

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

This illustrative Primary/Secondary analysis was revised from the current analysis (ComEd Ex. 3.03) to include all of the findings from the Christensen Associates Energy Consulting ("CA") study presented as ComEd Ex. 3.07 ("CA Distribution Study"). The resulting changes include: (1) changes to pole cost allocations, (2) changes to overhead conductor cost allocations and (3) splitting the shared costs allocation into "at or below 4 kV" and "over 4 kV" cost categories. See "Table 2.3 - Comparison of Allocations in this Study and those in Docket 10-0467" in the CA Distribution Study for a comparison of the cost assignments recommended by CA and those used in the current analysis. For the assignment of shared costs to "at or below 4 kV" and "over 4 kV" costs, CA's recommendation to use direct assignment or a Load Ratio Share of 5.90% of costs to "at or below 4 kV" and 94.10% to "over 4 kV" is used in this analysis.

Table A - Summary of Assignment of Costs

Account	Account Description	Plant In Service - <u>Shared</u> <u>At or Below 4 kV</u> Costs for Customers Receiving a Primary or Secondary Voltage	Plant In Service - <u>Shared</u> <u>Over 4 kV</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	\$ 1,308,786	\$ 20,874,028	\$ -	\$ 32,332,941	\$ 100,183	\$ 54,615,939
362	Distribution Equipment	\$ 14,638,147	\$ 247,415,274	\$ -	\$ 397,648,160	\$ 5,321,579	\$ 665,023,160
364	Poles, Towers, and Fixtures	\$ 66,815,745	\$ 1,128,899,401	\$ 44,853,826	\$ 56,326,557	\$ 763,440	\$ 1,297,658,969
365	Overhead Conductors and Devices	\$ 94,926,643	\$ 1,514,231,312	\$ 291,460,152	\$ 39,994,119	\$ 108,420	\$ 1,940,720,646
366	Underground Conduit	\$ 40,104,279	\$ 639,629,269	\$ 20,276,793	\$ 4,794	\$ 20	\$ 700,015,155
367	Underground Conductors and Devices	\$ 67,813,119	\$ 3,574,020,301	\$ 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	\$ 285,606,719	\$ 7,125,069,585	\$ 962,785,966	\$ 1,667,603,957	\$ 29,585,425	\$ 10,070,651,651
	Percent of Total	2.84%	70.75%	9.56%	16.56%	0.29%	

Notes:

Plant Data as of December 31, 2012

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 (At or Below 4kV)	Shared Dist. Substations (Over 4kV)	Secondary Voltage Dist. Substa.
361	Structures and Lot Improvments	\$ 2,117,284	\$ 359,308,039	\$ -	\$ -	\$ -	\$ -
362	Station Equipment	\$ 71,734,251	\$ 1,582,391,838	\$ -	\$ 14,638,147	\$ 247,415,274	\$ 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	\$ 14,638,147	\$ 247,415,274	\$ 397,648,160

Account	Account Description (3)	Shared Dist. Lines (At or Below 4kV)	Shared Dist. Lines (Over 4kV)	Secondary Voltage Dist. Lines	Primary Voltage Transformers	Secondary Voltage Transformers
361	Structures and Lot Improvments	\$ 1,308,786	\$ 20,874,027	\$ -	\$ 100,183	\$ 32,332,941
362	Station Equipment	\$ -	\$ -	\$ -	\$ 5,321,579	\$ -
364	Poles, Towers, and Fixtures	\$ 66,815,745	\$ 1,128,899,402	\$ 44,853,826	\$ 763,440	\$ 56,326,557
365	Overhead Conductors and Devices	\$ 94,926,643	\$ 1,514,231,310	\$ 291,460,152	\$ 108,420	\$ 39,994,119
366	Underground Conduit	\$ 40,104,279	\$ 639,629,268	\$ 20,276,793	\$ 20	\$ 4,794
367	Underground Conductors and Devices	\$ 67,813,119	\$ 3,574,020,300	\$ 606,195,194	\$ 239	\$ 11,706
368	Line Transformers			\$ -	\$ 23,291,544	\$ 1,141,285,677
TOTAL		\$ 270,968,572	\$ 6,877,654,307	\$ 962,785,965	\$ 29,585,425	\$ 1,269,955,794

Account	Account Description	Total	Form 1 - Pages 206-207	Difference
361	Structures and Lot Improvments	\$ 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. 3.10 in Sch. 1b, line 14.
- (2) Input into ComEd Ex. 3.10 in Sch. 1b, line 18.
- (3) Input into ComEd Ex. 3.10 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

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 1,280,542	\$ 20,423,564	\$ -	\$ -	\$ -
ESS	\$ -	\$ -	\$ -	\$ 4,908,968	\$ 100,183
NC	\$ -	\$ -	\$ -	\$ 27,410,169	\$ -
NC - D.C.	\$ -	\$ -	\$ -	\$ 13,804	\$ -
TDC	\$ 13,633	\$ 217,442	\$ -	\$ -	\$ -
TSS	\$ 6,913	\$ 110,262	\$ -	\$ -	\$ -
138 KV Lines IL	\$ 7,697	\$ 122,760	\$ -	\$ -	\$ -
Mass-Outside Chicago	\$ (0)	\$ (1)	\$ -	\$ -	\$ -
Grand Total	\$ 1,308,786	\$ 20,874,028	\$ -	\$ 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	2.4%	38.2%	0.0%	59.2%	0.2%
------------------	------	-------	------	-------	------

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost	Row Totals
DSS	\$ 14,174,193	\$ 239,661,002	\$ -	\$ -	\$ -	\$ 253,835,195
ESS	\$ -	\$ -	\$ -	\$ 258,819,196	\$ 5,282,024	\$ 264,101,220
NC	\$ -	\$ -	\$ -	\$ 135,530,811	\$ -	\$ 135,530,811
NC - D.C.	\$ -	\$ -	\$ -	\$ 342,477	\$ -	\$ 342,477
TDC	\$ 149,541	\$ 2,465,921	\$ -	\$ -	\$ -	\$ 2,615,463
TSS	\$ 198,384	\$ 3,416,716	\$ -	\$ -	\$ -	\$ 3,615,100
Unspecified - ComEd	\$ 17,617	\$ 302,048	\$ -	\$ 485,069	\$ 6,491	\$ 811,225
Warehouses & Storage - Stock	\$ 93,863	\$ 1,497,038	\$ -	\$ 2,414,084	\$ 32,307	\$ 4,037,292
Mass-Inside Chicago	\$ 318	\$ 5,070	\$ -	\$ 8,175	\$ 109	\$ 13,672
Mass-Outside Chicago	\$ 1,880	\$ 29,982	\$ -	\$ 48,348	\$ 647	\$ 80,858
General - Communications - Structur	\$ (0)	\$ (0)	\$ -	\$ -	\$ -	\$ (0)
General - Offices - Corp. - Struct.	\$ 2,351	\$ 37,498	\$ -	\$ -	\$ -	\$ 39,849
Grand Total	\$ 14,638,147	\$ 247,415,274	\$ -	\$ 397,648,160	\$ 5,321,579	\$ 665,023,160
Percent of Total	2.2%	37.2%	0.0%	59.8%	0.8%	

Assignment of Costs for Poles Based Upon the Christensen Associates Energy Consulting Field Review and Sampling Analysis**Poles over 50 ft.**

Secondary	0.0%
Secondary Transformer	2.5%
Primary	97.5%

Poles up to 50 ft.

Secondary	5.0%
Secondary Transformer	2.2%
Primary	92.8%

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

Docket No. 13-____
 ComEd Ex. 3.11
 ILLUSTRATIVE PRI/SEC ANALYSIS WITH ALL CA FINDINGS
 364 - Pivot
 7 of 16

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
DSS	\$ 2,502	\$ 12,440	\$ 496	\$ 623	\$ 8
ESS	\$ -	\$ -	\$ -	\$ 585	\$ 12
TSS	\$ 780	\$ 12,440	\$ 496	\$ 623	\$ 8
Mass-Inside Chicago	\$ 12,801,149	\$ 208,094,222	\$ 13,920,812	\$ 15,911,206	\$ 250,299
Mass-Outside Chicago	\$ 54,011,314	\$ 920,780,300	\$ 30,932,023	\$ 40,413,521	\$ 513,112
Grand Total	\$ 66,815,745	\$ 1,128,899,401	\$ 44,853,826	\$ 56,326,557	\$ 763,440
Percent of Total	5%	87%	3%	4%	0%

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

Commonwealth Edison Company
Primary/Secondary Analysis
Overhead Weather Resistant Wire Allocation

Docket No. 13-____
ComEd Ex. 3.11
ILLUSTRATIVE PRI/SEC
ANALYSIS WITH ALL CA FINDINGS
Weather Res Wire
8 of 16

**Assignment of Costs for Weather Resistant Wire Based Upon the Christensen Associates Energy Consulting
Field Review and Sampling Analysis**

Percent of Weather Resistant Wire Assigned to Secondary Transformer	1.0%
Percent of Weather Resistant Wire Assigned to Secondary Distribution	22.4%
Percent of Weather Resistant Wire Assigned to Shared	76.6%

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/Copperweld-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
---	----------------

Updated with December 31, 2012 plant data.

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost	Row Totals
DSS	\$ -	\$ 14,347	\$ -	\$ -	\$ -	\$ 14,347
Mass-Inside Chicago	\$ 12,784,875	\$ 203,907,922	\$ 76,841,765	\$ 6,069,660	\$ 15,711	\$ 299,619,933
Mass-Outside Chicago	\$ 82,141,768	\$ 1,310,307,840	\$ 214,618,387	\$ 33,924,460	\$ 92,708	\$ 1,641,085,163
69KV Lines IL	\$ -	\$ 1,203	\$ -	\$ -	\$ -	\$ 1,203
Grand Total	\$ 94,926,643	\$ 1,514,231,312	\$ 291,460,152	\$ 39,994,119	\$ 108,420	\$ 1,940,720,646
Percent of Total	4.9%	78.0%	15.0%	2.1%	0.0%	

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	20,586
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	9,849
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	2,601
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	1,954,301
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	9,995
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	-
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	604,976
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	964,680
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	9,846,882
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	14,977
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	3,043
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	115,245
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	153,482
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	134,945
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	-

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)

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
ESS	\$ -	\$ -	\$ -	\$ 977	\$ 20
NC	\$ -	\$ -	\$ -	\$ 3,822	\$ -
Unspecified - ComEd	\$ (40,777)	\$ (650,356)	\$ (20,617)	\$ (5)	\$ (0)
Warehouses & Storage - Stock	\$ 1,229	\$ 19,600	\$ 621	\$ 0	\$ 0
Mass-Inside Chicago	\$ 18,650,979	\$ 297,467,316	\$ 16,988,444	\$ -	\$ -
Mass-Outside Chicago	\$ 21,492,848	\$ 342,792,708	\$ 3,308,345	\$ -	\$ -
Grand Total	\$ 40,104,279	\$ 639,629,269	\$ 20,276,793	\$ 4,794	\$ 20
Percent of Total	5.7%	91.4%	2.9%	0.0%	0.0%

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

Major Location	Total Shared Cost At or Below 4 kV	Total Shared Cost Above 4 kV	Total Secondary Distribution Cost	Total Secondary Transformer Cost	Total Primary Transformer Cost
ESS	\$ -	\$ -	\$ -	\$ 11,602	\$ 237
TSS	\$ 2,685	\$ 42,823	\$ -	\$ -	\$ -
Unspecified - ComEd	\$ -	\$ (9,288,246)	\$ -	\$ -	\$ -
Warehouses & Storage - Stock	\$ 156,852	\$ 2,501,664	\$ -	\$ -	\$ -
Mass-Inside Chicago	\$ 36,951,609	\$ 1,046,722,231	\$ 126,034,536	\$ 60	\$ 1
Mass-Outside Chicago	\$ 30,701,972	\$ 2,534,041,828	\$ 480,160,658	\$ 44	\$ 1
Grand Total	\$ 67,813,119	\$ 3,574,020,301	\$ 606,195,194	\$ 11,706	\$ 239
Percent of Total	1.6%	84.1%	14.3%	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 Indirect Multiplier Typical Dry Type 480 V to 120 V transformers are installed by the Customer	Total Installation Cost	Total Purchase and Installation Costs	Percent of Total
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				\$4,684	\$17,672,326		
Dry Type Single Phase 4 or 12 kV to 120 V or 277 V	3,002	6,142				\$4,684	\$28,768,468		
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 - Distribution Line Transformers Plant Data

Docket No. 13-____
 ComEd Ex. 3.11
 ILLUSTRATIVE PRI/SEC
 ANALYSIS WITH ALL CA FINDINGS
 368 - Pivot
 16 of 16

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