

# **Smart Grid Advanced Metering Annual Implementation Progress Report**

## **ATTACHMENT 1**

## Metrics and Milestones

### Metric: 6C Continued

**Metric Description:** Number of customers who have accessed the web-based portal as of the last day of the calendar year as a percentage of customers with AMI Meters and as a percentage of ComEd customers in that delivery class.

Number of Accounts with AMI Meters by Delivery Class			
Delivery Class	# of Accounts with AMI Meters Viewed Web Portal	# of Accounts With AMI Meters	Viewed Web Portal as % of # of Accounts With AMI Meters
Single Family W/O Elec. Space Heat	2112	108,338	2.0%
Multi Family W/O Elec. Space Heat	864	64,944	1.3%
Single Family With Elec. Space Heat	18	426	4.3%
Multi Family With Elec. Space Heat	130	5,785	2.3%

Number of Accounts by Delivery Class			
Delivery Class	# of Accounts Viewed Web Portal	# of Accounts in Class	Viewed Web Portal as % of # of Accounts in Class
Single Family W/O Elec. Space Heat	25,130	2,242,727	1.1%
Multi Family W/O Elec. Space Heat	11,985	1,060,060	1.1%
Single Family With Elec. Space Heat	688	35,105	2.0%
Multi Family With Elec. Space Heat	3,003	161,366	1.9%

### Metric: 6D Continued

**Metric Description:** Number of customers who can directly access their usage data as of the last day of the calendar year as a percentage of customers with AMI Meters and as a percentage of ComEd customers in that delivery class.

<b>Number of Accounts with AMI Meters by Delivery Class</b>			
<b>Delivery Class</b>	<b># of Accounts with AMI Meters and Can Directly Access Usage Data(1)</b>	<b># of Accounts with AMI Meters</b>	<b>Accounts Can Directly Access Usage Data as % of # Accounts with AMI Meters(2)</b>
Single Family W/O Elec. Space Heat	17,678	108,338	16.3%
Multi Family W/O Elec. Space Heat	13,543	64,944	20.9%
Single Family With Elec. Space Heat	96	426	22.6%
Multi Family With Elec. Space Heat	1,050	5,785	18.1%
Watt-Hour	163	4,050	4.0%
Small Load	302	4,745	6.3%
Medium Load	17	309	5.5%
Large Load	3	59	5.1%
Very Large Load	1	17	5.9%
Extra Large Load	-	-	na
High Voltage	-	-	na
Railroad	-	-	na
Fixture-Included Lighting	-	-	na
Dusk to Dawn Lighting	-	38	0.0%
General Lighting	-	9	0.0%

<b>Number of Accounts by Delivery Class</b>			
<b>Delivery Class</b>	<b># of Accounts Can Directly Access Usage Data(1)</b>	<b># of Accounts in Class</b>	<b>Accounts Can Directly Access Usage Data as % # of Accounts in Class(2)</b>
Single Family W/O Elec. Space Heat	334,889	2,242,727	15.0%
Multi Family W/O Elec. Space Heat	225,479	1,060,060	21.3%
Single Family With Elec. Space Heat	5,398	35,105	15.4%
Multi Family With Elec. Space Heat	33,743	161,366	20.9%
Watt-Hour	3,225	90,334	3.6%
Small Load	16,053	253,968	6.3%
Medium Load	1,036	17,106	6.1%
Large Load	138	4,130	3.4%
Very Large Load	53	1,821	2.9%
Extra Large Load	1	47	2.1%
High Voltage	-	75	0.0%

Railroad	-	14	0.0%
Fixture-Included Lighting	27	2,127	1.3%
Dusk to Dawn Lighting	124	4,981	2.5%
General Lighting	22	1,538	1.4%

Notes:

(1) These are numbers of accounts that created an account in ComEd.com in 2013.

(2) Although only these percentages of accounts created an account in ComEd.Com and have direct access to usage data, all accounts can directly access usage data by creating an account in ComEd.com.

**Metric: 9**

**Metric Description:** Reduction in Greenhouse Gas Emissions enabled by smart grid.

ComEd will work with CUB and EDF to develop a full and practical measure of Greenhouse Gas (GHG) Emission reductions as enabled by smart grid investments, by exploring the capability of calculating

GHG emissions reductions realized through items such as the following:

- A. Energy Efficiency and conservation
- B. Peak load reductions and a flatter load curve
- C. A more predictable load profile
- D. Customer Demand-side management and Demand Response
- E. Increased penetration of clean distributed energy resources
- F. Enabling the integration of clean, renewable generation sources
- G. Reduced technical electricity losses

For 2013 reporting, ComEd will compare the 2013 vehicle emissions to the average of the 2007-2009 vehicle GHG emissions for the meter reading vehicles in the Maywood Operating Area due to Smart Meters being deployed in that operating center in 2010. GHG emissions will be calculated by measuring fuel consumption and converting into fuel emissions via the Climate Registry emission factor.

Below is the reduced vehicle emissions data, as well as the supporting documentation that illustrates how ComEd derived the data for 2013.

Meter Reading Vehicles - Maywood		
Years	Annual Fuel Gallons	MTC02E*
2007	6985.6	62.37
2008	8092.7	72.25
2009	8644.2	77.18
3 year average	7907.51	70.60
Years	Annual Fuel Gallons	MTC02E
2010	5896.7	52.65
2012	3776.0	33.71
2013	5052.63	45.11
	Gallons	MTC02E
Delta from 2007-09 Ave to 2013 usage	2854.88	25.49

\*Note: MTC02E = Metric Tons of Carbon Dioxide Equivalent

Supporting Information: The following provides additional information on how the calculation was achieved:

*Step 1:* Obtained meter reader fuel gallons for the applicable years for the Maywood Operating Center. The meters were deployed in 2010, so the average of the fuel gallons used for three years prior (2007-2009) were used for the comparison against the baseline year (2012) data.

04498 - Maywood Meter Reading	2007	2008	2009	2010	2011	2012	2013
Vehicle Count	25	24	30	26	23	20	14
Miles Driven	125,209	141,452	197,591	145,847	113,582	106,338	56,568
Fuel Gallons	6,986	8,093	8,644	5,897	4,216	3,776	2,526
Drivers (Readers and Supervisor)	29	31	25	25	19	12	

04498 - Maywood Meter Reading	2007	2008	2009	2010	2011	2012	2013
ComEd Vehicle Count	25	24	30	26	23	20	14
ComEd Miles Driven	125,209	141,452	197,591	145,847	113,582	106,338	56,568
Personal Vehicles Miles Driven	-	-	-	-	-	-	68,219
Total Miles	125,209	141,452	197,591	145,847	113,582	106,338	124,787

ComEd Fuel Gallons	6,986	8,093	8,644	5,897	4,216	3,776	2,526
*Personal Vehicles Fuel Gallons	-	-	-	-	-	-	2,527
Total Fuel Gallons	6,986	8,093	8,644	5,897	4,216	3,776	5,053

AVERAGE MPG source: U.S. Department of Energy 2013 fuel economy: 27 MPG (city driving)

<https://www.fueleconomy.gov/feg/pdfs/guides/FEG2013.pdf>

\*Maywood has meter readers driving personal vehicles, estimated mileage for personal vehicles is included in 2013 miles

*Step 2:* Use the Climate Registry emission factor to convert fuel gallons into MTC02E

GHG Conversion Factors		
Fuel	Comparable Metric	Conversion Factor
Unleaded	Gallons	19.687
Gas	Pounds to metric tons	2,205.000

*Step 3:* Subtract 2013 vehicle emissions from the average vehicle emissions from 2007, 2008, and 2009 to obtain the reduction in greenhouse gas emissions enabled by Smart Grid for the Maywood Operating Center, which is 48.05 MTC02E.

Meter Reading Vehicles - Maywood		
Years	Annual Fuel Gallons	MTC02E
2007	6985.6	62.37
2008	8092.7	72.25
2009	8644.2	77.18
3 year average	7907.51	70.60
Years	Annual Fuel Gallons	MTC02E
2010	5896.7	52.65
2012	3776.0	33.71
2013	5052.63	45.11
	Gallons	MTC02E
Delta from 2007-09 Ave to 2013 usage	2854.88	25.49

**Metric: 13**

**Overview of US Utility Customer Programs Enabled by Smart Grids**

While the market for customer applications enabled by AMI systems is growing rapidly, it still largely remains at the beginning of the technology adoption lifecycle. This document reviews the progress in AMI-enabled customer application industry, and highlights examples of how utilities across the US are employing emerging technologies to improve the experience they provide their customers.

**Web Presentment of Interval Usage**

One of the most promising areas of growth in this industry is work utilities have done to enable customers to view their hourly (or sub-hourly) electricity consumption through web portals. A leading vendor in this space, OPOWER, has enabled interval presentment for AMI customers at utilities across the U.S., including Consumers Energy, National Grid, Xcel Energy, and Exelon Utilities ComEd and BGE. Other leading vendors in the web present space include Aclara, Tendril, and C3. As AMI system upgrades continue throughout the US, it is likely that utilities will continue to enable web presentment of interval usage shortly after the AMI hardware is deployed.

### **Dynamic Rates**

AMI system upgrades also enable a wider range of dynamic rate structures to be implemented by utilities and Retail Electric Suppliers (RESs). These dynamic rates offer customers the ability to shift electricity consumption to lower system demand periods, and thus to save money on their bill, help relieve T&D system congestion, and lower emissions from power generation. The most prevalent types of dynamic rates include Time of Use rates that have variable tiers of pricing depending on the time of day and day of week. Utilities have rolled out many varieties of these rates in order to incentivize off-peak consumption, including PG&E, SCE, and WE Energies offering two-tier programs, and TXU Energy's "free nights" or "free weekends" rate plans offered to customers in Texas.

Other utilities have piloted and launched a number of other dynamic rates. For example, Critical Peak Pricing (CPP) programs have been offered in to reduce pressure on reserve margins on high demand days. Utilities such as San Diego Gas & Electric offer CPP rates to their customers. In addition to CPP rates, some utilities – such as NV Energy - have started offering off-peak charging rates for Electric Vehicle (EV) owners.

### **Home Area Network Technologies**

Another major area of development in customer applications enabled by the smart grid includes "smart home" technologies also referred to as HAN technologies. Collectively, this suite of technologies promises to help customers gain insight into and control over appliances throughout their house in order to operate them more efficiently and cost effectively. One of the most popular pieces of technology is the Nest Labs PCT. The Nest PCT touts a "smart" demand response capability called "Rush Hour Rewards," which Austin Energy recently piloted. Other advances include DLC switches that operate off of the AMI network, such as the Cooper Power Systems LCR-6600-S. Additionally, AMI systems are offering new opportunities for "smart" appliances from manufacturers such as Whirlpool that help customers optimize energy consumption.

**Metric: 16 A Continued**

**Metric Description:** ComEd's response time to a distributed resource project application, and time from receipt of application until energy flows from project to grid (distribution.)

Site ID	Date Application Received	Initial Prime Mover	Date Complete Application Received (1)	Date Commissioned (2)	Duration (3)
795	12/18/2013	Photovoltaic	12/18/2013	12/2/2013	-16
794	12/5/2013	Photovoltaic	12/18/2013	12/21/2013	3
784	11/22/2013	Photovoltaic	11/26/2013	11/25/2013	-1
783	11/22/2013	Photovoltaic	11/26/2013	11/25/2013	-1
773	11/4/2013	Photovoltaic	11/18/2013	12/30/2013	42
767	11/4/2013	Photovoltaic	11/4/2013	12/4/2013	30
765	10/2/2013	Photovoltaic	10/29/2013	11/22/2013	24
764	10/2/2013	Photovoltaic	10/29/2013	11/22/2013	24
762	10/2/2013	Photovoltaic	10/29/2013	11/22/2013	24
761	10/25/2013	Photovoltaic	10/29/2013	11/22/2013	24
760	10/21/2013	Photovoltaic	10/21/2013	12/30/2013	70
759	10/21/2013	Photovoltaic	10/23/2013	12/30/2013	68
757	10/11/2013	Photovoltaic	10/11/2013	10/15/2013	4
755	10/8/2013	Photovoltaic	10/18/2013	10/21/2013	3
751	9/11/2013	Photovoltaic	10/30/2013	10/31/2013	1
749	10/1/2013	Photovoltaic	10/2/2013	10/1/2013	-1
748	10/1/2013	Photovoltaic	10/1/2013	10/25/2013	24
747	10/1/2013	Photovoltaic	10/1/2013	10/11/2013	10
746	9/30/2013	Photovoltaic	9/30/2013	12/13/2013	74
743	9/24/2013	Photovoltaic	9/24/2013	9/14/2013	-10
742	9/24/2013	Photovoltaic	10/25/2013	9/27/2013	-28
740	9/5/2013	Photovoltaic	9/5/2013	9/15/2013	10
739	8/22/2013	Photovoltaic	8/29/2013	9/1/2013	3
737	8/23/2013	Photovoltaic	8/27/2013	8/23/2013	-4
735	8/14/2013	Photovoltaic	8/20/2013	9/6/2013	17
728	8/9/2013	Photovoltaic	8/12/2013	8/30/2013	18
727	7/29/2013	Photovoltaic	8/1/2013	8/1/2013	0
726	7/25/2013	Photovoltaic	7/25/2013	8/16/2013	22
722	7/25/2013	Photovoltaic	8/9/2013	8/16/2013	7
721	7/25/2013	Photovoltaic	8/9/2013	8/16/2013	7
720	7/25/2013	Photovoltaic	8/9/2013	8/16/2013	7
719	7/25/2013	Photovoltaic	8/9/2013	8/9/2013	0
717	7/19/2013	Photovoltaic	7/22/2013	8/5/2013	14
715	7/8/2013	Photovoltaic	7/9/2013	8/2/2013	24
714	6/23/2013	Photovoltaic	7/23/2013	7/1/2013	-22
712	7/1/2013	Photovoltaic	7/9/2013	7/20/2013	11
711	6/28/2013	Photovoltaic	6/28/2013	12/30/2013	185



709	6/27/2013	Photovoltaic	6/27/2013	7/12/2013	15
707	6/26/2013	Photovoltaic	6/26/2013	12/30/2013	187
705	6/25/2013	Photovoltaic	6/26/2013	12/31/2013	188
704	6/25/2013	Photovoltaic	6/26/2013	12/27/2013	184
702	6/24/2013	Photovoltaic	7/9/2013	7/5/2013	-4
701	6/6/2013	Photovoltaic	7/24/2013	7/11/2013	-13
700	6/18/2013	Photovoltaic	6/19/2013	7/19/2013	30
699	6/17/2013	Photovoltaic	6/18/2013	7/5/2013	17
698	6/6/2013	Photovoltaic	6/7/2013	6/28/2013	21
697	6/3/2013	Photovoltaic	6/3/2013	6/13/2013	10
696	5/24/2013	Photovoltaic	6/21/2013	6/14/2013	-7
695	5/24/2013	Photovoltaic	5/30/2013	6/14/2013	15
694	5/22/2013	Photovoltaic	5/30/2013	6/20/2013	21
691	5/22/2013	Photovoltaic	5/30/2013	6/26/2013	27
690	5/21/2013	Photovoltaic	5/21/2013	5/31/2013	10
689	5/13/2013	Photovoltaic	5/14/2013	6/3/2013	20
688	5/10/2013	Photovoltaic	5/14/2013	6/17/2013	34
687	5/13/2013	Photovoltaic	5/14/2013	6/28/2013	45
684	4/29/2013	Photovoltaic	5/2/2013	6/14/2013	43
683	5/1/2013	Photovoltaic	5/2/2013	5/24/2013	22
682	5/2/2013	Photovoltaic	5/3/2013	5/9/2013	6
681	3/29/2013	Photovoltaic	4/11/2013	5/3/2013	22
679	3/27/2013	Photovoltaic	7/16/2013	5/31/2013	-46
678	4/10/2013	Photovoltaic	4/12/2013	5/3/2013	21
677	4/4/2013	Photovoltaic	4/8/2013	5/24/2013	46
676	4/8/2013	Photovoltaic	4/8/2013	5/3/2013	25
675	2/27/2013	Photovoltaic	5/28/2013	7/24/2013	57
674	3/26/2013	Photovoltaic	3/26/2013	5/31/2013	66
673	3/26/2013	Photovoltaic	3/26/2013	9/30/2013	188
672	3/26/2013	Photovoltaic	3/26/2013	6/30/2013	96
670	3/27/2013	Photovoltaic	3/29/2013	6/25/2013	88
669	3/28/2013	Photovoltaic	3/28/2013	5/1/2013	34
668	3/27/2013	Photovoltaic	3/29/2013	5/31/2013	63
666	3/18/2013	Photovoltaic	3/20/2013	4/10/2013	21
665	3/19/2013	Photovoltaic	4/8/2013	4/17/2013	9
664	3/19/2013	Photovoltaic	4/8/2013	4/12/2013	4
663	3/19/2013	Photovoltaic	3/19/2013	4/5/2013	17
660	3/6/2013	Photovoltaic	3/14/2013	4/5/2013	22
651	2/22/2013	Photovoltaic	2/27/2013	4/9/2013	41
649	2/22/2013	Photovoltaic	2/26/2013	5/2/2013	65
648	2/14/2013	Photovoltaic	2/20/2013	5/7/2013	76
647	2/13/2013	Photovoltaic	3/7/2013	3/8/2013	1
646	2/18/2013	Solar/Wind	4/11/2013	9/2/2013	144
645	2/5/2013	Photovoltaic	2/13/2013	1/14/2013	-30

643	2/13/2013	Photovoltaic	2/13/2013	3/29/2013	44
642	2/21/2013	Photovoltaic	2/21/2013	3/15/2013	22
641	2/12/2013	Photovoltaic	2/27/2013	4/24/2013	56
639	1/24/2013	Photovoltaic	2/4/2013	12/13/2013	312
638	1/19/2013	Photovoltaic	1/30/2013	2/22/2013	23
637	1/28/2013	Photovoltaic	1/30/2013	2/8/2013	9
636	1/24/2013	Photovoltaic	1/24/2013	2/1/2013	8
633	12/27/2012	Photovoltaic	1/9/2013	2/19/2013	41
631	1/3/2013	Photovoltaic	1/7/2013	1/25/2013	18
630	12/27/2012	Photovoltaic	12/28/2012	1/16/2013	19
629	12/21/2012	Photovoltaic	1/17/2013	1/12/2013	-5
628	12/20/2012	Photovoltaic	1/28/2013	7/23/2013	176
626	12/13/2012	Photovoltaic	12/28/2012	2/5/2013	39
620	12/11/2012	Photovoltaic	12/13/2012	1/1/2013	19
608	11/14/2012	Photovoltaic	11/14/2012	3/28/2013	134
606	11/14/2012	Photovoltaic	11/15/2012	2/28/2013	105
600	3/27/2013	Photovoltaic	3/27/2013	5/3/2013	37
595	9/19/2012	Photovoltaic	10/30/2012	2/26/2013	119
581	10/25/2012	Photovoltaic	10/25/2012	2/3/2013	101
538	7/30/2012	Photovoltaic	7/30/2012	1/16/2013	170
536	7/17/2012	Photovoltaic	7/30/2012	1/28/2013	182
509	5/10/2012	Photovoltaic	5/10/2012	1/29/2013	264
256	9/10/2013	Photovoltaic	9/10/2013	12/15/2013	96
			Average Days w/Negative #s		43.82
			Average Days w/out Negative #s		59.00

Note 1 - Date complete application sent to engineering

Note 2 - Date on Appendix B returned to ComEd (site commissioned)

Note 3 - Duration, in days, from complete application to generation of energy

Negative #s - Application submitted after start of construction and/or Appendix B submitted long after project done

**Metric: 22**

**Metric Description:** Bill impacts associated with the costs for implementation of ComEd’s AMI Plan for low, average, and higher usage level customers pursuant to approved rates and surcharges. The usage level calculations will be values for a “typical” customer at the 25th, 50th, and 75th percentile of total usage for each applicable delivery service class.

Change from January 2013 to January 2014 for Typical Customer			
Customer Class or Type	Monthly	Annual	Percent
Single Family Residential Without Electric Space Heat	(\$11.46)	(\$137.57)	-11.67%

Multi-Family Residential Without Electric Space Heat	(\$4.25)	(\$51.00)	-8.51%
Single Family Residential With Electric Space Heat	(\$11.10)	(\$133.22)	-6.70%
Multi-Family Residential With Electric Space Heat	(\$2.67)	(\$32.10)	-3.29%
Non-Residential Watt hour	(\$2.64)	(\$31.63)	-4.55%
Non-Residential Small Load (0-100 kW)	(\$58.47)	(\$701.67)	-13.82%

Change from January 2013 to January 2014 at Percentile (Low/Median/High Usage)				
Customer Class or Type	Percentile	Monthly	Annual	Percent
Single Family Residential Without Electric Space Heat (low usage)	25%	(\$5.70)	(\$68.43)	- 8.68%
Single Family Residential Without Electric Space Heat (median usage)	50%	(\$9.62)	(\$115.41)	- 10.91%
Single Family Residential Without Electric Space Heat (high usage)	75%	(\$14.73)	(\$176.80)	- 12.58%
Multi-Family Residential Without Electric Space Heat (low usage)	25%	(\$1.46)	(\$17.51)	- 4.60%
Multi-Family Residential Without Electric Space Heat (median usage)	50%	(\$3.26)	(\$39.17)	- 7.47%
Multi-Family Residential Without Electric Space Heat (high usage)	75%	(\$5.79)	(\$69.51)	- 9.59%
Single Family Residential With Electric Space Heat (low usage)	25%	(\$6.12)	(\$73.41)	- 5.58%
Single Family Residential With Electric Space Heat (median usage)	50%	(\$10.00)	(\$119.95)	- 6.50%
Single Family Residential With Electric Space Heat (high usage)	75%	(\$14.30)	(\$171.56)	- 7.10%
Multi-Family Residential With Electric Space Heat (low usage)	25%	(\$0.69)	(\$8.32)	- 1.32%
Multi-Family Residential With Electric Space Heat (median usage)	50%	(\$2.19)	(\$26.32)	- 2.96%
Multi-Family Residential With Electric Space Heat (high usage)	75%	(\$3.98)	(\$47.75)	- 3.97%
Nonresidential Watt hour (low usage)	25%	\$0.21	\$2.51	0.64%
Nonresidential Watt hour (median usage)	50%	(\$2.33)	(\$27.97)	- 4.24%
Nonresidential Watt hour (high usage)	75%	(\$3.87)	(\$46.43)	- 5.64%
Nonresidential Small Load (0-100 kW) (low usage)	25%	(\$5.82)	(\$69.83)	- 5.24%
Nonresidential Small Load (0-100 kW) (median usage)	50%	(\$22.30)	(\$267.63)	- 10.28%
Nonresidential Small Load (0-100 kW) (high usage)	75%	(\$66.12)	(\$793.40)	- 13.56%

**Metric: 23**

**Metric Description:** Number of customers that have created and viewed an account on ComEd.com – by usage levels, customer class, and low income customers. An account on ComEd.com is necessary for viewing the web portal.

Number of Accounts by Delivery Class	
Delivery Class	Total Number of Accounts
Single Family W/O Elec. Space Heat	334,889
Multi Family W/O Elec. Space Heat	225,479
Single Family With Elec. Space Heat	5,398
Multi Family With Elec. Space Heat	33,743
Watt-Hour	3,225
Small Load	16,053
Medium Load	1,036
Large Load	139
Very Large Load	53
Extra Large Load	1
High Voltage	-
Railroad	-
Fixture-Included Lighting	27
Dusk to Dawn Lighting	124
General Lighting	22

Number of Accounts by Usage Level for Residential, Watt-hour, and Small Load Delivery Classes						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family w/o Elec. Space Heat	334,889	47,923	60,767	70,070	78,284	77,836
Multi Family w/o Elec. Space Heat	225,479	21,903	25,993	30,855	36,562	110,166
Single Family With Elec. Space Heat	5,398	884	1,037	1,051	1,128	1,298
Multi Family With Elec. Space Heat	33,743	3,627	4,267	5,011	5,099	15,739
Watt-Hour	3,225	692	875	298	703	657
Small Load	16,053	3,049	2,692	2,813	4,146	3,353
Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family Without Space Heat	18,960	4,067	4,688	4,546	3,958	1,701
Multi Family Without Space Heat	12,235	1,565	2,238	2,812	3,876	1,744
Single Family With Space Heat	293	46	68	71	58	50
Multi Family With Space Heat	2,092	319	392	493	578	310

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family Without Space Heat	1,503	96	241	399	568	199
Multi Family Without Space Heat	676	24	74	144	290	144
Single Family With Space Heat	32	1	8	5	12	6
Multi Family With Space Heat	136	3	15	36	55	27

**Metric: 24**

**Metric Description:** Number of customers with ComEd.com accounts that have viewed the web portal - by usage levels, customer class, and low income customers.

Number of Accounts by Usage Level for Residential Delivery Classes						
Number of Accounts by Usage Level						
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	25,130	3,397	4,786	5,647	7,868	3,432
Multi Family W/O Elec. Space Heat	11,985	908	1,444	1,909	2,618	5,106
Single Family With Elec. Space Heat	688	88	148	153	192	107
Multi Family With Elec. Space Heat	3,003	260	397	530	627	1,189

Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)						
Number of Accounts by Usage Level						
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	1,209	218	285	293	330	83
Multi Family W/O Elec. Space Heat	564	39	91	137	137	70
Single Family With Elec. Space Heat	34	6	4	6	6	6
Multi Family With Elec. Space Heat	149	18	26	33	33	21

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)						
Delivery Class	Total	Number of Accounts by Usage Level				NA(1)
		Quartile 1	Quartile 2	Quartile 3	Quartile 4	
Single Family W/O Elec. Space Heat	101	8	18	20	47	8
Multi Family W/O Elec. Space Heat	32	-	5	9	14	4
Single Family With Elec. Space Heat	4	-	-	-	4	-
Multi Family With Elec. Space Heat	6	-	-	3	2	1



**Metric: 26**

**Metric Description:** Number of customers enrolled in the RRTP program (ComEd's hourly pricing program) by usage levels, customer class, and low income customers.

Number of Accounts by Usage Level for Residential Delivery Classes						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	8,595	988	1,642	2,247	3,495	223
Multi Family W/O Elec. Space Heat	615	53	93	148	278	43
Single Family With Elec. Space Heat	189	28	40	48	67	6
Multi Family With Elec. Space Heat	179	14	34	45	78	8

Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	118	26	29	28	32	3
Multi Family W/O Elec. Space Heat	43	6	12	14	10	1
Single Family With Elec. Space Heat	5	2	3	-	-	-
Multi Family With Elec. Space Heat	15	1	3	1	8	2

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(2)
Single Family W/O Elec. Space Heat	10	1	2	1	5	1
Multi Family W/O Elec. Space Heat	3	-	1	-	2	-
Single Family With Elec. Space Heat	-	-	-	-	-	-
Multi Family With Elec. Space Heat	-	-	-	-	-	-

**Metric: 29**

**Metric Description:** Number of deposits required, disconnection notices, and disconnections for nonpayment for all customers and, if applicable, by low income customers. Other “key indicia associated with credit and collection activities targeted to low income customers” may be incorporated in the project plan’s business process redesigns for future implementation.

Part 1: Number of Deposits Required in 2013 - by usage levels, customer class, and low income customers.

Number of Accounts by Delivery Class	
Delivery Class	Total Number of Accounts
Single Family W/O Elec. Space Heat	23469
Multi Family W/O Elec. Space Heat	43957
Single Family With Elec. Space Heat	525
Multi Family With Elec. Space Heat	6954
Watt-Hour	1439
Small Load	7661
Medium Load	197
Large Load	32
Very Large Load	13
Extra Large Load	-
High Voltage	-
Railroad	-
Fixture-Included Lighting	10
Dusk to Dawn Lighting	1
General Lighting	2

Number of Accounts by Usage Level for Residential, Watt-hour, and Small Load Delivery Classes

Delivery Class	Total	Number of Accounts by Usage Level				
		Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	23469	97	70	56	50	23196
Multi Family W/O Elec. Space Heat	43957	145	118	112	81	43501
Single Family With Elec. Space Heat	525	2	2		1	520
Multi Family With Elec. Space Heat	6954	13	26	13	13	6889
Watt-Hour	1439	28	29	22	58	1302
Small Load	7661	189	163	156	118	7035

Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)							
Delivery Class	Total	Number of Accounts by Usage Level					
		Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)	
Single Family W/O Elec. Space Heat	1047	7	6	10	4	1020	
Multi Family W/O Elec. Space Heat	1544	15	7	12	8	1502	
Single Family With Elec. Space Heat	28	-	-	-	-	28	
Multi Family With Elec. Space Heat	258	4	2	1	1	250	

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)

Delivery Class	Total	Number of Accounts by Usage Level				
		Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	139	-	2	1	3	133
Multi Family W/O Elec. Space Heat	80	-	-	-	3	77
Single Family With Elec. Space Heat	3	-	-	-	-	3
Multi Family With Elec. Space Heat	22	-	-	-	-	22

Part 2: Number of Disconnection Notices in 2013 - by usage levels, customer class, and low income customers.

Number of Accounts by Delivery Class

Delivery Class	Total Number of Accounts
Single Family W/O Elec. Space Heat	261502
Multi Family W/O Elec. Space Heat	135642
Single Family With Elec. Space Heat	4603
Multi Family With Elec. Space Heat	20141
Watt-Hour	3044
Small Load	24247
Medium Load	1209
Large Load	196
Very Large Load	75
Extra Large Load	2
High Voltage	7
Railroad	-
Fixture-Included Lighting	153
Dusk to Dawn Lighting	188
General Lighting	88

Number of Accounts by Usage Level for Residential, Watt-hour, and Small Load Delivery Classes

Delivery Class	Total	Number of Accounts by Usage Level				
		Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	261502	41570	53781	66508	75630	24013
Multi Family W/O Elec. Space Heat	135642	16755	23763	31258	40769	23097
Single Family With Elec. Space Heat	4603	773	1083	1146	1124	477
Multi Family With Elec. Space Heat	20141	2026	3684	5424	5979	3028

Space Heat						
Watt-Hour	3044	437	645	371	1254	337
Small Load	24247	3216	5105	6562	6102	3262

Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	37057	7602	9352	9378	7993	2732
Multi Family W/O Elec. Space Heat	24541	2552	4382	6369	8689	2549
Single Family With Elec. Space Heat	541	117	140	127	93	64
Multi Family With Elec. Space Heat	3273	260	614	975	1088	336

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	4585	496	776	1144	1594	575
Multi Family W/O Elec. Space Heat	2531	133	313	555	1057	473
Single Family With Elec. Space Heat	91	13	20	17	32	9
Multi Family With Elec. Space Heat	498	29	74	115	198	82

Part 3: Number of Disconnections in 2013 - by usage levels, customer class, and low income customers.

Number of Accounts by Usage Level for Residential, Watt-hour, and Small Load Delivery Classes						
		Number of Accounts by Usage Level				
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)
Single Family W/O Elec. Space Heat	22640	2999	4447	5561	6944	2689
Multi Family W/O Elec. Space Heat	11278	987	1763	2560	4045	1923
Single Family With Elec. Space Heat	572	84	141	153	106	88
Multi Family With Elec. Space Heat	2988	169	465	841	994	519
Watt-Hour	503	74	103	66	199	61
Small Load	3420	637	963	874	474	472

Number of Low Income Accounts by Usage Level for Residential Delivery Classes(2)							
		Number of Accounts by Usage Level					
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)	
Single Family W/O Elec. Space Heat	4745	674	1083	1233	1276	479	
Multi Family W/O Elec. Space Heat	2656	197	358	654	1127	320	
Single Family With Elec. Space Heat	124	21	28	34	22	19	
Multi Family With Elec. Space Heat	627	25	82	189	250	81	

Accounts on Life Support and Medical Condition by Usage Level for Residential Delivery Classes(3)							
		Number of Accounts by Usage Level					
Delivery Class	Total	Quartile 1	Quartile 2	Quartile 3	Quartile 4	NA(1)	
Single Family W/O Elec. Space Heat	1049	115	169	250	359	156	
Multi Family W/O Elec. Space Heat	649	25	87	140	272	125	
Single Family With Elec. Space Heat	19	4	6	3	5	1	
Multi Family With Elec. Space Heat	160	7	20	32	73	28	