28/2004	73,355
10/24/2001	66,703			7/20/2003	55,190	4/20/2004	26,651
7/21/2001	60,212			5/1/2003	38,685	8/4/2004	25,679
7/25/2001	51,322			7/8/2003	38,365	11/25/2004	20,512
10/13/2001	44,488			5/12/2003	26,418		
				7/18/2003	21,432		

2005 through 2007 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

2005		2006		2007	
Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions
7/25/2005	103,317	10/2/2006	350,189	8/23/2007	467,785
7/20/2005	100,467	7/20/2006	132,676	12/23/2007	203,441
11/13/2005	99,306	5/29/2006	131,105	7/18/2007	126,569
6/4/2005	98,522	8/2/2006	119,258	8/22/2007	120,320
9/13/2005	66,701	8/24/2006	97,933	8/24/2007	101,489
8/20/2005	55,642	3/13/2006	82,824	12/1/2007	100,252
10/2/2005	50,688	10/3/2006	69,615	6/7/2007	100,134
7/26/2005	33,522	8/3/2006	68,463	4/11/2007	88,678
7/21/2005	25,188	12/1/2006	68,175	5/24/2007	79,751
		5/30/2006	60,027	2/24/2007	76,718
		10/4/2006	50,861	6/18/2007	69,461
		7/18/2006	50,498	8/7/2007	67,252
		9/22/2006	42,882	7/9/2007	62,164
		10/5/2006	12,523	8/12/2007	59,311
				9/25/2007	49,775
				7/26/2007	47,394
				7/19/2007	35,937
				2/25/2007	35,826
				8/25/2007	26,586
				12/2/2007	24,093
				6/8/2007	23,443
				8/26/2007	20,120
				8/27/2007	19,191

2008 through 2010 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

2008		2009		2010	
Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions
8/4/2008	376,721	6/19/2009	227,001	6/18/2010	456,892
6/15/2008	138,443	12/24/2009	97,320	6/23/2010	263,965
8/5/2008	115,163	3/29/2009	85,634	10/26/2010	183,766
5/30/2008	111,395	6/24/2009	55,187	10/27/2010	131,017
6/8/2008	107,489	10/6/2009	52,490	7/23/2010	99,194
6/6/2008	102,830	6/20/2009	37,401	7/24/2010	93,373
6/13/2008	87,792	5/14/2009	18,256	5/31/2010	72,993
12/19/2008	63,396	12/25/2009	12,807	6/26/2010	66,002
12/21/2008	62,791			8/4/2010	60,590
7/10/2008	60,980			6/21/2010	57,838
5/2/2008	60,821			6/24/2010	57,047
6/28/2008	60,086			9/21/2010	55,136
10/26/2008	59,641			4/6/2010	46,849
6/7/2008	48,927			6/19/2010	43,976
6/9/2008	31,982			6/22/2010	41,495
8/6/2008	25,869			6/20/2010	24,669
8/7/2008	11,331				

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

Commonwealth Edison Company )  
 )  
Approval of Multi-Year Performance Metrics pursuant ) Docket No. 11-0772  
to Section 16-108.5(f) & (f-5) of the Public Utilities Act. )

Direct Testimony of  
**MICHAEL B. MCMAHAN, P.E.**  
Vice President, Smart Grid and Technology  
Commonwealth Edison Company

December 8, 2011

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1 **I. Introduction**

2 **A. Identification of Witness**

3 **Q. What is your name and business address?**

4 A. My name is Michael B. McMahan. My business address is 2 Lincoln Centre, 10<sup>th</sup> Floor,  
5 Oakbrook Terrace, Illinois 60181.

6 **Q. By whom are you employed and in what capacity?**

7 A. I am Vice President, Smart Grid and Technology for Commonwealth Edison Company  
8 (“ComEd”).

9 **B. Purpose of Direct Testimony**

10 **Q. What is the purpose of your direct testimony?**

11 A. The purpose of my testimony is to describe ComEd’s Multi-Year Performance Metrics  
12 Plan (“Plan”) and to explain how ComEd has designed annual performance goals to  
13 achieve each of the 10-year performance metrics (“metrics”) set forth in Section 16-  
14 108.5(f) of the Public Utilities Act (“Act”).

15 **C. Summary of Conclusions**

16 **Q. What are the conclusions of your direct testimony?**

17 A. In summary, the annual performance goals set forth in the Plan are designed to achieve  
18 each of the 10-year goals ratably (*i.e.*, in equal segments) over the relevant 10-year period  
19 from the baseline established for each metric.

20 **D. Background and Qualifications**

21 **Q. Mr. McMahan, what are your current duties and responsibilities for ComEd?**

22 A. As Vice President, Smart Grid and Technology, I am responsible for developing and  
23 implementing operation plans for the installation of ComEd's Smart Grid projects and  
24 other related technologies.

25 **Q. Prior to your current position, what other positions did you hold at ComEd?**

26 A. I was Vice President, Engineering and Projects, responsible for distribution engineering,  
27 capacity planning, reliability engineering, project management, facility relocation,  
28 vegetation management, and contractor management.

29 **Q. What was your previous work experience before joining ComEd?**

30 A. I served for nearly four years as Vice President, Outage and Project Management for  
31 Exelon Nuclear, where I was responsible for outage services and projects across Exelon  
32 Nuclear's 17 nuclear units. Before joining Exelon, I held a series of positions with  
33 increasing responsibility in General Electric's Nuclear Division, including Outage and  
34 Inspection Services, Business Planning and Development, and Mechanical Services.

35 **Q. What is your educational background?**

36 A. I have a Bachelor's degree in nuclear engineering from the University of Florida, and a  
37 Masters of Business Administration from Emory University.

38 **Q. Do you hold any professional designations?**

39 A. Yes. I am a professional electrical engineer licensed by the State of Alabama.

40 **II. Overview of the Metrics Plan**

41 **Q. Could you provide an overview of the Plan being submitted to the Commission?**

42 A. Yes. Under the provisions of subsection (f) of Section 16-108.5 of the Act, ComEd must  
43 develop and file multi-year performance metrics designed to achieve, ratably over a 10-  
44 year period, improvement over baseline values in various areas. Accordingly, the first  
45 part of ComEd's Plan sets forth annual performance goals for the relevant 10-year period  
46 for each of the following metrics: frequency of customer interruptions system-wide,  
47 duration of customer interruptions system-wide, frequency of customer interruptions in  
48 the Southern Region of ComEd's service territory, overall improvement in exceeding  
49 service reliability targets, reduction in issuance of estimated electric bills, reduction in  
50 consumption on inactive meters, reduction in non-technical line loss unaccounted for  
51 energy (*i.e.*, losses not related to distribution and transmission losses), reduction in  
52 uncollectible expense, and increased opportunities for minority-owned and women-  
53 owned business enterprises ("MWBE"). I further address the General Assembly's recent  
54 passage of House Bill 3036 ("HB 3036"), which would modify the metrics provisions of  
55 Section 16-108.5(f). Although HB 3036 has not yet become law, it may become  
56 effective shortly. Therefore, I also provide the information that would be called for if HB  
57 3036 becomes effective.

58 The Plan also describes the penalties that will be applied to ComEd in the event it  
59 fails to achieve an annual performance goal. These penalties are described in the direct  
60 testimony of ComEd witness Dr. Ross Hemphill, ComEd Ex. 2.0.

61 **Q. When will the 10-year period commence for purposes of measuring ComEd's**  
62 **performance under each metric?**

63 A. ComEd elects that the 10-year period for the metrics begin on January 1, 2013. However,  
64 in the event that HB 3036 becomes law, ComEd elects a start date of January 1, 2013 for  
65 the reliability- and MWBE-related metrics set forth in Section 16-108.5(f)(1) through (4)  
66 and (9) of HB 3036 based on the fact that ComEd will begin investing in its infrastructure  
67 investment program no later than January 1, 2012. With respect to those metrics  
68 dependent upon approval of ComEd's Advanced Metering Infrastructure Deployment  
69 Plan ("AMI Plan") set forth in Section 16-108.5(f)(5) through (8) of HB 3036, ComEd  
70 will make a filing with the Commission within 30 days of the Commission's order  
71 approving ComEd's AMI Plan, which filing will elect a start date for these metrics that is  
72 no later than 14 months following the Commission's entry of the order. This is described  
73 further by ComEd witness Dr. Ross Hemphill, ComEd Ex. 2.0.

74 **III. ComEd's Multi-Year Performance Metrics**

75 **A. Reliability-Related Metrics**

76 **Q. Could you provide an overview of the first category of metrics?**

77 A. Yes. The first set of metrics set forth in Section 16-108.5(f) of the Act relates to  
78 ComEd's provision of reliable electric service to its customers.

79 **Q. How do these metrics measure reliability?**

80 A. Under Section 16-108.5(f), two metrics measure reliability for ComEd's entire service  
81 territory and ComEd's Southern Region using the System Average Interruption  
82 Frequency Index ("SAIFI") (Section 16-108.5(f)(1) and (3)), which is defined by the

83 Illinois Administrative Code as “the average number of interruptions per customer during  
84 the year.” 83 Ill. Admin. Code 411.20. SAIFI is calculated for a given population in a  
85 given year by dividing the total number of customer interruptions for that population in  
86 that year by the total number of customers served during the year in that population. In  
87 the event HB 3036 becomes law, ComEd will be subject to a third SAIFI metric that  
88 measures reliability for ComEd’s Northeastern Region. *See* Section 16-108.5(f)(3.5) of  
89 HB 3036.

90 Section 16-108.5(f) also includes a metric that measures reliability system-wide  
91 using the Customer Average Interruption Duration Index (“CAIDI”) (Section 16-  
92 108.5(f)(2)), which is defined by the Illinois Administrative Code as “the average  
93 interruption duration for those customers who experience interruptions during the year.”  
94 83 Ill. Admin. Code 411.20. CAIDI is calculated by dividing the annual sum of all  
95 customer interruption durations by the total number of customer interruptions.

96 **Q. Do these reliability-related metrics take into account the impact of severe weather?**

97 A. Yes. Section 16-108.5(f) permits ComEd to exclude up to nine Extreme Weather Event  
98 Days from the calculation for each of the 10 years, and requires that ComEd exclude up  
99 to nine Extreme Weather Event Days when calculating each year of the baseline period to  
100 the extent there are nine such days in a given year that qualify as Extreme Weather Event  
101 Days. The statute defines an Extreme Weather Event Day as a 24-hour calendar day  
102 beginning at 12:00 a.m. and ending at 11:59 p.m. during which any weather event caused  
103 interruptions of electric delivery service for 10,000 or more of the participating utility’s  
104 customers for three or more hours. *See* 220 ILCS 5/16-108.5(f); ComEd Ex. 1.0,

105 Appendix 2. ComEd has excluded up to nine Extreme Weather Event Days from each  
106 year associated with the baseline calculations for these reliability-related metrics. *See*  
107 ComEd Ex. 1.0, Appendix 1. The same Extreme Weather Event Days shall be excluded  
108 when calculating each of the annual performance goals for the reliability-related metrics.  
109 However, the calculation for Southern Region SAIFI, and, if HB 3036 becomes law, the  
110 calculation for Northeastern Region SAIFI, excludes only those customer interruptions  
111 occurring in that particular region.

112 **1. System Average Interruption Frequency Index (Section**  
113 **16-108.5(f)(1)).**

114 **Q. What is the System SAIFI metric described in ComEd's Plan?**

115 A. This is the system-wide SAIFI ("System SAIFI") metric for ComEd's entire service area.  
116 Under this metric, ComEd will improve its System SAIFI performance by 20%, ratably  
117 over the 10-year period beginning on January 1, 2013.

118 **Q. How was the System SAIFI baseline value calculated?**

119 A. The System SAIFI baseline value is determined based on the average of the System  
120 SAIFI data reported to the Commission in ComEd's annual reports to the Commission  
121 for the years 2001 through 2010 after excluding up to nine Extreme Weather Event Days  
122 from each baseline year. Based on this calculation, the System SAIFI baseline value is  
123 0.998. ComEd Ex. 1.0 at 5.

124 **Q. What are the annual performance goals that ComEd is proposing in order to**  
125 **achieve the 10-year System SAIFI goal?**

126 A. In order to achieve a 20% improvement in System SAIFI over the baseline value of  
127 0.998, ComEd must reduce System SAIFI to 0.798 by the end of the 10-year period.  
128 Accordingly, the Plan proposes 10 annual performance goals designed to decrease  
129 System SAIFI by 0.020 each year, which will achieve the required reduction. Table 1  
130 sets forth these annual performance goals necessary for ComEd to achieve the overall  
131 goal ratably over 10 years. *Id.* ComEd will have achieved the annual goal if its  
132 performance during the relevant annual period is sufficient as of the end of the relevant  
133 annual period to have satisfied the specific goal for that annual period.

134 2. **Customer Average Interruption Duration Index (Section**  
135 **16-108.5(f)(2)).**

136 **Q. What is the Customer Average Interruption Duration Index metric described in**  
137 **ComEd's Plan?**

138 A. This is the system-wide CAIDI ("System CAIDI") metric for ComEd's entire service  
139 area. Under this metric, ComEd will improve its System CAIDI performance by 15%,  
140 ratably over the 10-year period beginning January 1, 2013.

141 **Q. How was the System CAIDI baseline value calculated?**

142 A. The System CAIDI baseline value is determined based on the average of the System  
143 CAIDI data reported to the Commission in ComEd's annual reports to the Commission  
144 for the years 2001 through 2010 after excluding up to nine Extreme Weather Event Days  
145 from each baseline year. Based on this calculation, the System CAIDI baseline value is  
146 92.9 minutes. ComEd Ex. 1.0 at 6.

147 **Q. What are the annual performance goals that ComEd is proposing in order to**  
148 **achieve the 10-year System CAIDI goal?**

149 A. In order to achieve a 15% improvement in System CAIDI over the baseline value of 92.9  
150 minutes, ComEd must decrease System CAIDI to 78.9 minutes by the end of the 10-year  
151 period. Accordingly, the Plan proposes 10 annual performance goals designed to  
152 decrease System CAIDI by 1.4 minutes each year, which will achieve the required  
153 reduction. Table 2 sets forth these annual performance goals necessary for ComEd to  
154 achieve the overall goal ratably over 10 years. *Id.* at 7. ComEd will have achieved the  
155 annual goal if its performance during the relevant annual period is sufficient as of the end  
156 of the relevant annual period to have satisfied the specific goal for that annual period.

157 **3. Region-Specific SAIFI metrics (Section 16-108.5(f)(3); Section**  
158 **16-108.5(f)(3.5) of HB 3036).**

159 **Q. Previously you identified a Southern Region SAIFI metric and, if HB 3036 becomes**  
160 **law, a Northeastern Region SAIFI metric. What is the Southern Region SAIFI**  
161 **metric described in ComEd's Plan?**

162 A. This is the SAIFI metric for ComEd's Southern Region. Under this metric, ComEd will  
163 improve its Southern Region SAIFI performance by 20%, ratably over the 10-year period  
164 beginning on January 1, 2013.

165 **Q. How was the Southern Region SAIFI baseline value calculated?**

166 A. The Southern Region SAIFI baseline value is determined based on the average of the  
167 Southern Region SAIFI data reported to the Commission in ComEd's annual reports to  
168 the Commission for the years 2001 through 2010 after excluding up to nine Extreme

169 Weather Event Days occurring in the Southern Region from each baseline year. Based  
170 on this calculation, the Southern Region SAIFI baseline value is 1.236. ComEd Ex. 1.0  
171 at 8.

172 **Q. What are the annual performance goals that ComEd is proposing in order to**  
173 **achieve the 10-year Southern Region SAIFI goal?**

174 A. In order to achieve a 20% improvement in Southern Region SAIFI over the baseline  
175 value of 1.236, ComEd must reduce Southern Region SAIFI to 0.986 by the end of the  
176 10-year period. Accordingly, the Plan proposes 10 annual performance goals designed to  
177 decrease Southern Region SAIFI by 0.025 each year, which will achieve the required  
178 reduction. Table 3 sets forth these annual performance goals necessary for ComEd to  
179 achieve the overall goal ratably over 10 years. *Id.* at 9. ComEd will have achieved the  
180 annual goal if its performance during the relevant annual period is sufficient as of the end  
181 of the relevant annual period to have satisfied the specific goal for that annual period.

182 **Q. With respect to the SAIFI metric related to ComEd's Northeastern Region, which**  
183 **would only apply if HB 3036 becomes law, can you please describe this metric?**

184 A. If HB 3036 becomes law, ComEd will improve its Northeastern Region SAIFI  
185 performance by 20%, ratably over the 10-year period beginning on January 1, 2013.

186 **Q. How was the Northeastern Region SAIFI baseline value calculated?**

187 A. The Northeastern Region SAIFI baseline value is determined based on the average of the  
188 Northeastern Region SAIFI data reported to the Commission in ComEd's annual reports  
189 to the Commission for the years 2001 through 2010 after excluding up to nine Extreme

190 Weather Event Days occurring in the Northeastern Region from each baseline year.  
191 Based on this calculation, the Northeastern Region SAIFI baseline value is 1.006. *Id.* at  
192 10.

193 **Q. What are the annual performance goals that ComEd is proposing in order to**  
194 **achieve the 10-year Northeastern Region SAIFI goal?**

195 A. ComEd proposes the following annual performance goals in the event that HB 3036  
196 becomes law and ComEd is subject to the Northeastern Region SAIFI metric. In order to  
197 achieve a 20% improvement in Northeastern Region SAIFI over the baseline value of  
198 1.006, ComEd must reduce Northeastern Region SAIFI to 0.806 by the end of the 10-  
199 year period. Accordingly, the Plan proposes 10 annual performance goals designed to  
200 decrease Northeastern Region SAIFI by 0.020 each year, which will achieve the required  
201 reduction. Table 4 sets forth these annual performance goals necessary for ComEd to  
202 achieve the overall goal ratably over 10 years. *Id.* at 11. ComEd will have achieved the  
203 annual goal if its performance during the relevant annual period is sufficient as of the end  
204 of the relevant annual period to have satisfied the specific goal for that annual period.

205 **B. Service Reliability Targets (Section 16-108.5(f)(4)).**

206 **Q. What is the service reliability targets metric described in ComEd's Plan?**

207 A. Section 16-108.5(f)(4) defines the service reliability targets consistent with those set forth  
208 in 83 Ill. Admin. Code 411.140(b)(4)(A)-(C). Under this metric, ComEd will reduce the  
209 total number of customers who exceed the maximum number of controllable interruption  
210 and maximum total interruption duration targets by 75%, ratably over the 10-year period  
211 beginning on January 1, 2013.

212 **Q. How was the service reliability targets baseline value established?**

213 A. The service reliability targets baseline value is the 2010 data reported to the Commission  
214 regarding performance under each of the targets. Based on this calculation, the baseline  
215 value is 407 customers. ComEd Ex. 1.0 at 13.

216 **Q. What are the annual performance goals that ComEd is proposing in order to**  
217 **achieve the 10-year service reliability targets goal?**

218 A. In order to achieve a 75% improvement in the service reliability targets over the baseline  
219 value of 407 customers, ComEd must reduce the total number of customers who exceed  
220 the service reliability targets to 97 customers by the end of the 10-year period.  
221 Accordingly, the Plan proposes 10 annual performance goals designed to reduce the total  
222 number of customers who exceed the service reliability targets by 31 customers each  
223 year, which will achieve the required reduction. Table 5 sets forth these annual  
224 performance goals necessary for ComEd to achieve the overall goal ratably over 10 years.  
225 *Id.* ComEd will have achieved the annual goal if its performance during the relevant  
226 annual period is sufficient as of the end of the relevant annual period to have satisfied the  
227 specific goal for that annual period.

228 **C. Customer Benefits Metrics**

229 **Q. Can you describe the next group of performance metrics?**

230 A. Yes. The next four metrics are designed to reduce ComEd's costs of providing electric  
231 service through achievement of reductions in: (i) issuance of estimated electric bills, (ii)  
232 consumption on inactive meters, (iii) unaccounted for energy, and (iv) uncollectible  
233 expense. Because the costs associated with these categories are recovered from

234 customers, achievement of these metrics will realize tangible customer benefits in the  
235 form of reduced costs of electric service.

236 **Q. Why are these performance metrics grouped together?**

237 A. Each of the performance goals for these four metrics is based on the assumption that  
238 ComEd may fully implement Smart Grid technology, including the full functionality of  
239 the technology and that there is no on-site notification requirement prior to disconnection.  
240 Accordingly, the annual performance goals associated with these four metrics are  
241 dependent on the Commission's approval of ComEd's AMI Plan pursuant to Section 16-  
242 108.6 of the Act and on the Commission declining to otherwise impose an on-site  
243 disconnection requirement.

244 **1. Estimated Electric Bills (Section 16-108.5(f)(5)).**

245 **Q. What is the Estimated Electric Bills metric described in ComEd's Plan?**

246 A. This metric is the reduction in issuance of estimated electric bills. Under this metric,  
247 ComEd will reduce the number of estimated electric bills by 90%, ratably over the 10-  
248 year period beginning on January 1, 2013, or, in the event that HB 3036 becomes law,  
249 beginning on a date within 14 months after the Commission approves ComEd's AMI  
250 Plan.

251 **Q. What is an estimated electric bill?**

252 A. ComEd renders an estimated electric bill when a meter on an account was not read for the  
253 applicable monthly billing period. To reflect that the bill is estimated, the word  
254 "estimate" is plainly stated on the face of each such bill.

255 **Q. How was the baseline value for estimated electric bills calculated?**

256 A. The estimated electric bills baseline value is the average number of estimated electric  
257 bills issued for the years 2008 through 2010. Based on this calculation, the baseline  
258 value is 7,067,947 estimated electric bills. ComEd Ex. 1.0 at 15.

259

260

261 **Q. What are the annual performance goals that ComEd is proposing in order to**  
262 **achieve the 10-year estimated electric bills goal?**

263 A. In order to achieve a 90% improvement in estimated electric bills over the baseline value  
264 of 7,067,947, ComEd must decrease the number of estimated electric bills issued to  
265 706,787 by the end of the 10-year period. Accordingly, the Plan proposes 10 annual  
266 performance goals designed to decrease estimated electric bills by 636,116 each year,  
267 which will achieve the required reduction. Table 6 sets forth these annual performance  
268 goals necessary for ComEd to achieve the overall goal ratably over 10 years. *Id.* at 16.  
269 ComEd will have achieved the annual goal if its performance during the relevant annual  
270 period is sufficient as of the end of the relevant annual period to have satisfied the  
271 specific goal for that annual period.

272 **2. Consumption on Inactive Meters (Section 16-108.5(f)(6)).**

273 **Q. What is the consumption on inactive meters metric described in ComEd's Plan?**

274 A. This metric is the reduction of consumption on inactive meters. Under this metric,  
275 ComEd will reduce consumption on inactive meters by 90%, ratably over the 10-year  
276 period beginning on January 1, 2013, or, in the event that HB 3036 becomes law,

277 beginning on a date within 14 months after the Commission approves ComEd's AMI  
278 Plan.

279 **Q. What is consumption on inactive meters?**

280 A. Consumption on inactive meters occurs when metered electricity has no customer of  
281 record to bill for usage. As a result, the costs for the electricity are recovered from all  
282 ComEd customers receiving service under ComEd's Rate BES – Basic Electric Service,  
283 rather than from the individual retail customer that is responsible for such usage.  
284 Consumption on inactive meters generally occurs when the customer of record finalizes the  
285 account and there is no immediate successor customer that contacts ComEd to set up new  
286 service. ComEd tracks the total monthly kilowatthours ("kWh") of electricity  
287 categorized as consumption on inactive meters by way of the regular monthly meter reads  
288 and retains such information even though a bill is not generated.

289 **Q. How was the baseline value for consumption on inactive meters calculated?**

290 A. The consumption on inactive meters baseline value is the average consumption on  
291 inactive meters for the years 2009 and 2010. Based on this calculation, the baseline value  
292 is 516,405,909 kWh. ComEd Ex. 1.0 at 17.

293 **Q. What are the annual performance goals that ComEd is proposing in order to  
294 achieve the 10-year consumption on inactive meters goal?**

295 A. In order to achieve a 90% improvement in the consumption on inactive meters over the  
296 baseline value of 516,405,909, ComEd must reduce consumption on inactive meters to  
297 51,640,589 kWh by the end of the 10-year period. Accordingly, the Plan proposes 10

298 annual performance goals designed to decrease consumption on inactive meters by  
299 46,476,532 kWh each year, which will achieve the required reduction. Table 7 sets forth  
300 these annual performance goals necessary for ComEd to achieve the overall goal ratably  
301 over 10 years. *Id.* ComEd will have achieved the annual goal if its performance during  
302 the relevant annual period is sufficient as of the end of the relevant annual period to have  
303 satisfied the specific goal for that annual period.

304 **3. Unaccounted For Energy (Section 16-108.5(f)(7)).**

305 **Q. What is the unaccounted for energy metric described in ComEd's Plan?**

306 A. This metric is the reduction of non-technical line loss unaccounted for energy (*i.e.*, losses  
307 not related to distribution and transmission losses). Under this metric, ComEd will  
308 reduce unaccounted for energy by 50%, ratably over the 10-year period beginning on  
309 January 1, 2013, or, in the event that HB 3036 becomes law, beginning on a date within  
310 14 months after the Commission approves ComEd's AMI Plan.

311 **Q. What is unaccounted for energy?**

312 A. Unaccounted for energy is unmetered electricity that is not billed to an individual retail  
313 customer, such as when theft of service occurs. As a result, the costs of the unmetered  
314 electricity are recovered from all ComEd customers, rather than from the individual retail  
315 customer that is responsible for such usage.

316 **Q. How was the baseline value for unaccounted for energy calculated?**

317 A. The unaccounted for energy baseline value is the unaccounted for energy for the year  
318 2009, or 881,969,000 kWh. ComEd Ex. 1.0 at 18.

319 **Q. What are the annual performance goals that ComEd is proposing in order to**  
320 **achieve the 10-year unaccounted for energy goal?**

321 A. In order to achieve a 50% improvement in unaccounted for energy over the baseline  
322 value of 881,969,000 kWh, ComEd must reduce unaccounted for energy to 440,984,500  
323 kWh by the end of the 10-year period. Accordingly, the Plan proposes 10 annual  
324 performance goals designed to decrease unaccounted for energy by 44,098,450 kWh each  
325 year, which will achieve the required reduction. Table 8 sets forth these annual  
326 performance goals necessary for ComEd to achieve the overall goal ratably over 10 years.  
327 *Id.* at 19. ComEd will have achieved the annual goal if its performance during the  
328 relevant annual period is sufficient as of the end of the relevant annual period to have  
329 satisfied the specific goal for that annual period.

330 **4. Uncollectible Expense (Section 16-108.5(f)(8)).**

331 **Q. What is the uncollectible expense metric described in ComEd's Plan?**

332 A. This metric is the reduction in uncollectible expense. Under this metric, ComEd will  
333 reduce its uncollectible expense by \$30,000,000, ratably over the 10-year period  
334 beginning on January 1, 2013, or, in the event that HB 3036 becomes law, beginning on a  
335 date within 14 months after the Commission approves ComEd's AMI Plan.

336 **Q. What is uncollectible expense?**

337 A. Uncollectible expense is the amount of expense associated with bad debt that ComEd  
338 records in its Federal Energy Regulatory Form 1 ("FERC Form 1") Account 904.

339

340 **Q. How was the baseline value for uncollectible expense calculated?**

341 A. The uncollectible expense baseline value is the average uncollectible expense set forth in  
342 Account 904 in ComEd's 2008 through 2010 FERC Form 1 submittals. Based on this  
343 calculation, the baseline value is \$67,637,205. ComEd Ex. 1.0 at 20.

344 **Q. What are the annual performance goals that ComEd is proposing in order to**  
345 **achieve the 10-year Uncollectible Expense goal?**

346 A. In order to achieve a \$30,000,000 improvement in uncollectible expense over the baseline  
347 value of \$67,637,205, ComEd must reduce uncollectible expense to \$37,637,205 by the  
348 end of the 10-year period. Accordingly, the Plan proposes 10 annual performance goals  
349 designed to decrease uncollectible expense by \$3,000,000 each year, which will achieve  
350 the required reduction. Table 9 sets forth these annual performance goals necessary for  
351 ComEd to achieve the overall goal ratably over 10 years. *Id.* ComEd will have achieved  
352 the annual goal if its performance during the relevant annual period is sufficient as of the  
353 end of the relevant annual period to have satisfied the specific goal for that annual period.

354 **D. Opportunities for Minority-Owned and Women-Owned Business Enterprises**  
355 **(Section 16-108.5(f)(9)).**

356 **Q. What is the opportunities for minority-owned and women-owned business**  
357 **enterprises metric described in ComEd's Plan?**

358 A. This metric requires ComEd to design a performance metric regarding the creation of  
359 opportunities for minority-owned and women-owned business enterprises ("MWBE")  
360 consistent with State and federal law.

361

362 **Q. For purposes of this metric, how does ComEd define MWBE?**

363 A. MWBE refers to a minority-owned or women-owned business that is a for-profit  
364 enterprise, regardless of size, physically located in the United States or its trust territories,  
365 which is owned, operated and controlled by minority group members or women.

366 **Q. For purposes of this metric, who does ComEd consider to be a “minority group  
367 member”?**

368 A. A “minority group member” refers to an individual that is Asian, Black, Hispanic, or  
369 Native American.

370 **Q. What constitutes ownership and control of an MWBE for purposes of this metric?**

371 A. For a business to be owned by minority group members or women, the business must be  
372 at least 51% owned by such individuals; in the case of a publicly-owned business, at least  
373 51% of the stock of the company must be owned by one or more such individuals.

374 **Q. Could you describe the metric that ComEd has designed to create opportunities for  
375 MWBE?**

376 A. Yes. Under this performance metric, ComEd has elected to increase its capital  
377 expenditures paid to MWBE by 15% over a 10-year period beginning on January 1, 2013.

378 **Q. How was the baseline value for MWBE capital expenditures calculated?**

379 A. The MWBE baseline value is ComEd’s capital expenditures paid to MWBE in 2010, or  
380 \$65,000,000. ComEd Ex. 1.0 at 22.

381 **Q. What are the annual performance goals that ComEd is proposing in order to**  
382 **achieve the 10-year MWBE goal?**

383 A. In order to achieve a 15% improvement in MWBE capital expenditures over the baseline  
384 value of \$65,000,000, ComEd must increase MWBE capital expenditures to \$74,750,000  
385 by the end of the 10-year period. Accordingly, the Plan proposes 10 annual performance  
386 goals designed to increase MWBE capital expenditures by \$975,000 each year, which  
387 will achieve the proposed increase. Table 10 sets forth these annual performance goals  
388 necessary for ComEd to achieve the overall goal ratably over 10 years. *Id.* ComEd will  
389 have achieved the annual goal if its performance during the relevant annual period is  
390 sufficient as of the end of the relevant annual period to have satisfied the specific goal for  
391 that annual period.

392 **IV. Conclusion**

393 **Q. Does this conclude your direct testimony?**

394 A. Yes.