

Commonwealth Edison Company
Primary/Secondary Analysis Overview

Explanation of the Process to Determine Primary and Secondary Cost Assignments

A. Overview

The Primary/Secondary Analysis cost allocation provided on pages 8 through 23 in this exhibit is the same analysis used in the compliance Embedded Cost of Service Study (“ECOSS”) in Illinois Commerce Commission (“ICC”) Docket No. 12-0321 with updated plant costs as of December 31, 2012. The methodology used in this analysis is the same methodology approved by the ICC in ICC Docket No. 08-0532 (“the 2008 Rate Design Investigation”). This Primary/Secondary Analysis is based on a pre-existing definition of primary distribution facilities and secondary distribution facilities contained in ComEd’s General Terms and Conditions (ILL. C. C. No. 10 Original Sheet No. 159), which defines ComEd’s Primary Distribution System as follows:

PRIMARY DISTRIBUTION SYSTEM.

The Company’s primary distribution system utilizes electric facilities to distribute electricity at the following common nominal voltages: 4,000 volts, 12,000 volts, and/or 34,500 volts. However, in certain individual situations, the Company’s primary distribution system utilizes electric facilities to distribute electricity at 69,000 volts, 138,000 volts, or 345,000 volts, if the Company determines that distribution at such nominal voltage is more economical, efficient, or reliable than distribution at a voltage listed in the first sentence of this paragraph. Not all primary distribution system nominal voltages are available in all areas of the Company’s service territory.

Using the description from ComEd’s tariffs, ComEd determined that primary distribution facilities include the wire, cable, attachments, portions of poles, and conduit used to distribute electricity at a primary voltage (*i.e.*, 4,000 Volts or higher phase-to-phase and less than 69,000 Volts phase-to-phase). Secondary distribution facilities include the wire, cable, attachments, portions of poles, and conduit used to distribute electricity at a secondary voltage (*i.e.*, less than 4,000 Volts phase-to-phase).

This Primary/Secondary Analysis also allocates costs to primary voltage transformer and secondary voltage transformer facilities based upon this same definition of primary and secondary voltage and the voltage delivered by the transformer. The cost allocations developed in this analysis are used in the ECOSS to assign primary and secondary costs to delivery classes based upon how much electricity is delivered to customers in each delivery class at a primary or secondary voltage. The assigned costs from the ECOSS, including but not limited to primary voltage and secondary voltage costs, are then used to assign revenue responsibility in an ICC approved rate design model. Primary voltage customers are generally customers that receive electric service at a primary voltage and secondary voltage customers are customers that receive electric service at a secondary voltage. Often a primary voltage customer has multiple electric service points and some electric service points may be at a secondary voltage. Delivery service classes with these types of

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customers that receive electric delivery service at both primary voltage and secondary voltage are allocated an appropriate share of primary and secondary costs based upon the primary or secondary voltage classification at each electric service point.

B. Assignment of Plant Costs

To assign costs to primary or secondary, ComEd reviewed detailed plant data, which is the equipment and corresponding costs, in certain Uniform System of Accounts (“USOA”) accounts to determine, based on descriptions, which types of equipment are used for distribution of electricity at secondary voltages and which types of equipment are used for distribution of electricity at primary voltages. Available data, and when needed, engineering judgment, were used to estimate the USOA accounts associated with the primary distribution system and the secondary distribution system.

The following USOA accounts, which are the same accounts evaluated during the course the 2008 Rate Design Investigation, are accounts that include some facilities that were identified as being facilities used in a primary distribution system and some facilities that were identified as being used in a secondary distribution system or include costs for transformers that deliver a primary or secondary voltage:

- 361 – Structures and Improvements
- 364 – Poles, Towers, and Fixtures,
- 365 – Overhead Conductors and Devices,
- 366 – Underground Conduit,
- 367 – Underground Conductors and Devices, and
- 368 – Distribution Line Transformers.

Page 8 of this exhibit displays a table that summarizes the assignment of costs between primary and secondary for these USOA accounts. Page 10 provides the split of the high voltage plant costs for these USOA accounts and page 9 provides a summary of all of the plant costs for input into ComEd’s ECOSS. Page 8 shows that 10.88% of the costs are assigned to secondary distribution facilities, 17.75% are assigned to secondary voltage transformers, 71.08% of the costs are assigned as services shared by both primary and secondary voltage customers (“shared costs”), and 0.29% of the costs are assigned to primary voltage transformers using the data as of December 31, 2012. The remaining pages in this narrative detail the method for assignment of costs in each of these five USOA accounts between primary and secondary. Summaries of the cost assignments are provided for each account in this exhibit. Due to the voluminous number of pages in the plant accounts, the detailed plant cost assignments are not provided in this exhibit. The specific

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assignment of detailed plant costs can be viewed in the electronic spreadsheet model for this exhibit.

Determination of Plant Cost Allocators

This primary/secondary analysis provides several calculations and/or estimations used to allocate costs into the four categories. The allocators are as follows:

- Page 13 provides the allocation of pole costs to shared primary, secondary distribution, and secondary transformer. Engineering judgments were made because ComEd does not have data readily available that would be necessary to determine the exact number of poles in ComEd's entire system that have both primary and secondary facilities attached versus those that have only primary or secondary facilities attached. However, ComEd was able to use its electronic mapping software, ComEd's Geographical Information System ("CEGIS"), to access certain limited pole and wire information.

On page 13, the pole counts by region that were extracted from CEGIS are provided. ComEd applied its engineering judgment and the results from ComEd's field and map reviews of sample data conducted during the course of the 2008 Rate Design Investigation to estimate the percentage of poles by region that may have secondary facilities attached thereto. Page 13 displays the number of poles by region and the estimated percentage of poles expected to have secondary facilities attached. Based on this data, ComEd calculated that 51.6% of the wood poles in ComEd's entire system that are 50 feet or less in height have secondary distribution facilities or a secondary voltage transformer attached.

Lastly, ComEd considered what portion of the cost of these poles is typically attributable to the primary and secondary facilities attached to such poles. Based on engineering judgment, 50% of the costs of these poles are estimated to be attributable to supporting primary facilities and 50% is attributable to supporting secondary facilities. Consequently, 25.8% (*i.e.*, 50% of 51.6%) of the costs of wood poles 50 feet or less in height was assigned as secondary distribution and secondary transformer and are further split to secondary distribution and secondary transformer as shown on Page 13. In a similar calculation, ComEd assigned 17.5% of the costs for wood poles taller than 50 feet as secondary and secondary transformer based on ComEd's field and map reviews of sample data conducted during the course of the 2008 Rate Design Investigation as provided in the data shown on page 13 of this exhibit.

- Page 15 provides the cost allocations for weather resistant wire ("WRW") costs to shared primary, secondary distribution, and secondary transformer. Historically, ComEd used 1/C WRW for both the open wire secondary distribution system and

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the primary distribution system. Today, ComEd installs the 1/C WRW only for primary distribution and is replacing the old open wire secondary distribution systems with 3/C or 4/C secondary wire. 1/C WRW is also used to connect overhead transformers to secondary and/or service conductors at the pole on which the transformer is mounted. ComEd does not have a conclusive record of the historical uses of WRW, therefore an estimate of 50% was assigned to secondary transformers, 20% to secondary distribution, and 30% to shared services.

- Page 16 provides the cost allocations for bare copper wire (“BCW”) costs to shared primary, secondary transformer, and primary transformer. ComEd used its CEGIS system to determine the number of transformer installations and used the approximate feet of BCW for each installation. Additionally, a similar calculation was done for the approximate number of lightning arresters on ComEd’s system. Based on these calculations BCW is allocated 69.8% to secondary transformers, 30.0% to shared wire, and 0.2% to primary transformers.
- Page 17 provides the determination of a necessary input for a calculation to provide for an adjustment to the dusk-to-dawn lighting delivery class as directed in the Final Order in ICC Docket No. 10-0467.
- Page 19 provides the cost allocations for conduit costs to shared primary or secondary distribution costs for installations inside and outside the City of Chicago. While some conduit may be used only for secondary distribution systems, the majority is used for primary distribution systems. The total amount of conduit and the total amount of conduit with only secondary facilities mapped in the CEGIS system within the City of Chicago was extracted from CEGIS. As shown on page 19, ComEd determined that 5.1% of the conduit in the City of Chicago should be assigned to secondary facilities. The CEGIS system does not have the secondary distribution conduit mapped in its entirety outside the City of Chicago. However, based on the results from ComEd’s field and map reviews of areas that have secondary distribution systems in conduit conducted during the course of the 2008 Rate Design Investigation and displayed on page 19, ComEd estimated that 0.9% of the conduit should be assigned to secondary outside the City of Chicago using the updated plant data.
- Page 22 provides the cost allocation of transformer costs to primary and secondary transformers by determining the estimated cost to install the secondary and primary voltage transformers that serve customers on ComEd’s system. The calculation estimates that 98.0% of the transformer related costs are for secondary voltage transformers and 2.0% are for primary voltage transformers.

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Account 361 - Structures and Improvements and Account 362 – Distribution Equipment

Page 11 displays a summary of the assignment of costs for the assets or equipment in USOA account 361 – Structures and Improvements and page 12 displays a summary of the assignment of costs for the assets or equipment in USOA Account 362 – Distribution Equipment.

In the detailed plant costs spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign the dollars for the equipment represented in each row.

The Major Location descriptions listed as a Distribution Sub-Station (“DSS”) are for costs related to primary voltage distribution substations and are assigned 100% to shared costs. Some of the equipment is related to secondary network centers and is identified with a “NC” label in the Major Location column of the plant data and consequently 100% of the costs for those facilities are assigned as secondary costs. The costs identified as Electric Service Station (“ESS”) are assigned to secondary transformer and primary transformer based upon the transformer allocations determined on page 22.

Account 364 - Poles, Towers, and Fixtures

Page 14 displays a summary of the assignment of costs for the assets or equipment in USOA Account 364 - Poles, Towers, and Fixtures. In the detailed spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign the dollars for the equipment represented in each row. The pole related costs are assigned to shared, secondary transformer and secondary distribution based upon the pole allocations determined on page 13.

Account 365 - Overhead Conductors and Devices

Page 18 displays a summary of the assignment of costs for the assets or equipment in USOA Account 365 - Overhead Conductors and Devices. In the detailed spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign the dollars for the equipment represented in each row. In the “Retirement Unit”

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column, the equipment designated as “Cable-Other” or “Secondary” is either three-conductor (“3/C”) or four-conductor (“4/C”) secondary wire and, therefore, is assigned 100% to secondary distribution costs. The costs for WRW conductor is allocated based upon the allocations determined on page 15 and the costs for BCW are allocated based upon the allocations determined on page 16.

Account 366 – Underground Conduit

Page 20 displays a summary of the assignment of costs for the assets or equipment in USOA Account 366 – Underground Conduit. In the detailed spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign the dollars for the equipment represented in each row. The costs for conduit inside and outside the City of Chicago is assigned to shared and secondary distribution based upon the allocations determined on page 19 except for cost specifically identified as ESS or NC and those cost are assigned in the same manner as described in Accounts 361 and 362.

Account 367 – Underground Conductor and Devices

Page 21 displays a summary of the assignment of costs for the assets or equipment in USOA Account 367 – Underground Conductor and Devices. In the detailed spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign the dollars for the equipment represented in each row. The items of equipment designated as “Bus-Manhole,” “Cable-Secondary-Buried” and “Cable-Secondary-In-Duct” are assigned 100% to secondary as shown. Costs specifically identified as ESS or NC and those costs are assigned in the same manner as described in Accounts 361 and 362. The remainder of the costs is assigned as 100% shared costs.

Account 368 – Distribution Line Transformers

Page 23 displays a summary of the assignment of costs for the assets or equipment in USOA Account 368 – Distribution Line Transformers. In the detailed spreadsheet model for this exhibit, each item of equipment is described in the column titled “Retirement Unit.” The columns titled “Percent Primary Transformer”, “Percent Secondary Distribution”, “Percent Secondary Transformer” and “Percent Shared” displays the percentage multipliers that ComEd used to assign

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the dollars for the equipment represented in each row. The costs are assigned to secondary transformer and primary transformer based upon the transformer allocations determined on page 22.

For all of the USOA accounts discussed above, the “Non-unitized” designation is for items of equipment that ComEd had put into service but not yet classified as of the time data was compiled for this analysis. The Non-unitized costs assigned to a specific address for a distribution center were assigned 100% to shared costs because distribution centers do not have any secondary voltage facilities. The other Non-unitized costs were assigned to secondary using an average secondary assignment percentage derived from all the classified facilities that were assigned to secondary in each USOA account.

**Commonwealth Edison Company
 Primary/Secondary Analysis
 for Uniform System of Accounts (USOA) 361, 362 and 364 through 368**

Table A - Summary of Assignment of Costs

Account	Account Description	Plant In Service - <u>Shared</u> Costs for Customers Receiving a Primary or Secondary Voltage	Plant In Service -Costs for Customers Using the <u>Secondary Voltage</u> <u>Distribution</u> System	Plant In Service -Costs for Customers Using a <u>Secondary Voltage</u> <u>Transformer</u>	Plant In Service -Costs for Customers Receiving a <u>Primary Voltage</u> <u>Transformer</u>	Total
361	Structures and Lot Improvements	\$ 22,182,814	\$ -	\$ 32,332,941	\$ 100,183	\$ 54,615,939
362	Distribution Equipment	\$ 262,053,421	\$ -	\$ 397,648,160	\$ 5,321,579	\$ 665,023,160
364	Poles, Towers, and Fixtures	\$ 1,043,995,737	\$ 182,726,423	\$ 70,173,369	\$ 763,440	\$ 1,297,658,969
365	Overhead Conductors and Devices	\$ 1,508,707,769	\$ 286,286,752	\$ 145,617,705	\$ 108,420	\$ 1,940,720,646
366	Underground Conduit	\$ 679,733,548	\$ 20,276,793	\$ 4,794	\$ 20	\$ 700,015,155
367	Underground Conductors and Devices	\$ 3,641,833,420	\$ 606,195,194	\$ 11,706	\$ 239	\$ 4,248,040,559
368	Distribution Line Transformers	\$ -	\$ -	\$ 1,141,285,679	\$ 23,291,544	\$ 1,164,577,224
	Total	\$ 7,158,506,709	\$ 1,095,485,163	\$ 1,787,074,354	\$ 29,585,425	\$ 10,070,651,651
	Percent of Total	71.08%	10.88%	17.75%	0.29%	

Notes:

Plant Data as of December 31, 2012

This primary/secondary analysis is the same analysis approved in ICC Docket No. 10-0467 and used in ICC Dockets 11-0721 and 12-0321 with updated plant costs and assignments.

Commonwealth Edison Company
 Plant In Service by Sub-functions

Account 360 - Land and Land Rights

High Voltage (Land and Easements) \$57,022,993 (1)
Distribution Voltage (Land and Easements) \$8,598,171 (2)
 Total \$65,621,164

65,621,164 2012 Form 1 - Pages 206-207
 (0)

The information by subfunction is provided in three blocks below in order to print the information on a single page.

Account	Account Description (3)	High Voltage ESS (4)	High Voltage Dist. Subs.	High Voltage Dist. Lines	Shared Dist. Substations	Secondary Voltage Dist. Substa.
361	Structures and Lot Improvements	\$ 2,117,284	\$ 359,308,039	\$ -	\$ -	\$ -
362	Station Equipment	\$ 71,734,251	\$ 1,582,391,838	\$ -	\$ 262,053,421	\$ 397,648,160
364	Poles, Towers, and Fixtures	\$ -	\$ -	\$ 132,929,668	\$ -	\$ -
365	Overhead Conductors and Devices	\$ -	\$ -	\$ 55,865,820	\$ -	\$ -
366	Underground Conduit	\$ -	\$ -	\$ 67,354,883	\$ -	\$ -
367	Underground Conductors and Devices	\$ -	\$ -	\$ 108,614,572	\$ -	\$ -
368	Line Transformers	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		\$ 73,851,535	\$ 1,941,699,878	\$ 364,764,943	\$ 262,053,421	\$ 397,648,160

Account	Account Description	Shared Dist. Lines	Secondary Voltage Dist. Lines	Primary Voltage Transformers	Secondary Voltage Transformers
361	Structures and Lot Improvements	\$ 22,182,813	\$ -	\$ 100,183	\$ 32,332,941
362	Station Equipment	\$ -	\$ -	\$ 5,321,579	\$ -
364	Poles, Towers, and Fixtures	\$ 1,043,995,738	\$ 182,726,423	\$ 763,440	\$ 70,173,369
365	Overhead Conductors and Devices	\$ 1,508,707,767	\$ 286,286,752	\$ 108,420	\$ 145,617,705
366	Underground Conduit	\$ 679,733,547	\$ 20,276,793	\$ 20	\$ 4,794
367	Underground Conductors and Devices	\$ 3,641,833,419	\$ 606,195,194	\$ 239	\$ 11,706
368	Line Transformers	\$ -	\$ -	\$ 23,291,544	\$ 1,141,285,677
TOTAL		\$ 6,896,453,284	\$ 1,095,485,162	\$ 29,585,425	\$ 1,389,426,192

Account	Account Description	Total	Form 1 - Pages 206-207	Difference
361	Structures and Lot Improvements	\$ 416,041,260	\$ 416,041,260	\$ 0
362	Station Equipment	\$ 2,319,149,249	\$ 2,319,149,249	\$ 0
364	Poles, Towers, and Fixtures	\$ 1,430,588,638	\$ 1,430,588,638	\$ (0)
365	Overhead Conductors and Devices	\$ 1,996,586,464	\$ 1,996,586,464	\$ 0
366	Underground Conduit	\$ 767,370,037	\$ 767,370,037	\$ 0
367	Underground Conductors and Devices	\$ 4,356,655,130	\$ 4,356,655,130	\$ 0
368	Line Transformers	\$ 1,164,577,221	\$ 1,164,577,221	\$ -
TOTAL		\$ 12,450,967,999	\$ 12,450,967,999	\$ -

Notes:

- (1) Input into ComEd Ex. 3.01 and 3.04 in Sch. 1b, line 14.
- (2) Input into ComEd Ex. 3.01 and 3.04 in Sch. 1b, line 18.
- (3) Input into ComEd Ex. 3.01 and 3.04 by plant account number in Sch. 1b, lines 24, 29, 34, 39, 44, 49, 53.
- (4) High Voltage ESS data is from the work paper titled: "HV Plant Data_CONFIDENTIAL_ECOSS" in this docket.

Commonwealth Edison Company
 High Voltage Plant Investment Summary

<u>Utility Account</u>	<u>Accumulated Cost</u>	<u>HVD PORTIONS ONLY</u>		<u>NON-HVD PORTIONS</u>
		Account 360 Total		
CED 360.00 Dist - Land / Fee	\$3,464,135	\$65,621,164	\$57,022,993	\$8,598,171
CED 360.03 Dist - Limtd Term Ease	\$24,286			
CED 360.09 Dist - Easements	\$5,109,750			
CED 360.08 Dist - Easements-HVD	\$9,916,588			
CED 360.02 Dist - Land / Fee - HVD	\$47,106,405			
		Account 361 Total		
CED 361.00 Dist - Structures	\$53,324,414	\$416,041,262	\$359,308,039	\$56,733,223
CED 361.01 Dist - Lot Improvements	\$3,408,808			
CED 361.02 Dist - Structures-HVD	\$306,123,149			
CED 361.03 Dist - Lot Imprvmnts-HVD	\$53,184,890			
		Account 362 Total		
CED 362.00 Dist-Equipment	\$736,757,411	\$2,319,149,249	\$1,582,391,838	\$736,757,411
CED 362.02 Dist-Sta Eqmt- HVD	\$1,582,391,838			
		Account 364 Total		
CED 364.00 Dist-Poles/Twrs-WO<69KV	\$1,136,242,494	\$1,430,588,637	\$132,929,668	\$1,297,658,969
CED 364.01 Dist-Poles/Twrs-JO<69KV	\$161,416,475			
CED 364.02 Dist-Poles/Twrs-HVD	\$132,929,668			
		Account 365 Total		
CED 365.00 Dist-Ovhd Condtrs<69KV	\$1,940,720,646	\$1,996,586,466	\$55,865,820	\$1,940,720,646
CED 365.02 Dist-Ovhd Condtrs-HVD	\$55,865,820			
		Account 366 Total		
CED 366.00 Dist-Undg Conduit	\$700,015,155	\$767,370,038	\$67,354,883	\$700,015,155
CED 366.02 Dist-Undg Conduit-HVD	\$67,354,883			
		Account 367 Total		
CED 367.00 Dist-Undg Conductrs<69KV	\$4,248,040,559	\$4,356,655,131	\$108,614,572	\$4,248,040,559
CED 367.02 Dist-Undg Conductors-HVD	\$108,614,572			
CED 368.00 Dist-Line Transformers	\$1,164,577,224			
CED 369.00 Dist-Services	\$1,089,766,178			
CED 370.00 Dist-Meters & Devices	\$356,311,124			
CED 370.01 Dist-AMI Meters	\$25,308,444			
CED 370.02 Distr-Relays, CT and PT	\$18,825,822			
CED 371.00 Dist-Inst/Cust Premises	\$52,870,093			
CED 372.00 Dist-Leas/Cust Premises	\$796,691			
CED 373.00 Dist-Str Light/Sig Syst	\$112,174,661			
CED 374.00 Dist-ARO Costs	\$6,205,753			
CED 374.02 Dist H Vol-ARO Costs	\$4,720,192			
Grand Total	<u>\$14,183,568,130</u>			

Total Agrees to 2012 FERC Form 1 pages 204-207

\$14,183,568,120

-\$10

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 361 - Structures and Improvements Plant Data

Docket No. 13-____
 ComEd Ex. 3.03
 FRU and RDI Primary/Secondary
 361 - Pivot
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Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 21,704,106	\$ -	\$ -	\$ -
ESS	\$ -	\$ -	\$ 4,908,968	\$ 100,183
NC	\$ -	\$ -	\$ 27,410,169	\$ -
NC - D.C.	\$ -	\$ -	\$ 13,804	\$ -
TDC	\$ 231,076	\$ -	\$ -	\$ -
TSS	\$ 117,176	\$ -	\$ -	\$ -
138 KV Lines IL	\$ 130,457	\$ -	\$ -	\$ -
Mass-Outside Chicago	\$ (1)	\$ -	\$ -	\$ -
Grand Total	\$ 22,182,814	\$ -	\$ 32,332,941	\$ 100,183

Row Totals
\$ 21,704,106
\$ 5,009,151
\$ 27,410,169
\$ 13,804
\$ 231,076
\$ 117,176
\$ 130,457
\$ (1)
\$ 54,615,939

Percent of Total	40.6%	0.0%	59.2%	0.2%
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Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 362 - Distribution Equipment Plant Data

Docket No. 13-____
 ComEd Ex. 3.03
 FRU and RDI Primary/Secondary
 362 - Pivot
 Page 12 of 23

Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 253,835,195	\$ -	\$ -	\$ -
ESS	\$ -	\$ -	\$ 258,819,196	\$ 5,282,024
NC	\$ -	\$ -	\$ 135,530,811	\$ -
NC - D.C.	\$ -	\$ -	\$ 342,477	\$ -
TDC	\$ 2,615,463	\$ -	\$ -	\$ -
TSS	\$ 3,615,100	\$ -	\$ -	\$ -
Unspecified - ComEd	\$ 319,664	\$ -	\$ 485,069	\$ 6,491
Warehouses & Storage - Stock	\$ 1,590,901	\$ -	\$ 2,414,084	\$ 32,307
Mass-Inside Chicago	\$ 5,388	\$ -	\$ 8,175	\$ 109
Mass-Outside Chicago	\$ 31,862	\$ -	\$ 48,348	\$ 647
General - Communications - Structur	\$ (0)	\$ -	\$ -	\$ -
General - Offices - Corp. - Struct.	\$ 39,849	\$ -	\$ -	\$ -
Grand Total	\$ 262,053,421	\$ -	\$ 397,648,160	\$ 5,321,579
Percent of Total	39.4%	0.0%	59.8%	0.8%

Row Totals
\$ 253,835,195
\$ 264,101,220
\$ 135,530,811
\$ 342,477
\$ 2,615,463
\$ 3,615,100
\$ 811,225
\$ 4,037,292
\$ 13,672
\$ 80,858
\$ (0)
\$ 39,849
\$ 665,023,160

**Commonwealth Edison Company
Compliant Primary/Secondary Analysis
Percent of Pole Cost Assigned to Secondary**

Wood Poles 50 Feet and Less

Region	Region Abbreviation	Number of Poles from CEGIS (1)	Estimated Number of Poles 50 Feet or Less (2)	Estimated Percent of Poles with Secondary (4)	Estimated Number of Poles with Secondary
Chicago North	CN1	135,183	128,627	90%	115,765
Chicago South	CS1	154,178	146,701	90%	132,031
Maywood	MAY	57,842	55,037	90%	49,533
Skokie	SKO	52,478	49,933	90%	44,940
Bolingbrook	BOL	48,693	46,332	50%	23,166
Mount Prospect	MPR	56,693	53,944	50%	26,972
Glenbard	GLB	62,432	59,404	50%	29,702
Crestwood	CRE	72,300	68,794	50%	34,397
Libertyville	LIB	79,139	75,301	26%	19,578
Elgin	ELG	54,417	51,778	26%	13,462
Aurora (2)	AUR	64,500	61,372	26%	15,957
Rockford	ROC	84,002	79,926	26%	20,781
Crystal Lake	CRY	42,654	40,596	26%	10,552
University Park	UNV	76,408	72,703	26%	18,903
Joliet	JOL	65,134	61,975	26%	16,114
Freeport	FPT	16,833	16,017	14%	2,242
DeKalb	DKB	69,497	66,127	14%	9,258
Streator	STR	60,584	57,646	14%	8,070
Dixon	DX	102,221	97,264	14%	13,617

Total 1,355,188 1,289,470 (a) 605,041 (b)

Estimated Number of Poles with a Transformer and No Secondary 60,278 (c)

Estimated Percent of Poles With Secondary Wire or Secondary Voltage Transformer 51.6% (d) = [(b)+(c)]/a

Estimated Percentage of Cost for Secondary for Poles that have both Secondary and Primary Wire on the Pole 50.0% (e)

Percent of Pole Assets to be Split Between Secondary Transformer and Secondary Distribution	25.6%	(f) = (d) x (e)
Percent Assigned to Secondary Transformer	4.1%	(g)
Percent Assigned to Secondary Distributor	21.7%	(5)

- Notes:
- ComEd's Geographical Information System (CEGIS) is ComEd's electronic mapping software.
 - Aurora pole count is estimated.
 - Poles over 50 feet are estimated in the table below. Wood poles 50 feet or less in length are assumed to be poles that may have both primary wire and secondary wire on them. The estimated number of poles 50 feet or less in each region is estimated by taking the total number of wood poles in the plant data 50 feet or less divided by the total number of wood poles in the 2010 plant data (1,295 million/1,361 million).
 - The percentage of poles estimated to have secondary attached is based on the field sampling.
 - Using the diagram from ComEd Ex. 6.12 in Docket 08-0532, ComEd estimates that 9 of the 28 poles with secondary have a transformer on them so the weighting factor is 4.5/28 to transformers to recognize that those 9 poles have transformers and secondary, or 4.5 is assigned to transformers, and the remainder have just secondary.

Wood Poles Over 50 Feet

Results of Random Sample and Customer Density by Office Analysis		
Number of Poles with Secondary	15 (g)	
Total Number of Poles Sampled	43 (h)	
Percent of Poles with Secondary	34.9% (i) = (g)/(h)	
Estimated Percentage of Cost for Secondary for Poles that have both Secondary and Primary Wire on the Pole	50.0% (e)	
Percent of Pole Assets to be Split Between Secondary Transformer and Secondary Distribution	17.5%	(j) = (i) x (e)
Percent Assigned to Secondary Transformer	2.8%	(5)
Percent Assigned to Secondary Distributor	14.7%	(5)

Results of Random Sample and Customer Density by Office Analysis									
	Square Miles By Office (1)	Customer Count By Office (2)	Customer Density by Office (3)	Count of Poles With Secondary	Count of Poles Without Secondary	Total Count of Poles	% of Poles With Secondary from Sample of 10 random poles	Weighted Average (8)	
CHICAGO NORTH	100	731,319	7,313	9	1	10	90%		
CHICAGO SOUTH	126	420,801	3,340	8	2	10	80%		
MAYWOOD	91	203,785	2,239	9	1	10	90%		
SKOKIE	116	202,899	1,749	10	0	10	100%	90%	
BOLINGBROOK	139	179,295	1,290	6	4	10	60%		
MT PROSPECT	227	254,231	1,120	6	4	10	60%		
GLENBARD	172	211,007	1,227	3	7	10	30%		
CRESTWOOD	176	233,053	1,324	5	5	10	50%	50%	
LIBERTYVILLE	416	242,975	584	5	5	10	50%		
ELGIN	250	129,160	517	2	8	10	20%		
AURORA	330	123,102	373	3	6	9	33%		
ROCKFORD	915	148,502	163	1	9	10	10%		
CRYSTAL LAKE	354	120,878	341	3	6	9	33%		
UNIVERSITY PARK	937	162,285	173	1	9	10	10%	26%	
JOLIET	1,032	219,747	213	0	10	10	0%	0%	
FREEPORT	955	31,670	33	2	8	10	20%		
DEKALB	1,287	66,955	52	1	9	10	10%		
STREATOR	1,551	32,775	21	1	8	9	11%	14%	
DIXON	2,253	66,435	29	6	4	10	60%		

- Notes:
- From ComEd's Geographical Information System (CEGIS), ComEd's electronic mapping software.
 - 2008 data.
 - Joliet and Dixon are excluded due to outlying data. Skokie was maintained in the average although 100% is not a likely result for the entire area.

	Number of Transformer Installations	Estimated Percent with No Secondary	Estimated Number of Poles with a Transformer and No Secondary
Overhead 4 kV Single Phase	23,477	5%	1,174
Overhead 12 kV Single Phase	145,348	20%	29,070
Overhead 4 kV Open Delta Three Phase	3,119	50%	1,560
Overhead 12 kV Open Delta Three Phase	17,773	50%	8,887
Overhead 4 kV - 120 V Three Phase	3,282	80%	2,626
Overhead 4 kV - 277 V Three Phase	372	95%	353
Overhead 12 kV - 120 V Three Phase	15,372	80%	12,298
Overhead 12 kV - 277 V Three Phase	4,538	95%	4,312

(c) Total Number of Poles 60,278

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 364 - Poles, Towers, and Fixtures Plant Data

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 FRU and RDI Primary/Secondary
 364 - Pivot
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Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 13,265	\$ 2,020	\$ 776	\$ 8
ESS	\$ -	\$ -	\$ 585	\$ 12
TSS	\$ 11,542	\$ 2,020	\$ 776	\$ 8
Mass-Inside Chicago	\$ 190,529,832	\$ 41,277,760	\$ 18,919,796	\$ 250,299
Mass-Outside Chicago	\$ 853,441,098	\$ 141,444,623	\$ 51,251,436	\$ 513,112
Grand Total	\$ 1,043,995,737	\$ 182,726,423	\$ 70,173,369	\$ 763,440

Row Totals
\$ 16,069
\$ 597
\$ 14,347
\$ 250,977,687
\$ 1,046,650,269
\$ 1,297,658,969

Percent of Total	80.5%	14.1%	5.4%	0.1%
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Commonwealth Edison Company
Primary/Secondary Analysis
Overhead Weather Resistant Wire Allocation

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Percent of Weather Resistant Wire Assigned to Secondary Transformer	50%
Percent of Weather Resistant Wire Assigned to Secondary Distribution	20%
Percent of Weather Resistant Wire Assigned to Shared	30%

The percent of weather resistant wire used for installations in open wire secondary distribution systems and to wire overhead transformers cannot be accurately determined from the plant data. Therefore, the plant data cost are split 50% to secondary transformers, 20% to secondary distribution and 30% to shared costs because more wire is likely used for secondary transformers than in each of the other installations.

Commonwealth Edison Company
 Primary/Secondary Analysis
Bare Copper Wire Allocation

Estimated Number of Transformer Installations

	Estimated Feet of Bare CU Wire Per Installation	Total Estimated Feet	Secondary Transformer Allocations (feet)	Shared Wire Allocations (feet)	Primary Transformer Allocations (feet)
Secondary Transformer Installations					
Overhead 4 kV Single Phase	23,477	40	939,080		939,080
Overhead 12 kV Single Phase	145,348	40	5,813,920		5,813,920
Overhead 4 kV Open Delta Three Phase	3,119	40	124,760		124,760
Overhead 12 kV Open Delta Three Phase	17,773	40	710,920		710,920
Overhead 4 kV - 120 V Three Phase	3,282	40	131,280		131,280
Overhead 4 kV - 277 V Three Phase	372	40	14,880		14,880
Overhead 12 kV - 120 V Three Phase	15,372	40	614,880		614,880
Overhead 12 kV - 277 V Three Phase	4,539	40	181,560		181,560
Underground Feed Through Single Phase	143,681	25	3,592,025		3,592,025
Underground Feed Through Open Delta Three Phase	5,608	55	308,440		308,440
Underground Feed Through Three Phase 120 V	15,975	55	878,625		878,625
Underground Feed Through Three Phase 277 V	7,485	55	411,675		411,675
Underground Radial Three Phase 120 V	4,368	55	240,240		240,240
Underground Radial Three Phase 277 V	4,105	55	225,775		225,775
Network Transformers	1,977	55	108,735		108,735
Primary Voltage Transformer Installations					
Overhead Primary Voltage Transformers	86	40	3,440		3,440
Station Primary Voltage Transformers	729	55	40,095		40,095
Transformer Totals			14,296,795	-	43,535

Estimated Number of Lightning Arrester Installations

Number of Feet of Overhead Primary (1) 184,021,970
 Number of Arresters at 1,200 Feet per Arrester 153,352

	Estimated Feet of Bare CU Wire Per Installation	Total Estimated Feet	Secondary Wire Allocations	Shared Wire Allocations	Primary Wire Allocations
Number of Arresters and feet of wire	153,352	40		6,134,066	

	Secondary Transformer Allocations	Shared Wire Allocations	Primary Transformer Allocations
Total Bare CU Footage Estimation	14,296,795	6,134,066	43,535
Total Bare CU Percent of Cost Allocation	69.8%	30.0%	0.2%

(1) Number of feet from CEGIS Feeder Report in ICC Docket 10-0467 filing.

Notes

Cspec C5286 for 3 phase pad mounted transformers calls for an average of 55 feet of bare copper wire
 Cspec C5296 for 1 phase pad mounted transformers calls for an average of 25 feet of bare copper wire
 Cspec C8550 for pole mounted grounding installation calls for an average of 40 feet of bare copper wire for an equipment pole
 ComEd standards calls for a lightning arrester installation every 1,200 feet.

Utility Account	GL Account	Retirement Unit	Depreciation Group	Asset Location	Major Location	Quantity	Cost
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Cable-Other	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	8840631	62,310,310.45
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-ACSR/Al-Bare-Single Conductor	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	6678676	17,864,261.67
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-ACSR/Al-Weather Resistant 1C	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	30744401	40,612,959.36
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-CU/Copperweild-bare-1C	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	15713	59,417.30
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-CU-Weather Resistant 1C	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	27129779	16,252,861.04
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-Not CU or ACS Weather Resst 1C	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	51540	530,342.75
CED 365.00 Dist-Ovhd Condrts<69KV	101000 Util Plant In Serv-Unitized	Wire-Other/than CU or Al-Bare 1C	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Inside Chicago	Mass-Inside Chicago	150381	21,970.59

73,611,121.00 137,652,123.16

\$/ Foot of Wire Using the Chicago Method with Bodmer's Work Paper as Directed by the Final Order in ICC Docket 10-0467	\$ 1.87
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Updated with December 31, 2012 plant data.

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 365 - Overhead Conductors and Devices Plant Data

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Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 14,347	\$ -	\$ -	\$ -
Mass-Inside Chicago	\$ 189,369,004	\$ 75,434,531	\$ 34,800,687	\$ 15,711
Mass-Outside Chicago	\$ 1,319,323,216	\$ 210,852,221	\$ 110,817,018	\$ 92,708
69KV Lines IL	\$ 1,203	\$ -	\$ -	\$ -
Grand Total	\$ 1,508,707,769	\$ 286,286,752	\$ 145,617,705	\$ 108,420

Row Totals
\$ 14,347
\$ 299,619,933
\$ 1,641,085,163
\$ 1,203
\$ 1,940,720,646

Percent of Total	77.7%	14.8%	7.5%	0.0%
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Commonwealth Edison Company
 Primary/Secondary Analysis
Determination of Conduit for Secondary Use

City of Chicago Computed Percentage

CEGIS Chicago Conduit Data	
	Length (feet)
Total	12,970,464 (a)
Secondary Only	660,173 (b)
Computed Percent of Secondary Only Conduit Inside Chicago	5.1% (c) = (b)/(a)

Outside City of Chicago Computed Percentage

Utility Account	General Ledger Account	Retirement Unit	Depreciation Group	Asset Location	Major Location	Quantity
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit - Bends	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	20586
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit - Riser	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	9849
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Aluminum	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	2601
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Fiber	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	1954301
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Gas Pipe	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	150
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-in Tunnel	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	9995
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Leased	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	0
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Metallic	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	604976
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Precast Concrete	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	964690
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Plastic	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	9846882
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Pump Log	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	14977
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Steel	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	3043
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Stone	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	115245
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Tile	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	153482
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Transite	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	134945
CED 366.00 Dist-Undg Conduit	101000 Util Plant In Serv-Unitized	Conduit-Unknown Type	Distribution-Excl HVD,Transf&Meters	MASS-Commercial-Outside Chicago	Mass-Outside Chicago	0

Total Feet of Conduit from Plant Data Outside Chicago 13,835,722 (d)

Secondary in Conduit outside the City of Chicago as measured by Engineering staff from available paper and electronic maps

Area	Feet of Conduit
Aurora	25,234
Elgin	23,703
DeKalb	1,444
Freeport	8,858
Rockford	8,453
Evanston	39,279
Oak Brook	5,978
Joliet	10,941
Streator	719
Evergreen Park	3,410
Calumet City	1,600
Oak Park	1,307
Total	130,926

Total Feet of Conduit with Secondary Outside Chicago 130,926 (e)

Percent of Conduit with Secondary Outside the City of Chicago 0.9% (f) = (e)/(d)

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 366 - Underground Conduit Plant Data

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 ComEd Ex. 3.03
 FRU and RDI Primary/Secondary
 366 - Pivot
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Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
ESS	\$ -	\$ -	\$ 977	\$ 20
NC	\$ -	\$ -	\$ 3,822	\$ -
Unspecified - ComEd	\$ (691,133)	\$ (20,617)	\$ (5)	\$ (0)
Warehouses & Storage - Stock	\$ 20,829	\$ 621	\$ 0	\$ 0
Mass-Inside Chicago	\$ 316,118,296	\$ 16,988,444	\$ -	\$ -
Mass-Outside Chicago	\$ 364,285,556	\$ 3,308,345	\$ -	\$ -
Grand Total	\$ 679,733,548	\$ 20,276,793	\$ 4,794	\$ 20
Percent of Total	97.1%	2.9%	0.0%	0.0%

Row Totals
\$ 997
\$ 3,822
\$ (711,754)
\$ 21,451
\$ 333,106,740
\$ 367,593,901
\$ 700,015,155

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 367 - Underground Conductors and Devices Plant Data

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 ComEd Ex. 3.03
 FRU and RDI Primary/Secondary
 367 - Pivot
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Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
ESS	\$ -	\$ -	\$ 11,602	\$ 237
TSS	\$ 45,508	\$ -	\$ -	\$ -
Unspecified - ComEd	\$ (9,288,246)	\$ -	\$ -	\$ -
Warehouses & Storage - Stock	\$ 2,658,517	\$ -	\$ -	\$ -
Mass-Inside Chicago	\$ 1,083,673,840	\$ 126,034,536	\$ 60	\$ 1
Mass-Outside Chicago	\$ 2,564,743,800	\$ 480,160,658	\$ 44	\$ 1
Grand Total	\$ 3,641,833,420	\$ 606,195,194	\$ 11,706	\$ 239
Percent of Total	85.6%	14.4%	0.0%	0.0%

Row Totals
\$ 11,839
\$ 45,508
\$ (9,288,246)
\$ 2,658,517
\$ 1,209,708,437
\$ 3,044,904,504
\$ 4,248,040,559

SYSTEM TRANSFORMERS

	Count Transformer Installations	Count of Transformers	1.19 Materials Multiplier		Total Purchase Cost with Materials Indirect Multiplier	Installation Cost with Labor		Total Purchase and Installation Costs	Percent of Total
			Indirect Multiplier	Total Installation Cost		Indirect Multiplier	Total Installation Cost		
Dry Type Three Phase 480 V to 120 V	1,330	1,330							
Dry Type Single Phase 480 V to 120 V	2,473	2,775							
Dry Type Three Phase 4 or 12 kV to 120 V or 277 V	3,773	3,773							
Dry Type Single Phase 4 or 12 kV to 120 V or 277 V	3,002	6,142							
Total	6,775	9,915			\$ 166,537,328		\$ 46,440,794		
Overhead 4 kV Single Phase	23,477	23,477				\$2,340	\$53,488,231		
Overhead 12 kV Single Phase	145,348	145,348				\$2,340	\$331,149,953		
Overhead 4 kV Open Delta Three Phase	3,119	6,238				\$4,476	\$13,591,435		
Overhead 12 kV Open Delta Three Phase	17,773	35,546				\$4,476	\$77,448,087		
Overhead 4 kV - 120 V Three Phase	3,282	9,846				\$5,759	\$18,399,667		
Overhead 4 kV - 277 V Three Phase	372	1,116				\$5,759	\$2,085,520		
Overhead 12 kV - 120 V Three Phase	15,372	46,116				\$5,759	\$86,179,063		
Overhead 12 kV - 277 V Three Phase	4,539	13,617				\$5,759	\$25,446,706		
Total	213,282	281,304			\$ 460,767,895		\$ 607,788,663		
Underground Feed Through Single Phase	143,681	143,681				\$4,233	\$592,099,113		
Underground Feed Through Open Delta Three Phase	5,608	11,216				\$4,765	\$26,012,474		
Underground Feed Through Three Phase 120 V	15,975	15,975				\$6,255	\$97,280,104		
Underground Feed Through Three Phase 277 V	7,485	7,485				\$6,255	\$45,580,068		
Underground Radial Three Phase 120 V	4,368	4,368				\$3,566	\$15,162,780		
Underground Radial Three Phase 277 \	4,105	4,105				\$3,566	\$14,249,820		
Total	181,222	186,830			\$ 619,292,508		\$ 790,384,360		
Grand Total	401,279	478,049			\$ 1,246,597,731		\$ 1,444,613,817	\$ 2,691,211,548	98.0%

PRIMARY VOLTAGE CUSTOMERS TRANSFORMERS

	Count of Transformer Installations								
Total	815		\$	38,542,417		\$	16,123,635	\$	54,666,053 2.0%

The data provided in this allocator is the same data used in the study presented in ICC Docket No. 11-0721

Commonwealth Edison Company
 Primary/Secondary Analysis
 Account 368 - Distribuiton Line Transformers Plant Data

Docket No. 13-____
 ComEd Ex. 3.03
 FRU and RDI Primary/Secondary
 368 - Pivot
 Page 23 of 23

Major Location	Total Shared Cost	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
Warehouses & Storage - Stock	\$ -	\$ -	\$ 747,435,626	\$ 15,253,788
Mass-Inside Chicago	\$ -	\$ -	\$ 81,467,605	\$ 1,662,604
Mass-Outside Chicago	\$ -	\$ -	\$ 312,382,449	\$ 6,375,152
Grand Total	\$ -	\$ -	\$ 1,141,285,679	\$ 23,291,544
Percent of Total	0.0%	0.0%	98.0%	2.0%

Row Totals
\$ 762,689,414
\$ 83,130,209
\$ 318,757,601
\$ 1,164,577,224