UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. ELECTRIC PLANT IN SERVICE							
A. INTANGIBLE PLANT							
Organization	301	380	251	1	75	32	21
Franchises and Consents	302	0	0	0	0	0	0
Miscellaneous Intangible Plant	303	6,353,387	4,199,330	18,940	1,246,083	533,109	355,925
Subtotal - INTANGIBLE PLANT	301-303	6,353,767	4,199,581	18,941	1,246,158	533,141	355,946
B. PRODUCTION PLANT							
Land and Land Rights	310, 320, 330, 340	0	0	0	0	0	0
Structures and Improvements	311, 321, 331, 341	0	0	0	0	0	0
Boiler Plant Equipment	(312, 342)	0	0	0	0	0	0
Reactor Plant Equipment	322	0	0	0	0	0	0
Engines and Generators	(343, 323)	56,575	23,983	0	17,654	14,938	0
Turbogenerator Units	(314, 333, 344)	0	0	0	0	0	0
Accessory Electric Equipment	315, 324, 334, 345	0	0	0	0	0	0
Misc. Power Plant Equipment	6, 325, 332, 335,3	0	0	0	0	0	0
Subtotal - OTHER PLANT	340-346	56,575	23,983	0	17,654	14,938	0
Subtotal - PRODUCTION PLANT	304-346	56,575	23,983	0	17,654	14,938	0
C. TRANSMISSION PLANT							
Land and Land Rights	350	0	0	0	0	0	0
Structures and Improvements	352	0	0	0	0	0	0
Station Equipment	353	0	0	0	0	0	0
Towers and Fixtures	354	0	0	0	0	0	0
Poles and Fixtures	355	0	0	0	0	0	0
Overhead Conductors and Devices	356	0	0	0	0	0	0
Underground Conduit	357	0	0	0	0	0	0
Underground Conductors and Devices	358	0	0	0	0	0	0
Roads and Trails	359	0	0	0	0	0	0
Subtotal - TRANSMISSION PLANT	350-359	0	0	0	0	0	0

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	G2	G1	OL
				TOTAL			
D. DISTRIBUTION PLANT							
Land and Land Rights	360	2,665,928	1,198,358	5,938	768,160	674,009	19,463
Structures and Improvements	361	4,759,019	2,139,220	10,600	1,371,263	1,203,191	34,745
Station Equipment	362	28,718,883	12,909,384	63,967	8,275,055	7,260,806	209,671
Compressor Station Equipment	363	0	0	0	0	0	0
Poles, Towers and Fixtures	364	54,881,358	37,206,565	166,782	9,556,280	3,546,239	4,405,492
Overhead Conductors and Devices	365	71,414,284	46,819,955	211,492	13,339,150	5,847,737	5,195,950
Underground Conduit	366	1,841,623	1,398,261	6,116	235,795	3,217	198,234
Underground Conductors and Devices	367	18,242,829	12,085,311	54,459	3,336,507	1,396,971	1,369,582
Line Transformers	368	43,163,325	32,705,035	146,376	8,159,348	2,055,319	97,246
Services	369	20,341,811	15,278,363	66,828	4,954,027	42,592	0
Meters	370	13,663,983	11,391,725	49,828	1,924,720	297,710	0
Installed on Cust Premise PR_L	371	1,886,935	1,573,146	6,881	265,795	41,112	0
Other Property on Customers Premise	372	0	0	0	0	0	0
Street Lighting and Signals	373	3,237,653	0	0	0	0	3,237,653
Subtotal - DISTRIBUTION PLANT	374-387	264,817,631	174,705,322	789,268	52,186,101	22,368,903	14,768,037
E. GENERAL PLANT							
Land and Land Rights	389	18,620	12,863	56	3,238	1,305	1,158
Structures and Improvements	390	3,787,332	2,616,427	11,403	658,625	265,347	235,530
Office Furniture and Equipment	391	267,375	184,713	805	46,497	18,733	16,628
Transportation Equipment	392	1,078,761	745,248	3,248	187,599	75,580	67,087
Stores Equipment	393	79,908	55,204	241	13,896	5,599	4,969
Tools, Shop and Garage Equipment	394	1,539,171	1,063,315	4,634	267,665	107,837	95,719
Laboratory Equipment	395	792,711	547,634	2,387	137,854	55,539	49,298
Power Operated Equipment	396	0	0	0	0	0	0
Communication Equipment	397	3,772,058	2,605,875	11,357	655,969	264,277	234,580
Miscellaneous Equipment	398	102,943	71,117	310	17,902	7,212	6,402
Subtotal - GENERAL PLANT	389-399	11,438,880	7,902,395	34,439	1,989,246	801,428	711,372
TOTAL PLANT IN SERVICE	101	282,666,854	186,831,282	842,648	55,439,159	23,718,410	15,835,355
ADDITIONS TO UTILITY PLANT							
Energy Conservation Programs	182.3	0	0	0	0	0	0
Property Held for Future Use	105	0	0	0	0	0	0
Construction Work in Progress	107	0	0	0	0	0	0
Nuclear Plant Costs - Calvert Cliffs	182.3	0	0	0	0	0	0
Total Additions to Utility Plant		0	0	0	0	0	0
TOTAL UTILITY PLANT		282,666,854	186,831,282	842,648	55,439,159	23,718,410	15,835,355

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
II. DEPRECIATION RESERVE							
Intangible	108.3	-4,082,537	-2,698,391	-12,170	-800,704	-342,563	-228,709
Transmission	108.4	0	0	0	0	0	0
Procurement Supply	108	-17,747	-7,523	0	-5,538	-4,686	0
StreetLighting	108	-1,881,836	0	0	0	0	-1,881,836
Primary-Distribution	108	-7,507,748	-3,374,797	-16,722	-2,163,281	-1,898,134	-54,813
Overhead Lines	108	-45,032,355	-29,523,685	-133,362	-8,411,389	-3,687,461	-3,276,457
Underground Lines	108	-7,527,359	-4,986,643	-22,471	-1,376,710	-576,418	-565,117
Transformers	108	-12,929,311	-9,796,594	-43,846	-2,444,083	-615,658	-29,130
Services	108	-13,235,456	-9,940,909	-43,482	-3,223,352	-27,713	0
Metering	108.5	10,847	9,043	40	1,528	236	0
Other Property on Customers Premise	108.6	-363,888	-303,375	-1,327	-51,258	-7,928	0
General	108.7	-6,412,647	-4,430,090	-19,307	-1,115,173	-449,281	-398,796
Subtotal-DEPRECIATION RESERVE		-98,980,036	-65,052,964	-292,648	-19,589,960	-7,609,607	-6,434,857
Dep. Res.- adjust for 13 month avg.	108.9	0	0	0	0	0	0
TOTAL RESERVE FOR DEPRECIATION	108	-98,980,036	-65,052,964	-292,648	-19,589,960	-7,609,607	-6,434,857
III. OTHER RATE BASE ITEMS							
Deferred Fuel Cost	183	0	0	0	0	0	0
Prepayments	165	7,616,460	5,034,170	22,705	1,493,808	639,093	426,684
Cash Working Capital	131	2,659,151	1,757,591	7,927	521,537	223,128	148,969
Materials and Supplies	154	1,410,324	932,167	4,204	276,605	118,339	79,008
Regulatory Assets	182, 254	558,673	369,260	1,665	109,572	46,878	31,298
Customer Deposits	235	-1,480,939	-1,112,306	-4,865	-360,667	-3,101	0
Deferred Income Tax	190	-41,499,086	-27,429,206	-123,711	-8,139,173	-3,482,164	-2,324,831
Total - OTHER RATE BASE ITEMS	131-283	-30,735,416	-20,448,325	-92,075	-6,098,317	-2,457,827	-1,638,873
TOTAL RATE BASE		152,951,401	101,329,993	457,925	29,750,882	13,650,976	7,761,625

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. OPERATING AND MAINTENANCE EXPE							
A. PRODUCTION EXPENSES							
Supervision and Engineering	(500, 517, 546)	0	0	0	0	0	0
Fuel	(501)	0	0	0	0	0	0
Fuel - Nuclear & Other	(518, 547)	0	0	0	0	0	0
Steam expense	(502, 520)	0	0	0	0	0	0
Electric Expenses	(505, 523)	0	0	0	0	0	0
Generation Expense	(548, 549)	0	0	0	0	0	0
Misc. Generation Expenses	5, 507, 509, 519, 5	0	0	0	0	0	0
Gas Turbine Lease	(550)	0	0	0	0	0	0
Maintenance - Supervision and Engineering	(510, 528, 551)	0	0	0	0	0	0
Maintenance of Structures	(511, 529, 552)	0	0	0	0	0	0
Maintenance of Generation Plant	512, 513, 530-533	0	0	0	0	0	0
Maintenance of Steam Plant	(514)	0	0	0	0	0	0
Maintenance of Misc. Plant	(554)	0	0	0	0	0	0
Subtotal - Other Production	500-554	0	0	0	0	0	0
Purchased Power Expenses	555	0	0	0	0	0	0
Other Variable Expenses	Mix	0	0	0	0	0	0
Load Dispatch	556	0	0	0	0	0	0
Other Purchased Power	557	281,438	114,248	193	83,105	82,062	1,829
Subtotal	556-557	281,438	114,248	193	83,105	82,062	1,829
TOTAL PRODUCTION EXPENSE	500-557	281,438	114,248	193	83,105	82,062	1,829

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
B. TRANSMISSION EXPENSE							
Supervision and Engineering	560	14,391	6,101	0	4,491	3,800	0
Load Dispatching	561	80,772	34,240	0	25,205	21,326	0
Station Expenses	562	16,709	7,083	0	5,214	4,412	0
Overhead Line Expenses	563	22,573	9,569	0	7,044	5,960	0
Underground Lines Expenses	564	0	0	0	0	0	0
Transmission by Others-Demand	565	0	0	0	0	0	0
Transmission by Others-Energy	565	0	0	0	0	0	0
Miscellaneous Expenses	566	0	0	0	0	0	0
Rents	567	2,000	848	0	624	528	0
Supervision and Engineering	568	25,780	10,928	0	8,045	6,807	0
Maintenance of Structures	569	0	0	0	0	0	0
Maintenance of Station Equipment	570	33,546	14,221	0	10,468	8,857	0
Maintenance of Overhead Lines	571	3,617	1,533	0	1,129	955	0
Maintenance of Underground Lines	572	0	0	0	0	0	0
Misc Maintenance - Credits	573	0	0	0	0	0	0
TOTAL TRANSMISSION EXPENSES	560-573	199,387	84,524	0	62,219	52,645	0
C. DISTRIBUTION EXPENSE							
Operation Supervision & Engineering	580	1,230,624	821,866	3,692	216,111	90,356	98,600
Load Dispatching	581	62,144	34,111	161	15,616	10,040	2,216
Station Expenses	582	163,022	73,280	363	46,973	41,216	1,190
Overhead Line Expenses	583	263,243	172,585	780	49,170	21,556	19,153
Underground Line Expenses	584	141,391	93,667	422	25,860	10,827	10,615
Street Light and Signal Systems	585	199,283	0	0	0	0	199,283
Meter Expenses	586	589,769	491,693	2,151	83,075	12,850	0
Customer Installation Expenses	587	11,227	9,360	41	1,581	245	0
Misc. Distribution Expenses	588	78,533	51,748	234	15,454	6,624	4,473
Rents	589	568	374	2	112	48	32
Maint Supervision & Engineering	590	164,107	109,598	492	28,819	12,049	13,149
Maint of Structures	591	342	154	1	99	87	2
Maintenance of Station Equipment	592	133,884	60,182	298	38,577	33,849	977
Maintenance of Overhead Lines	593	4,800,687	3,147,381	14,217	896,698	393,103	349,288
Vegetation Management	593-Demand	1,019,289	458,179	2,270	293,698	257,700	7,442
Maintenance of Underground Lines	594	383	254	1	70	29	29
Maintenance of Line Transformers	595	969	734	3	183	46	2
Maintenance of Street Lights	596	2,488	0	0	0	0	2,488
Maintenance of Meters	597	11,956	9,968	44	1,684	260	0
Maintenance of Misc. Plant	598	17,805	11,732	53	3,504	1,502	1,014
Test Year Distribution Payroll Adjustments	NA	331,108	221,129	993	58,146	24,311	26,529
Subtotal - DISTRIBUTION EXPENSES	580-599	9,222,823	5,767,994	26,218	1,775,431	916,697	736,483
Total - OPER. AND MAINT. EXPENSE	500-599	9,703,648	5,966,765	26,411	1,920,754	1,051,404	738,312

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
D. CUSTOMER ACCOUNTS AND SERVIC							
Supervision	901	0	0	0	0	0	0
Meter Reading Expenses	902	97,812	81,547	357	13,778	2,131	0
Customer Records & Collection Expense	903	2,757,165	2,320,604	10,150	373,841	5,073	47,496
Uncollectible Accounts	904	739,118	706,923	79	32,116	0	0
Misc Customer Accounts Expenses	905	0	0	0	0	0	0
Subtotal - Customer Accounts Expense	901-905	3,594,095	3,109,074	10,586	419,735	7,204	47,496
Customer Assistance Exp Electric	(907, 908)	0	0	0	0	0	0
Supervision	909	1,438	1,092	5	184	3	155
Customer Assistance Expenses	910	0	0	0	0	0	0
Information, Instructional Advertising	911	0	0	0	0	0	0
Misc Customer Serv & Inform Expen	912	0	0	0	0	0	0
Rents	913	0	0	0	0	0	0
Subtotal - Customer Service & Info.	909-913	1,438	1,092	5	184	3	155
Supervision	915	0	0	0	0	0	0
Demonstrating & Selling Expenses	916	0	0	0	0	0	0
Advertising Expenses	917	0	0	0	0	0	0
Miscellaneous Sales Expenses	918	0	0	0	0	0	0
Subtotal - Sales Expense	915-919	0	0	0	0	0	0
Total - CUST ACCTS, SERVS, & SALES E	901-919	3,595,533	3,110,165	10,591	419,919	7,207	47,651

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
E. ADMINISTRATIVE AND GENERAL							
LABOR RELATED EXPENSES							
Administrative & General Salaries	920	30,793	21,273	93	5,355	2,157	1,915
Office Supplies & Expenses	921	455,714	314,824	1,372	79,250	31,928	28,340
Admin Expenses Transferred-Credit	922	0	0	0	0	0	0
Outside Services Employed	923	4,321,771	2,985,637	13,012	751,565	302,791	268,766
Key Account Management	923-Dir	280,360	0	0	127,212	153,148	0
Employee Pensions and Benefits	926	2,607,425	1,801,304	7,850	453,437	182,681	162,153
Subtotal - O & M Accounts 920-923,926	920-926	7,696,062	5,123,037	22,327	1,416,818	672,705	461,175
PLANT RELATED EXPENSES							
Property Insurance	924	100,912	66,699	301	19,792	8,467	5,653
Injuries and Damages	925	204,582	135,221	610	40,125	17,166	11,461
Maintenance of General Plant (also acct 93	935	140,760	93,037	420	27,607	11,811	7,886
Subtotal - O & M Accounts 924-925	924,925,935	446,254	294,956	1,330	87,523	37,445	25,000
OTHER A&G EXPENSES							
Franchise Requirements	927	102	68	0	19	9	6
Regulatory Commission Expenses	928	185,716	123,577	540	34,312	16,198	11,089
Duplicate Charges-Credit	929	0	0	0	0	0	0
General Advertising Expenses	930.1	140,218	93,303	407	25,906	12,229	8,372
Rents	931	0	0	0	0	0	0
Test year Inflation Allowance	NA	141,596	94,220	411	26,161	12,350	8,455
Subtotal	927-932	467,632	311,168	1,359	86,398	40,786	27,922
TOTAL A&G EXPENSES	920-932	8,609,949	5,729,161	25,016	1,590,739	750,936	514,097
TOTAL OPERATING EXPENSES		21,909,130	14,806,092	62,018	3,931,413	1,809,547	1,300,060

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
II. DEPRECIATION EXPENSE							
Intangible	403.1	0	0	0	0	0	0
Transmission	403	0	0	0	0	0	0
Procurement Supply	403	3,847	1,631	0	1,200	1,016	0
StreetLighting	403	260,307	0	0	0	0	260,307
Primary-Distribution	403	882,897	396,870	1,967	254,398	223,217	6,446
Overhead Lines	403	4,756,386	3,118,337	14,086	888,424	389,475	346,064
Underground Lines	403	514,628	340,925	1,536	94,122	39,408	38,636
Transformers	403	1,302,827	987,158	4,418	246,279	62,037	2,935
Services	403.5	1,185,928	890,729	3,896	288,820	2,483	0
Metering	403.6	694,131	578,700	2,531	97,776	15,124	0
Other Property on Customers Premise	403.6	146,992	122,548	536	20,705	3,203	0
General	403.7	437,972	302,567	1,319	76,164	30,685	27,237
Amortization	#REF!	1,680,347	1,110,641	5,009	329,565	140,997	94,135
TOTAL DEPRECIATION EXPENSES		11,866,262	7,850,105	35,298	2,297,454	907,645	775,760
III. TAXES							
A. GENERAL TAXES							
Payroll Taxes	408.15	135,277	93,454	407	23,525	9,478	8,413
Unemployment Tax	408.16	3,256	2,249	10	566	228	202
Real Estate Taxes	408.17	6,091,543	4,026,262	18,159	1,194,728	511,138	341,256
Subtotal - General Taxes		6,230,076	4,121,966	18,576	1,218,819	520,844	349,871
B. FRANCHISE AND REVENUE TAXES							
Maryland Franchise Tax T&D	408.11	137,060	90,591	409	26,882	11,501	7,678
PSC Assessment	408.12	0	0	0	0	0	0
Subtotal - Franchise & Gross Receipts		137,060	90,591	409	26,882	11,501	7,678
Federal Income Taxes - Current		-315,463	-208,508	-940	-61,871	-26,470	-17,673
State Income Taxes - Current		577,861	381,943	1,723	113,335	48,488	32,373
Provision for Deferred FIT		2,822,623	1,865,639	8,414	553,598	236,845	158,127
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,039,073	9,197	605,062	258,862	172,827
TOTAL TAXES		9,452,158	6,251,630	28,182	1,850,763	791,207	530,376
TOTAL EXPENSES		43,227,550	28,907,828	125,498	8,079,629	3,508,399	2,606,197

UNITIL ENERGY SYSTEMS, INC.
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12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
IV. OPERATING REVENUES							
Electric Revenues	440-446	51,823,377	26,549,941	65,721	16,442,452	7,114,162	1,651,100
Late Payment Charges	450	481,633	463,071	2,025	16,536	0	0
Connect/Disconnect Revenue	440-446	160,502	139,255	345	20,903	0	0
Rent	451	443,900	293,400	1,323	87,062	37,247	24,868
Other Sales	449	1,115,301	571,386	1,414	353,861	153,105	35,534
Unbilled Reclassification		-1,337,801	-685,377	-1,697	-424,456	-183,649	-42,623
Misc Revenue	456	151,101	77,412	192	47,941	20,743	4,814
Total Operating Revenues		52,838,014	27,409,088	69,324	16,544,299	7,141,608	1,673,693
Gains/Losses from Energy Purchases		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
V. NET INCOME		9,605,687	-1,502,327	-56,189	8,463,507	3,633,200	-932,503
Rate of Return		6.28%	-1.48%	-12.27%	28.45%	26.61%	-12.01%

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
SUMMARY REPORT							
OPERATING REVENUES							
Total Operating Revenues		52,838,014	27,409,088	69,324	16,544,299	7,141,608	1,673,693
OPERATING EXPENSES							
Production	500-555	281,438	114,248	193	83,105	82,062	1,829
Transmission	560-573	199,387	84,524	0	62,219	52,645	0
Distribution	580-599	9,222,823	5,767,994	26,218	1,775,431	916,697	736,483
Customer Acctg & Service	901-919	3,595,533	3,110,165	10,591	419,919	7,207	47,651
Admin & General	920-932	8,609,949	5,729,161	25,016	1,590,739	750,936	514,097
Total Operating Expenses		21,909,130	14,806,092	62,018	3,931,413	1,809,547	1,300,060
DEPRECIATION & AMRTIZATION EXPEN!	403	11,866,262	7,850,105	35,298	2,297,454	907,645	775,760
TAXES OTHER THAN INCOME TAX	408	6,367,137	4,212,557	18,985	1,245,701	532,344	357,549
INCOME BEFORE INCOME TAXES		12,695,485	540,334	-46,977	9,069,732	3,892,072	-759,676
INCOME TAXES							
Income Taxes - Current		262,398	173,435	782	51,464	22,018	14,700
Provision for Deferred FIT		2,822,623	1,865,639	8,414	553,598	236,845	158,127
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,039,073	9,197	605,062	258,862	172,827
OPERATING INCOME		9,610,463	-1,498,740	-56,174	8,464,670	3,633,210	-932,503
Gains/Losses		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
NET INCOME		9,605,687	-1,502,327	-56,189	8,463,507	3,633,200	-932,503
		0	0	0	0	0	0
RATE BASE		152,951,401	101,329,993	457,925	29,750,882	13,650,976	7,761,625
RETURN ON RATE BASE		6.28%	-1.48%	-12.27%	28.45%	26.61%	-12.01%
Unitized Rate of Return		1.00	-0.24	-1.95	4.53	4.24	-1.91

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Base
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
REVENUE REQUIREMENTS							
RATE OF RETURN by Function		8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
Using Target for System							
RATE BASE		152,951,401	101,329,993	457,925	29,750,882	13,650,976	7,761,625
OPERATING EXPENSES		21,909,130	14,806,092	62,018	3,931,413	1,809,547	1,300,060
DEPRECIATION EXPENSE		11,866,262	7,850,105	35,298	2,297,454	907,645	775,760
GENERAL TAXES		6,230,076	4,121,966	18,576	1,218,819	520,844	349,871
Other costs (benefits), net of taxes		141,837	94,179	424	28,045	11,511	7,678
Subtotal- Operating Costs to recover		40,147,306	26,872,342	116,317	7,475,731	3,249,546	2,433,370
Target Return on Rate Base- After taxes		13,383,248	8,866,374	40,068	2,603,202	1,194,460	679,142
Actual Historic FIT		-315,463	-208,508	-940	-61,871	-26,470	-17,673
Actual Historic SIT		577,861	381,943	1,723	113,335	48,488	32,373
Incremental Tax Due to Target ROR	0	2,477,715	1,656,682	7,254	466,564	204,538	142,676
Targeted Tax		2,740,113	1,830,116	8,037	518,028	226,556	157,376
Provision for Deferred FIT		2,822,623	1,865,639	8,414	553,598	236,845	158,127
ITC Adjustment, net		0	0	0	0	0	0
FIT to recover		5,562,736	3,695,755	16,451	1,071,626	463,401	315,503
Subtotal- Rev Req before Uncollectible Adj.		59,093,289	39,434,472	172,836	11,150,559	4,907,407	3,428,015
Proforma Incr for Uncollect. Calc		0	0	0	0	0	0
Other		0	0	0	0	0	0
TOTAL REVENUE REQUIREMENT		59,093,289	39,434,472	172,836	11,150,559	4,907,407	3,428,015
OPERATING REVENUES		52,838,014	27,409,088	69,324	16,544,299	7,141,608	1,673,693
Revenue Excess (Deficiency)		-6,255,276	-12,025,383	-103,512	5,393,740	2,234,201	-1,754,322

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. ELECTRIC PLANT IN SERVICE							
A. INTANGIBLE PLANT							
Organization	301	380	251	1	74	32	21
Franchises and Consents	302	0	0	0	0	0	0
Miscellaneous Intangible Plant	303	6,353,387	4,198,227	21,324	1,245,376	532,553	355,907
Subtotal - INTANGIBLE PLANT	301-303	6,353,767	4,198,478	21,326	1,245,450	532,585	355,928
B. PRODUCTION PLANT							
Land and Land Rights	310, 320, 330, 340	0	0	0	0	0	0
Structures and Improvements	311, 321, 331, 341	0	0	0	0	0	0
Boiler Plant Equipment	(312, 342)	0	0	0	0	0	0
Reactor Plant Equipment	322	0	0	0	0	0	0
Engines and Generators	(343, 323)	56,575	23,910	173	17,600	14,892	0
Turbogenerator Units	(314, 333, 344)	0	0	0	0	0	0
Accessory Electric Equipment	315, 324, 334, 345	0	0	0	0	0	0
Misc. Power Plant Equipment	6, 325, 332, 335,3	0	0	0	0	0	0
Subtotal - OTHER PLANT	340-346	56,575	23,910	173	17,600	14,892	0
Subtotal - PRODUCTION PLANT	304-346	56,575	23,910	173	17,600	14,892	0
C. TRANSMISSION PLANT							
Land and Land Rights	350	0	0	0	0	0	0
Structures and Improvements	352	0	0	0	0	0	0
Station Equipment	353	0	0	0	0	0	0
Towers and Fixtures	354	0	0	0	0	0	0
Poles and Fixtures	355	0	0	0	0	0	0
Overhead Conductors and Devices	356	0	0	0	0	0	0
Underground Conduit	357	0	0	0	0	0	0
Underground Conductors and Devices	358	0	0	0	0	0	0
Roads and Trails	359	0	0	0	0	0	0
Subtotal - TRANSMISSION PLANT	350-359	0	0	0	0	0	0

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
D. DISTRIBUTION PLANT							
Land and Land Rights	360	2,665,928	1,197,115	8,696	767,364	673,310	19,443
Structures and Improvements	361	4,759,019	2,137,001	15,524	1,369,841	1,201,944	34,709
Station Equipment	362	28,718,883	12,895,997	93,683	8,266,473	7,253,276	209,454
Compressor Station Equipment	363	0	0	0	0	0	0
Poles, Towers and Fixtures	364	54,881,358	37,199,150	182,784	9,551,527	3,542,529	4,405,368
Overhead Conductors and Devices	365	71,414,284	46,807,658	238,030	13,331,268	5,841,584	5,195,744
Underground Conduit	366	1,841,623	1,398,261	6,116	235,795	3,217	198,234
Underground Conductors and Devices	367	18,242,829	12,082,379	60,787	3,334,627	1,395,504	1,369,533
Line Transformers	368	43,163,325	32,698,455	159,536	8,155,185	2,053,014	97,135
Services	369	20,341,811	15,278,363	66,828	4,954,027	42,592	0
Meters	370	13,663,983	11,391,725	49,828	1,924,720	297,710	0
Installed on Cust Premise PR_L	371	1,886,935	1,573,146	6,881	265,795	41,112	0
Other Property on Customers Premise	372	0	0	0	0	0	0
Street Lighting and Signals	373	3,237,653	0	0	0	0	3,237,653
Subtotal - DISTRIBUTION PLANT	374-387	264,817,631	174,659,251	888,693	52,156,623	22,345,792	14,767,273
E. GENERAL PLANT							
Land and Land Rights	389	18,620	12,860	63	3,236	1,303	1,158
Structures and Improvements	390	3,787,332	2,615,823	12,763	658,220	265,004	235,522
Office Furniture and Equipment	391	267,375	184,670	901	46,469	18,709	16,627
Transportation Equipment	392	1,078,761	745,075	3,635	187,483	75,482	67,085
Stores Equipment	393	79,908	55,191	269	13,888	5,591	4,969
Tools, Shop and Garage Equipment	394	1,539,171	1,063,070	5,187	267,500	107,698	95,716
Laboratory Equipment	395	792,711	547,507	2,671	137,769	55,467	49,296
Power Operated Equipment	396	0	0	0	0	0	0
Communication Equipment	397	3,772,058	2,605,274	12,711	655,565	263,936	234,572
Miscellaneous Equipment	398	102,943	71,101	347	17,891	7,203	6,402
Subtotal - GENERAL PLANT	389-399	11,438,880	7,900,571	38,547	1,988,021	800,393	711,347
TOTAL PLANT IN SERVICE	101	282,666,854	186,782,210	948,738	55,407,695	23,693,661	15,834,548
ADDITIONS TO UTILITY PLANT							
Energy Conservation Programs	182.3	0	0	0	0	0	0
Property Held for Future Use	105	0	0	0	0	0	0
Construction Work in Progress	107	0	0	0	0	0	0
Nuclear Plant Costs - Calvert Cliffs	182.3	0	0	0	0	0	0
Total Additions to Utility Plant		0	0	0	0	0	0
TOTAL UTILITY PLANT		282,666,854	186,782,210	948,738	55,407,695	23,693,661	15,834,548

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	G2	G1	OL
					TOTAL		
II. DEPRECIATION RESERVE							
Intangible	108.3	-4,082,537	-2,697,682	-13,703	-800,249	-342,206	-228,697
Transmission	108.4	0	0	0	0	0	0
Procurement Supply	108	-17,747	-7,500	-54	-5,521	-4,671	0
StreetLighting	108	-1,881,836	0	0	0	0	-1,881,836
Primary-Distribution	108	-7,507,748	-3,371,297	-24,491	-2,161,038	-1,896,166	-54,756
Overhead Lines	108	-45,032,355	-29,515,931	-150,096	-8,406,419	-3,683,581	-3,276,328
Underground Lines	108	-7,527,359	-4,985,433	-25,082	-1,375,934	-575,813	-565,097
Transformers	108	-12,929,311	-9,794,623	-47,788	-2,442,836	-614,968	-29,096
Services	108	-13,235,456	-9,940,909	-43,482	-3,223,352	-27,713	0
Metering	108.5	10,847	9,043	40	1,528	236	0
Other Property on Customers Premise	108.6	-363,888	-303,375	-1,327	-51,258	-7,928	0
General	108.7	-6,412,647	-4,429,067	-21,610	-1,114,487	-448,701	-398,782
Subtotal-DEPRECIATION RESERVE		-98,980,036	-65,036,775	-327,593	-19,579,566	-7,601,511	-6,434,592
Dep. Res.- adjust for 13 month avg.	108.9	0	0	0	0	0	0
TOTAL RESERVE FOR DEPRECIATION	108	-98,980,036	-65,036,775	-327,593	-19,579,566	-7,601,511	-6,434,592
III. OTHER RATE BASE ITEMS							
Deferred Fuel Cost	183	0	0	0	0	0	0
Prepayments	165	7,616,460	5,032,848	25,564	1,492,961	638,426	426,662
Cash Working Capital	131	2,659,151	1,757,129	8,925	521,241	222,895	148,961
Materials and Supplies	154	1,410,324	931,922	4,734	276,448	118,216	79,004
Regulatory Assets	182, 254	558,673	369,163	1,875	109,510	46,829	31,296
Customer Deposits	235	-1,480,939	-1,112,306	-4,865	-360,667	-3,101	0
Deferred Income Tax	190	-41,499,086	-27,422,002	-139,287	-8,134,554	-3,478,531	-2,324,713
Total - OTHER RATE BASE ITEMS	131-283	-30,735,416	-20,443,246	-103,055	-6,095,061	-2,455,266	-1,638,789
TOTAL RATE BASE		152,951,401	101,302,189	518,091	29,733,069	13,636,885	7,761,167

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. OPERATING AND MAINTENANCE EXPE							
A. PRODUCTION EXPENSES							
Supervision and Engineering	(500, 517, 546)	0	0	0	0	0	0
Fuel	(501)	0	0	0	0	0	0
Fuel - Nuclear & Other	(518, 547)	0	0	0	0	0	0
Steam expense	(502, 520)	0	0	0	0	0	0
Electric Expenses	(505, 523)	0	0	0	0	0	0
Generation Expense	(548, 549)	0	0	0	0	0	0
Misc. Generation Expenses	6, 507, 509, 519, 5	0	0	0	0	0	0
Gas Turbine Lease	(550)	0	0	0	0	0	0
Maintenance - Supervision and Engineering	(510, 528, 551)	0	0	0	0	0	0
Maintenance of Structures	(511, 529, 552)	0	0	0	0	0	0
Maintenance of Generation Plant	512, 513, 530-533	0	0	0	0	0	0
Maintenance of Steam Plant	(514)	0	0	0	0	0	0
Maintenance of Misc. Plant	(554)	0	0	0	0	0	0
Subtotal - Other Production	500-554	0	0	0	0	0	0
Purchased Power Expenses	555	0	0	0	0	0	0
Other Variable Expenses	Mix	0	0	0	0	0	0
Load Dispatch	556	0	0	0	0	0	0
Other Purchased Power	557	281,438	113,990	828	82,918	81,877	1,825
Subtotal	556-557	281,438	113,990	828	82,918	81,877	1,825
TOTAL PRODUCTION EXPENSE	500-557	281,438	113,990	828	82,918	81,877	1,825

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
B. TRANSMISSION EXPENSE							
Supervision and Engineering	560	14,391	6,082	44	4,477	3,788	0
Load Dispatching	561	80,772	34,136	247	25,128	21,261	0
Station Expenses	562	16,709	7,062	51	5,198	4,398	0
Overhead Line Expenses	563	22,573	9,540	69	7,022	5,942	0
Underground Lines Expenses	564	0	0	0	0	0	0
Transmission by Others-Demand	565	0	0	0	0	0	0
Transmission by Others-Energy	565	0	0	0	0	0	0
Miscellaneous Expenses	566	0	0	0	0	0	0
Rents	567	2,000	845	6	622	526	0
Supervision and Engineering	568	25,780	10,895	79	8,020	6,786	0
Maintenance of Structures	569	0	0	0	0	0	0
Maintenance of Station Equipment	570	33,546	14,177	102	10,436	8,830	0
Maintenance of Overhead Lines	571	3,617	1,529	11	1,125	952	0
Maintenance of Underground Lines	572	0	0	0	0	0	0
Misc Maintenance - Credits	573	0	0	0	0	0	0
TOTAL TRANSMISSION EXPENSES	560-573	199,387	84,265	609	62,029	52,484	0
C. DISTRIBUTION EXPENSE							
Operation Supervision & Engineering	580	1,230,624	821,690	4,075	215,998	90,264	98,597
Load Dispatching	581	62,144	34,088	210	15,601	10,029	2,215
Station Expenses	582	163,022	73,204	532	46,924	41,173	1,189
Overhead Line Expenses	583	263,243	172,540	877	49,141	21,533	19,152
Underground Line Expenses	584	141,391	93,644	471	25,845	10,816	10,615
Street Light and Signal Systems	585	199,283	0	0	0	0	199,283
Meter Expenses	586	589,769	491,693	2,151	83,075	12,850	0
Customer Installation Expenses	587	11,227	9,360	41	1,581	245	0
Misc. Distribution Expenses	588	78,533	51,734	263	15,445	6,618	4,473
Rents	589	568	374	2	112	48	32
Maint Supervision & Engineering	590	164,107	109,574	543	28,804	12,037	13,148
Maint of Structures	591	342	154	1	99	86	2
Maintenance of Station Equipment	592	133,884	60,120	437	38,537	33,814	976
Maintenance of Overhead Lines	593	4,800,687	3,146,554	16,001	896,169	392,689	349,274
Vegetation Management	593-Demand	1,019,289	457,704	3,325	293,393	257,433	7,434
Maintenance of Underground Lines	594	383	254	1	70	29	29
Maintenance of Line Transformers	595	969	734	4	183	46	2
Maintenance of Street Lights	596	2,488	0	0	0	0	2,488
Maintenance of Meters	597	11,956	9,968	44	1,684	260	0
Maintenance of Misc. Plant	598	17,805	11,729	60	3,502	1,500	1,014
Test Year Distribution Payroll Adjustments	NA	331,108	221,081	1,096	58,116	24,286	26,528
Subtotal - DISTRIBUTION EXPENSES	580-599	9,222,823	5,766,199	30,134	1,774,280	915,757	736,453
Total - OPER. AND MAINT. EXPENSE	500-599	9,703,648	5,964,454	31,571	1,919,226	1,050,118	738,278

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
D. CUSTOMER ACCOUNTS AND SERVIC							
Supervision	901	0	0	0	0	0	0
Meter Reading Expenses	902	97,812	81,547	357	13,778	2,131	0
Customer Records & Collection Expense	903	2,757,165	2,320,604	10,150	373,841	5,073	47,496
Uncollectible Accounts	904	739,118	706,685	204	32,229	0	0
Misc Customer Accounts Expenses	905	0	0	0	0	0	0
Subtotal - Customer Accounts Expense	901-905	3,594,095	3,108,836	10,711	419,848	7,204	47,496
Customer Assistance Exp Electric	(907, 908)	0	0	0	0	0	0
Supervision	909	1,438	1,092	5	184	3	155
Customer Assistance Expenses	910	0	0	0	0	0	0
Information, Instructional Advertising	911	0	0	0	0	0	0
Misc Customer Serv & Inform Expen	912	0	0	0	0	0	0
Rents	913	0	0	0	0	0	0
Subtotal - Customer Service & Info.	909-913	1,438	1,092	5	184	3	155
Supervision	915	0	0	0	0	0	0
Demonstrating & Selling Expenses	916	0	0	0	0	0	0
Advertising Expenses	917	0	0	0	0	0	0
Miscellaneous Sales Expenses	918	0	0	0	0	0	0
Subtotal - Sales Expense	915-919	0	0	0	0	0	0
Total - CUST ACCTS, SERVS, & SALES E	901-919	3,595,533	3,109,928	10,715	420,032	7,207	47,651

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
E. ADMINISTRATIVE AND GENERAL							
LABOR RELATED EXPENSES							
Administrative & General Salaries	920	30,793	21,268	104	5,352	2,155	1,915
Office Supplies & Expenses	921	455,714	314,751	1,536	79,201	31,887	28,339
Admin Expenses Transferred-Credit	922	0	0	0	0	0	0
Outside Services Employed	923	4,321,771	2,984,948	14,564	751,103	302,400	268,757
Key Account Management	923-Dir	280,360	0	0	127,212	153,148	0
Employee Pensions and Benefits	926	2,607,425	1,800,888	8,787	453,158	182,445	162,147
Subtotal - O & M Accounts 920-923,926	920-926	7,696,062	5,121,855	24,990	1,416,025	672,034	461,159
PLANT RELATED EXPENSES							
Property Insurance	924	100,912	66,681	339	19,781	8,459	5,653
Injuries and Damages	925	204,582	135,185	687	40,102	17,148	11,460
Maintenance of General Plant (also acct 93	935	140,760	93,012	472	27,591	11,799	7,885
Subtotal - O & M Accounts 924-925	924,925,935	446,254	294,879	1,498	87,474	37,406	24,998
OTHER A&G EXPENSES							
Franchise Requirements	927	102	68	0	19	9	6
Regulatory Commission Expenses	928	185,716	123,549	604	34,293	16,181	11,089
Duplicate Charges-Credit	929	0	0	0	0	0	0
General Advertising Expenses	930.1	140,218	93,281	456	25,892	12,217	8,372
Rents	931	0	0	0	0	0	0
Test year Inflation Allowance	NA	141,596	94,198	461	26,146	12,337	8,454
Subtotal	927-932	467,632	311,096	1,521	86,349	40,745	27,921
TOTAL A&G EXPENSES	920-932	8,609,949	5,727,829	28,009	1,589,848	750,185	514,078
TOTAL OPERATING EXPENSES		21,909,130	14,802,211	70,295	3,929,106	1,807,510	1,300,008

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
II. DEPRECIATION EXPENSE							
Intangible	403.1	0	0	0	0	0	0
Transmission	403	0	0	0	0	0	0
Procurement Supply	403	3,847	1,626	12	1,197	1,013	0
StreetLighting	403	260,307	0	0	0	0	260,307
Primary-Distribution	403	882,897	396,458	2,880	254,134	222,986	6,439
Overhead Lines	403	4,756,386	3,117,518	15,853	887,899	389,065	346,051
Underground Lines	403	514,628	340,842	1,715	94,069	39,367	38,634
Transformers	403	1,302,827	986,959	4,815	246,153	61,967	2,932
Services	403.5	1,185,928	890,729	3,896	288,820	2,483	0
Metering	403.6	694,131	578,700	2,531	97,776	15,124	0
Other Property on Customers Premise	403.6	146,992	122,548	536	20,705	3,203	0
General	403.7	437,972	302,497	1,476	76,117	30,645	27,236
Amortization	#REF!	1,680,347	1,110,349	5,640	329,378	140,850	94,130
TOTAL DEPRECIATION EXPENSES		11,866,262	7,848,227	39,355	2,296,249	906,703	775,730
III. TAXES							
A. GENERAL TAXES							
Payroll Taxes	408.15	135,277	93,433	456	23,510	9,466	8,412
Unemployment Tax	408.16	3,256	2,249	11	566	228	202
Real Estate Taxes	408.17	6,091,543	4,025,205	20,446	1,194,050	510,604	341,239
Subtotal - General Taxes		6,230,076	4,120,886	20,912	1,218,126	520,298	349,853
B. FRANCHISE AND REVENUE TAXES							
Maryland Franchise Tax T&D	408.11	137,060	90,568	460	26,866	11,489	7,678
PSC Assessment	408.12	0	0	0	0	0	0
Subtotal - Franchise & Gross Receipts		137,060	90,568	460	26,866	11,489	7,678
Federal Income Taxes - Current		-315,463	-208,453	-1,059	-61,836	-26,443	-17,672
State Income Taxes - Current		577,861	381,842	1,940	113,271	48,437	32,371
Provision for Deferred FIT		2,822,623	1,865,149	9,474	553,284	236,597	158,119
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,038,538	10,355	604,719	258,592	172,818
TOTAL TAXES		9,452,158	6,249,991	31,727	1,849,711	790,379	530,349
TOTAL EXPENSES		43,227,550	28,900,429	141,376	8,075,066	3,504,592	2,606,087

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
IV. OPERATING REVENUES							
Electric Revenues	440-446	51,926,382	26,549,941	168,727	16,442,452	7,114,162	1,651,100
Late Payment Charges	450	481,633	463,071	2,025	16,536	0	0
Connect/Disconnect Revenue	440-446	160,502	138,718	882	20,903	0	0
Rent	451	443,900	293,323	1,490	87,012	37,209	24,867
Other Sales	449	1,115,301	570,253	3,624	353,159	152,802	35,463
Unbilled Reclassification		-1,337,801	-684,017	-4,347	-423,614	-183,285	-42,538
Misc Revenue	456	151,101	77,258	491	47,846	20,702	4,805
Total Operating Revenues		52,941,019	27,408,547	172,892	16,544,295	7,141,589	1,673,697
Gains/Losses from Energy Purchases		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
V. NET INCOME		9,708,692	-1,495,470	31,500	8,468,065	3,636,987	-932,390
Rate of Return		6.35%	-1.48%	6.08%	28.48%	26.67%	-12.01%

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
SUMMARY REPORT							
OPERATING REVENUES							
Total Operating Revenues		52,941,019	27,408,547	172,892	16,544,295	7,141,589	1,673,697
OPERATING EXPENSES							
Production	500-555	281,438	113,990	828	82,918	81,877	1,825
Transmission	560-573	199,387	84,265	609	62,029	52,484	0
Distribution	580-599	9,222,823	5,766,199	30,134	1,774,280	915,757	736,453
Customer Acctg & Service	901-919	3,595,533	3,109,928	10,715	420,032	7,207	47,651
Admin & General	920-932	8,609,949	5,727,829	28,009	1,589,848	750,185	514,078
Total Operating Expenses		21,909,130	14,802,211	70,295	3,929,106	1,807,510	1,300,008
DEPRECIATION & AMRTIZATION EXPEN!	403	11,866,262	7,848,227	39,355	2,296,249	906,703	775,730
TAXES OTHER THAN INCOME TAX	408	6,367,137	4,211,454	21,372	1,244,993	531,786	357,531
INCOME BEFORE INCOME TAXES		12,798,490	546,656	41,870	9,073,947	3,895,590	-759,572
INCOME TAXES							
Income Taxes - Current		262,398	173,389	881	51,435	21,995	14,699
Provision for Deferred FIT		2,822,623	1,865,149	9,474	553,284	236,597	158,119
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,038,538	10,355	604,719	258,592	172,818
OPERATING INCOME		9,713,469	-1,491,882	31,515	8,469,228	3,636,997	-932,390
Gains/Losses		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
NET INCOME		9,708,692	-1,495,470	31,500	8,468,065	3,636,987	-932,390
		0	0	0	0	0	0
RATE BASE		152,951,401	101,302,189	518,091	29,733,069	13,636,885	7,761,167
RETURN ON RATE BASE		6.35%	-1.48%	6.08%	28.48%	26.67%	-12.01%
Unitized Rate of Return		1.00	-0.23	0.96	4.49	4.20	-1.89

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Counterfactual
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
REVENUE REQUIREMENTS							
RATE OF RETURN by Function		8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
Using Target for System							
RATE BASE		152,951,401	101,302,189	518,091	29,733,069	13,636,885	7,761,167
OPERATING EXPENSES		21,909,130	14,802,211	70,295	3,929,106	1,807,510	1,300,008
DEPRECIATION EXPENSE		11,866,262	7,848,227	39,355	2,296,249	906,703	775,730
GENERAL TAXES		6,230,076	4,120,886	20,912	1,218,126	520,298	349,853
Other costs (benefits), net of taxes		141,837	94,155	476	28,030	11,499	7,678
Subtotal- Operating Costs to recover		40,147,306	26,865,479	131,037	7,471,511	3,246,009	2,433,269
Target Return on Rate Base- After taxes		13,383,248	8,863,942	45,333	2,601,644	1,193,227	679,102
Actual Historic FIT		-315,463	-208,453	-1,059	-61,836	-26,443	-17,672
Actual Historic SIT		577,861	381,842	1,940	113,271	48,437	32,371
Incremental Tax Due to Target ROR	0	2,410,153	1,610,997	7,953	453,611	198,784	138,808
Targeted Tax		2,672,552	1,784,386	8,834	505,045	220,779	153,507
Provision for Deferred FIT		2,822,623	1,865,149	9,474	553,284	236,597	158,119
ITC Adjustment, net		0	0	0	0	0	0
FIT to recover		5,495,174	3,649,535	18,308	1,058,329	457,376	311,626
Subtotal- Rev Req before Uncollectible Adj.		59,025,728	39,378,955	194,678	11,131,484	4,896,613	3,423,997
Proforma Incr for Uncollect. Calc		0	0	0	0	0	0
Other		0	0	0	0	0	0
TOTAL REVENUE REQUIREMENT		59,025,728	39,378,955	194,678	11,131,484	4,896,613	3,423,997
OPERATING REVENUES		52,941,019	27,408,547	172,892	16,544,295	7,141,589	1,673,697
Revenue Excess (Deficiency)		-6,084,709	-11,970,409	-21,787	5,412,811	2,244,976	-1,750,300

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. ELECTRIC PLANT IN SERVICE							
A. INTANGIBLE PLANT							
Organization	301	380	251	2	74	32	21
Franchises and Consents	302	0	0	0	0	0	0
Miscellaneous Intangible Plant	303	6,353,387	4,195,501	27,206	1,243,632	531,185	355,861
Subtotal - INTANGIBLE PLANT	301-303	6,353,767	4,195,752	27,208	1,243,707	531,217	355,883
B. PRODUCTION PLANT							
Land and Land Rights	310, 320, 330, 340	0	0	0	0	0	0
Structures and Improvements	311, 321, 331, 341	0	0	0	0	0	0
Boiler Plant Equipment	(312, 342)	0	0	0	0	0	0
Reactor Plant Equipment	322	0	0	0	0	0	0
Engines and Generators	(343, 323)	56,575	23,908	177	17,599	14,891	0
Turbogenerator Units	(314, 333, 344)	0	0	0	0	0	0
Accessory Electric Equipment	315, 324, 334, 345	0	0	0	0	0	0
Misc. Power Plant Equipment	6, 325, 332, 335,3	0	0	0	0	0	0
Subtotal - OTHER PLANT	340-346	56,575	23,908	177	17,599	14,891	0
Subtotal - PRODUCTION PLANT	304-346	56,575	23,908	177	17,599	14,891	0
C. TRANSMISSION PLANT							
Land and Land Rights	350	0	0	0	0	0	0
Structures and Improvements	352	0	0	0	0	0	0
Station Equipment	353	0	0	0	0	0	0
Towers and Fixtures	354	0	0	0	0	0	0
Poles and Fixtures	355	0	0	0	0	0	0
Overhead Conductors and Devices	356	0	0	0	0	0	0
Underground Conduit	357	0	0	0	0	0	0
Underground Conductors and Devices	358	0	0	0	0	0	0
Roads and Trails	359	0	0	0	0	0	0
Subtotal - TRANSMISSION PLANT	350-359	0	0	0	0	0	0

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	G2	G1	OL
				TOTAL			
D. DISTRIBUTION PLANT							
Land and Land Rights	360	2,665,928	1,193,992	15,628	765,362	671,554	19,393
Structures and Improvements	361	4,759,019	2,131,427	27,897	1,366,268	1,198,809	34,618
Station Equipment	362	28,718,883	12,862,359	168,349	8,244,911	7,234,357	208,908
Compressor Station Equipment	363	0	0	0	0	0	0
Poles, Towers and Fixtures	364	54,881,358	37,180,522	222,986	9,539,586	3,533,207	4,405,057
Overhead Conductors and Devices	365	71,414,284	46,776,764	304,704	13,311,464	5,826,125	5,195,228
Underground Conduit	366	1,841,623	1,398,261	6,116	235,795	3,217	198,234
Underground Conductors and Devices	367	18,242,829	12,075,013	76,684	3,329,905	1,391,818	1,369,410
Line Transformers	368	43,163,325	32,681,929	192,589	8,144,729	2,047,225	96,854
Services	369	20,341,811	15,278,363	66,828	4,954,027	42,592	0
Meters	370	13,663,983	11,391,725	49,828	1,924,720	297,710	0
Installed on Cust Premise PR_L	371	1,886,935	1,573,146	6,881	265,795	41,112	0
Other Property on Customers Premise	372	0	0	0	0	0	0
Street Lighting and Signals	373	3,237,653	0	0	0	0	3,237,653
Subtotal - DISTRIBUTION PLANT	374-387	264,817,631	174,543,500	1,138,490	52,082,563	22,287,725	14,765,353
E. GENERAL PLANT							
Land and Land Rights	389	18,620	12,856	73	3,233	1,301	1,158
Structures and Improvements	390	3,787,332	2,614,898	14,750	657,634	264,543	235,507
Office Furniture and Equipment	391	267,375	184,605	1,041	46,427	18,676	16,626
Transportation Equipment	392	1,078,761	744,812	4,201	187,317	75,351	67,080
Stores Equipment	393	79,908	55,171	311	13,875	5,582	4,969
Tools, Shop and Garage Equipment	394	1,539,171	1,062,694	5,994	267,263	107,510	95,710
Laboratory Equipment	395	792,711	547,314	3,087	137,647	55,370	49,293
Power Operated Equipment	396	0	0	0	0	0	0
Communication Equipment	397	3,772,058	2,604,352	14,690	654,982	263,476	234,557
Miscellaneous Equipment	398	102,943	71,075	401	17,875	7,191	6,401
Subtotal - GENERAL PLANT	389-399	11,438,880	7,897,777	44,549	1,986,254	799,000	711,301
TOTAL PLANT IN SERVICE	101	282,666,854	186,660,937	1,210,423	55,330,122	23,632,834	15,832,537
ADDITIONS TO UTILITY PLANT							
Energy Conservation Programs	182.3	0	0	0	0	0	0
Property Held for Future Use	105	0	0	0	0	0	0
Construction Work in Progress	107	0	0	0	0	0	0
Nuclear Plant Costs - Calvert Cliffs	182.3	0	0	0	0	0	0
Total Additions to Utility Plant		0	0	0	0	0	0
TOTAL UTILITY PLANT		282,666,854	186,660,937	1,210,423	55,330,122	23,632,834	15,832,537

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
II. DEPRECIATION RESERVE							
Intangible	108.3	-4,082,537	-2,695,930	-17,482	-799,129	-341,327	-228,668
Transmission	108.4	0	0	0	0	0	0
Procurement Supply	108	-17,747	-7,500	-56	-5,521	-4,671	0
StreetLighting	108	-1,881,836	0	0	0	0	-1,881,836
Primary-Distribution	108	-7,507,748	-3,362,504	-44,010	-2,155,401	-1,891,220	-54,613
Overhead Lines	108	-45,032,355	-29,496,450	-192,140	-8,393,931	-3,673,833	-3,276,002
Underground Lines	108	-7,527,359	-4,982,393	-31,641	-1,373,986	-574,292	-565,046
Transformers	108	-12,929,311	-9,789,673	-57,689	-2,439,704	-613,234	-29,012
Services	108	-13,235,456	-9,940,909	-43,482	-3,223,352	-27,713	0
Metering	108.5	10,847	9,043	40	1,528	236	0
Other Property on Customers Premise	108.6	-363,888	-303,375	-1,327	-51,258	-7,928	0
General	108.7	-6,412,647	-4,427,501	-24,974	-1,113,496	-447,920	-398,756
Subtotal-DEPRECIATION RESERVE		-98,980,036	-64,997,191	-412,761	-19,554,249	-7,581,902	-6,433,933
Dep. Res.- adjust for 13 month avg.	108.9	0	0	0	0	0	0
TOTAL RESERVE FOR DEPRECIATION	108	-98,980,036	-64,997,191	-412,761	-19,554,249	-7,581,902	-6,433,933
III. OTHER RATE BASE ITEMS							
Deferred Fuel Cost	183	0	0	0	0	0	0
Prepayments	165	7,616,460	5,029,580	32,615	1,490,870	636,787	426,608
Cash Working Capital	131	2,659,151	1,755,988	11,387	520,511	222,323	148,942
Materials and Supplies	154	1,410,324	931,317	6,039	276,061	117,913	78,994
Regulatory Assets	182, 254	558,673	368,923	2,392	109,356	46,709	31,292
Customer Deposits	235	-1,480,939	-1,112,306	-4,865	-360,667	-3,101	0
Deferred Income Tax	190	-41,499,086	-27,404,197	-177,706	-8,123,165	-3,469,600	-2,324,418
Total - OTHER RATE BASE ITEMS	131-283	-30,735,416	-20,430,695	-130,137	-6,087,032	-2,448,970	-1,638,581
TOTAL RATE BASE		152,951,401	101,233,051	667,525	29,688,841	13,601,962	7,760,022

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
I. OPERATING AND MAINTENANCE EXPE							
A. PRODUCTION EXPENSES							
Supervision and Engineering	(500, 517, 546)	0	0	0	0	0	0
Fuel	(501)	0	0	0	0	0	0
Fuel - Nuclear & Other	(518, 547)	0	0	0	0	0	0
Steam expense	(502, 520)	0	0	0	0	0	0
Electric Expenses	(505, 523)	0	0	0	0	0	0
Generation Expense	(548, 549)	0	0	0	0	0	0
Misc. Generation Expenses	5, 507, 509, 519, 5	0	0	0	0	0	0
Gas Turbine Lease	(550)	0	0	0	0	0	0
Maintenance - Supervision and Engineering	(510, 528, 551)	0	0	0	0	0	0
Maintenance of Structures	(511, 529, 552)	0	0	0	0	0	0
Maintenance of Generation Plant	512, 513, 530-533	0	0	0	0	0	0
Maintenance of Steam Plant	(514)	0	0	0	0	0	0
Maintenance of Misc. Plant	(554)	0	0	0	0	0	0
Subtotal - Other Production	500-554	0	0	0	0	0	0
Purchased Power Expenses	555	0	0	0	0	0	0
Other Variable Expenses	Mix	0	0	0	0	0	0
Load Dispatch	556	0	0	0	0	0	0
Other Purchased Power	557	281,438	114,248	193	83,105	82,062	1,829
Subtotal	556-557	281,438	114,248	193	83,105	82,062	1,829
TOTAL PRODUCTION EXPENSE	500-557	281,438	114,248	193	83,105	82,062	1,829

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
B. TRANSMISSION EXPENSE							
Supervision and Engineering	560	14,391	6,082	45	4,477	3,788	0
Load Dispatching	561	80,772	34,133	253	25,126	21,260	0
Station Expenses	562	16,709	7,061	52	5,198	4,398	0
Overhead Line Expenses	563	22,573	9,539	71	7,022	5,941	0
Underground Lines Expenses	564	0	0	0	0	0	0
Transmission by Others-Demand	565	0	0	0	0	0	0
Transmission by Others-Energy	565	0	0	0	0	0	0
Miscellaneous Expenses	566	0	0	0	0	0	0
Rents	567	2,000	845	6	622	526	0
Supervision and Engineering	568	25,780	10,894	81	8,019	6,785	0
Maintenance of Structures	569	0	0	0	0	0	0
Maintenance of Station Equipment	570	33,546	14,176	105	10,435	8,830	0
Maintenance of Overhead Lines	571	3,617	1,528	11	1,125	952	0
Maintenance of Underground Lines	572	0	0	0	0	0	0
Misc Maintenance - Credits	573	0	0	0	0	0	0
TOTAL TRANSMISSION EXPENSES	560-573	199,387	84,259	624	62,024	52,480	0
C. DISTRIBUTION EXPENSE							
Operation Supervision & Engineering	580	1,230,624	821,247	5,039	215,714	90,035	98,590
Load Dispatching	581	62,144	34,031	331	15,565	10,002	2,214
Station Expenses	582	163,022	73,013	956	46,802	41,066	1,186
Overhead Line Expenses	583	263,243	172,426	1,123	49,068	21,476	19,150
Underground Line Expenses	584	141,391	93,587	594	25,808	10,787	10,614
Street Light and Signal Systems	585	199,283	0	0	0	0	199,283
Meter Expenses	586	589,769	491,693	2,151	83,075	12,850	0
Customer Installation Expenses	587	11,227	9,360	41	1,581	245	0
Misc. Distribution Expenses	588	78,533	51,700	337	15,424	6,600	4,473
Rents	589	568	374	2	111	48	32
Maint Supervision & Engineering	590	164,107	109,515	672	28,766	12,006	13,147
Maint of Structures	591	342	153	2	98	86	2
Maintenance of Station Equipment	592	133,884	59,963	785	38,437	33,726	974
Maintenance of Overhead Lines	593	4,800,687	3,144,477	20,483	894,837	391,650	349,239
Vegetation Management	593-Demand	1,019,289	456,510	5,975	292,628	256,761	7,415
Maintenance of Underground Lines	594	383	254	2	70	29	29
Maintenance of Line Transformers	595	969	734	4	183	46	2
Maintenance of Street Lights	596	2,488	0	0	0	0	2,488
Maintenance of Meters	597	11,956	9,968	44	1,684	260	0
Maintenance of Misc. Plant	598	17,805	11,722	76	3,497	1,496	1,014
Test Year Distribution Payroll Adjustments	NA	331,108	220,962	1,356	58,039	24,224	26,526
Subtotal - DISTRIBUTION EXPENSES	580-599	9,222,823	5,761,688	39,973	1,771,389	913,395	736,379
Total - OPER. AND MAINT. EXPENSE	500-599	9,703,648	5,960,195	40,790	1,916,518	1,047,937	738,208

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
D. CUSTOMER ACCOUNTS AND SERVIC							
Supervision	901	0	0	0	0	0	0
Meter Reading Expenses	902	97,812	81,547	357	13,778	2,131	0
Customer Records & Collection Expense	903	2,757,165	2,320,604	10,150	373,841	5,073	47,496
Uncollectible Accounts	904	739,118	706,923	79	32,116	0	0
Misc Customer Accounts Expenses	905	0	0	0	0	0	0
Subtotal - Customer Accounts Expense	901-905	3,594,095	3,109,074	10,586	419,735	7,204	47,496
Customer Assistance Exp Electric	(907, 908)	0	0	0	0	0	0
Supervision	909	1,438	1,092	5	184	3	155
Customer Assistance Expenses	910	0	0	0	0	0	0
Information, Instructional Advertising	911	0	0	0	0	0	0
Misc Customer Serv & Inform Expen	912	0	0	0	0	0	0
Rents	913	0	0	0	0	0	0
Subtotal - Customer Service & Info.	909-913	1,438	1,092	5	184	3	155
Supervision	915	0	0	0	0	0	0
Demonstrating & Selling Expenses	916	0	0	0	0	0	0
Advertising Expenses	917	0	0	0	0	0	0
Miscellaneous Sales Expenses	918	0	0	0	0	0	0
Subtotal - Sales Expense	915-919	0	0	0	0	0	0
Total - CUST ACCTS, SERVS, & SALES E	901-919	3,595,533	3,110,165	10,591	419,919	7,207	47,651

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
E. ADMINISTRATIVE AND GENERAL							
LABOR RELATED EXPENSES							
Administrative & General Salaries	920	30,793	21,260	120	5,347	2,151	1,915
Office Supplies & Expenses	921	455,714	314,640	1,775	79,130	31,831	28,338
Admin Expenses Transferred-Credit	922	0	0	0	0	0	0
Outside Services Employed	923	4,321,771	2,983,892	16,831	750,435	301,874	268,740
Key Account Management	923-Dir	280,360	0	0	127,212	153,148	0
Employee Pensions and Benefits	926	2,607,425	1,800,251	10,155	452,755	182,127	162,137
Subtotal - O & M Accounts 920-923,926	920-926	7,696,062	5,120,043	28,880	1,414,879	671,131	461,129
PLANT RELATED EXPENSES							
Property Insurance	924	100,912	66,638	432	19,753	8,437	5,652
Injuries and Damages	925	204,582	135,097	876	40,046	17,104	11,459
Maintenance of General Plant (also acct 93	935	140,760	92,952	603	27,553	11,768	7,884
Subtotal - O & M Accounts 924-925	924,925,935	446,254	294,687	1,911	87,351	37,310	24,995
OTHER A&G EXPENSES							
Franchise Requirements	927	102	68	0	19	9	6
Regulatory Commission Expenses	928	185,716	123,503	702	34,264	16,159	11,088
Duplicate Charges-Credit	929	0	0	0	0	0	0
General Advertising Expenses	930.1	140,218	93,247	530	25,870	12,200	8,371
Rents	931	0	0	0	0	0	0
Test year Inflation Allowance	NA	141,596	94,163	535	26,124	12,320	8,454
Subtotal	927-932	467,632	310,980	1,768	86,277	40,687	27,919
TOTAL A&G EXPENSES	920-932	8,609,949	5,725,711	32,560	1,588,506	749,129	514,043
TOTAL OPERATING EXPENSES		21,909,130	14,796,071	83,941	3,924,943	1,804,273	1,299,902

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
II. DEPRECIATION EXPENSE							
Intangible	403.1	0	0	0	0	0	0
Transmission	403	0	0	0	0	0	0
Procurement Supply	403	3,847	1,626	12	1,197	1,013	0
StreetLighting	403	260,307	0	0	0	0	260,307
Primary-Distribution	403	882,897	395,424	5,176	253,471	222,404	6,422
Overhead Lines	403	4,756,386	3,115,460	20,294	886,580	388,036	346,016
Underground Lines	403	514,628	340,635	2,163	93,936	39,263	38,631
Transformers	403	1,302,827	986,460	5,813	245,838	61,793	2,923
Services	403.5	1,185,928	890,729	3,896	288,820	2,483	0
Metering	403.6	694,131	578,700	2,531	97,776	15,124	0
Other Property on Customers Premise	403.6	146,992	122,548	536	20,705	3,203	0
General	403.7	437,972	302,390	1,706	76,050	30,592	27,234
Amortization	#REF!	1,680,347	1,109,629	7,196	328,917	140,488	94,118
TOTAL DEPRECIATION EXPENSES		11,866,262	7,843,600	49,322	2,293,289	904,398	775,653
III. TAXES							
A. GENERAL TAXES							
Payroll Taxes	408.15	135,277	93,400	527	23,490	9,449	8,412
Unemployment Tax	408.16	3,256	2,248	13	565	227	202
Real Estate Taxes	408.17	6,091,543	4,022,591	26,085	1,192,378	509,294	341,195
Subtotal - General Taxes		6,230,076	4,118,239	26,624	1,216,433	518,970	349,810
B. FRANCHISE AND REVENUE TAXES							
Maryland Franchise Tax T&D	408.11	137,060	90,509	587	26,829	11,459	7,677
PSC Assessment	408.12	0	0	0	0	0	0
Subtotal - Franchise & Gross Receipts		137,060	90,509	587	26,829	11,459	7,677
Federal Income Taxes - Current		-315,463	-208,318	-1,351	-61,750	-26,375	-17,669
State Income Taxes - Current		577,861	381,595	2,474	113,112	48,313	32,367
Provision for Deferred FIT		2,822,623	1,863,938	12,087	552,509	235,990	158,099
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,037,214	13,211	603,872	257,928	172,796
TOTAL TAXES		9,452,158	6,245,962	40,422	1,847,134	788,358	530,283
TOTAL EXPENSES		43,227,550	28,885,633	173,685	8,065,366	3,497,028	2,605,837

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
IV. OPERATING REVENUES							
Electric Revenues	440-446	51,823,377	26,549,941	65,721	16,442,452	7,114,162	1,651,100
Late Payment Charges	450	481,633	463,071	2,025	16,536	0	0
Connect/Disconnect Revenue	440-446	160,502	139,255	345	20,903	0	0
Rent	451	443,900	293,132	1,901	86,890	37,113	24,863
Other Sales	449	1,115,301	571,386	1,414	353,861	153,105	35,534
Unbilled Reclassification		-1,337,801	-685,377	-1,697	-424,456	-183,649	-42,623
Misc Revenue	456	151,101	77,412	192	47,941	20,743	4,814
Total Operating Revenues		52,838,014	27,408,821	69,902	16,544,128	7,141,474	1,673,689
Gains/Losses from Energy Purchases		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
V. NET INCOME		9,605,687	-1,480,400	-103,799	8,477,598	3,644,436	-932,148
Rate of Return		6.28%	-1.46%	-15.55%	28.55%	26.79%	-12.01%

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
SUMMARY REPORT							
OPERATING REVENUES							
Total Operating Revenues		52,838,014	27,408,821	69,902	16,544,128	7,141,474	1,673,689
OPERATING EXPENSES							
Production	500-555	281,438	114,248	193	83,105	82,062	1,829
Transmission	560-573	199,387	84,259	624	62,024	52,480	0
Distribution	580-599	9,222,823	5,761,688	39,973	1,771,389	913,395	736,379
Customer Acctg & Service	901-919	3,595,533	3,110,165	10,591	419,919	7,207	47,651
Admin & General	920-932	8,609,949	5,725,711	32,560	1,588,506	749,129	514,043
Total Operating Expenses		21,909,130	14,796,071	83,941	3,924,943	1,804,273	1,299,902
DEPRECIATION & AMRTIZATION EXPEN!	403	11,866,262	7,843,600	49,322	2,293,289	904,398	775,653
TAXES OTHER THAN INCOME TAX	408	6,367,137	4,208,747	27,211	1,243,262	530,429	357,487
INCOME BEFORE INCOME TAXES		12,695,485	560,402	-90,573	9,082,634	3,902,374	-759,352
INCOME TAXES							
Income Taxes - Current		262,398	173,277	1,124	51,363	21,938	14,697
Provision for Deferred FIT		2,822,623	1,863,938	12,087	552,509	235,990	158,099
ITC Adjustment - Net		0	0	0	0	0	0
Subtotal - Federal Income Taxes	409-411	3,085,021	2,037,214	13,211	603,872	257,928	172,796
OPERATING INCOME		9,610,463	-1,476,813	-103,783	8,478,762	3,644,446	-932,148
Gains/Losses		0	0	0	0	0	0
Allowance for Funds During Construction		0	0	0	0	0	0
Interest on Customer Deposits		-4,777	-3,588	-16	-1,163	-10	0
NET INCOME		9,605,687	-1,480,400	-103,799	8,477,598	3,644,436	-932,148
		0	0	0	0	0	0
RATE BASE		152,951,401	101,233,051	667,525	29,688,841	13,601,962	7,760,022
RETURN ON RATE BASE		6.28%	-1.46%	-15.55%	28.55%	26.79%	-12.01%
Unitized Rate of Return		1.00	-0.23	-2.48	4.55	4.27	-1.91

UNITIL ENERGY SYSTEMS, INC.
2016 Rate Case Electric Cost of Service Study - Solar Class
12 MONTHS ENDED DECEMBER 31, 2015
Allocation Phase

Account Description	Account Code	Total Allocated Dollars	Domestic	Domestic- DG	TOTAL G2	G1	OL
REVENUE REQUIREMENTS							
RATE OF RETURN by Function		8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
Using Target for System							
RATE BASE		152,951,401	101,233,051	667,525	29,688,841	13,601,962	7,760,022
OPERATING EXPENSES		21,909,130	14,796,071	83,941	3,924,943	1,804,273	1,299,902
DEPRECIATION EXPENSE		11,866,262	7,843,600	49,322	2,293,289	904,398	775,653
GENERAL TAXES		6,230,076	4,118,239	26,624	1,216,433	518,970	349,810
Other costs (benefits), net of taxes		141,837	94,096	603	27,992	11,469	7,677
Subtotal- Operating Costs to recover		40,147,306	26,852,007	160,490	7,462,657	3,239,110	2,433,041
Target Return on Rate Base- After taxes		13,383,248	8,857,892	58,408	2,597,774	1,190,172	679,002
Actual Historic FIT		-315,463	-208,318	-1,351	-61,750	-26,375	-17,669
Actual Historic SIT		577,861	381,595	2,474	113,112	48,313	32,367
Incremental Tax Due to Target ROR	0	2,477,715	1,655,355	10,131	465,712	203,861	142,655
Targeted Tax		2,740,113	1,828,632	11,255	517,075	225,800	157,352
Provision for Deferred FIT		2,822,623	1,863,938	12,087	552,509	235,990	158,099
ITC Adjustment, net		0	0	0	0	0	0
FIT to recover		5,562,736	3,692,569	23,342	1,069,584	461,790	315,451
Subtotal- Rev Req before Uncollectible Adj.		59,093,289	39,402,468	242,241	11,130,015	4,891,071	3,427,494
Proforma Incr for Uncollect. Calc		0	0	0	0	0	0
Other		0	0	0	0	0	0
TOTAL REVENUE REQUIREMENT		59,093,289	39,402,468	242,241	11,130,015	4,891,071	3,427,494
OPERATING REVENUES		52,838,014	27,408,821	69,902	16,544,128	7,141,474	1,673,689
Revenue Excess (Deficiency)		-6,255,276	-11,993,647	-172,339	5,414,113	2,250,403	-1,753,805