					Electric Product Detailed Technical Ass												Technical			Program Fore		Stipulated Forecast Inputs				Program Forecast Outputs				
Measure Description	High Efficiency Product Assumptions			Baseline Product Assumptions Baseline			Economic Assumptions Average				Stipulated Output Annual Rebated							Economic Assumptions Assumption			2018					2018				
Electric Measure Description	Efficient Product Description / Rating			Baseline Product Description / Rating	Baseline Product Consumption (watts)	Hours of Operation (hrs/yr)	Measure Lifetime (years)	Rebate Amount (\$)	Baseline	Incremental Cost of Efficient Product (\$)	Assumed Energy Cost (\$/kWh)	Rebate as a % of Incremental Cost (%)	of Incremt'i Cost Payback Period w/o Rebate (yrs) Incremt'i Cost Payback Perio w/ Rebate (yrs)	Customer kWi	Rebated Cost / Cust kWh Saved (\$/kWh)	Lifetime cost /Cust KWh Saved (\$/kWh)	Customer kW Savings (kW)	Generator Peak kW Savings (kW)	Non-Energy O&M Savings (\$)	Energy O&M Savings (\$)	Coincidence Factor (%)	2018 Participants (-) 3.183	2018 Units (-) 792,501	NTG (%)	Installation Rate (%)	Realization 20 Rate (%)	018 NET Gen kW (kW)	2018 NET Gen kWh (kWh)	2018 Rebate Budget (\$) 124959/705	2018 Incremental Costs (\$)
T8 to T8 Optimization	Fluorescent T8 Fixture with Less Lamps (3,2,1)	63	4,543	Fluorescent T8 Fixture with More	114	4,543	20.00	\$12	\$0	\$43.20	0.068	28%	2.88 2.0	3 231	\$0.052	\$0.003	0.05	0.04	\$0.00	-\$0.59	77.54%	3	100	99%	100%	100%	4	24,504	\$1,200	\$4,320
High Bay Fluorescent replacing HID	High Bay Flourescents With	400	4,543	Lamps (4,3,2) HID Fixture	702	4,543	20.00	\$59	\$0	\$276.96	0.068	21%	3.10 2.4	1,372	\$0.043	\$0.002	0.30	0.25	\$0.00	-\$3.52	77.54%	13	505	99%	100%	100%	125	734,835	\$30,000	\$139,865
T8 Ballast, 2 ft to 4 ft., 1 and 2 Lamp / T8 Ballast, 2 ft to 4 ft., 3 and 4 Lamp	High Efficiency Ballast	94	4,543	Standard Ballast	98	4,543	20.00	\$1.50	\$18	\$3.00	0.068	50%	2.70 1.3	5 17	\$0.088	\$0.004	0.00	0.00	\$0.00	-\$0.04	77.54%	1	100	99%	100%	100%	0	1,814	\$150	\$300
CFL Pin Based	Pin-Based CFL	36	4,543	Incandescent	108	4,543	20.00	\$ 3	\$0	\$11.46	0.068	24%	0.54 0.4	1 324	\$0.008	\$0.000	0.07	0.06	0	-\$0.83	77.54%	65	400	99%	100%	100%	23	137,662	\$1,100	\$4,585
Occupancy Sensor - Photocell	Lighting Fixture with Photocell	172	4,543	Lighting Fixture with Manual Switch	265	4,543	8	\$25	\$0	\$65.00	0.068	38%	2.36 1.4	424	\$0.059	\$0.007	0.09	0.08	\$0.00	-\$1.09	77.54%	2	100	99%	100%	100%	8	44,984	\$2,500	\$6,500
Wall mount occupancy sensor - 50 Watts to 300 Watts Controlled Load	Lighting System with Occupancy Sensor	88	4,543	Lighting Fixture with Manual Switch	126	4,543	8	\$15	\$0	\$55	0.068	27%	4.93 3.5	171	\$0.088	\$0.011	0.04	0.03	\$0.00	-\$0.44	77.54%	3	500	99%	100%	100%	16	90,908	\$7,500	\$27,500
Wall mount occupancy sensor - Greater than 300 Watts Controlled Load	Lighting System with Occupancy Sensor	450	4,543	Lighting Fixture with Manual Switch	643	4,543	8	\$25	\$0	\$55	0.068	45%	0.96 0.5	876	\$0.029	\$0.004	0.19	0.16	\$0.00	-\$2.25	77.54%	5	300	99%	100%	100%	48	278,923	\$7,500	\$16,500
Ceiling mount occupancy sensor - 50 Watts to 300 Watts Controlled Load	Lighting System with Occupancy Sensor	88	4,543	Lighting Fixture with Manual Switch	126	4,543	8	\$30	\$0	\$125	0.068	24%	11.21 8.5	2 171	\$0.175	\$0.022	0.04	0.03	\$0.00	-\$0.44	77.54%	5	500	99%	100%	100%	16	90,908	\$15,000	\$62,500
Ceiling mount occupancy sensor - Greater than 300 Watts Controlled Load	Lighting System with Occupancy Sensor	450	4,543	Lighting Fixture with Manual Switch	643	4,543	8	\$40	\$0	\$125.00	0.068	32%	2.19 1.4	876	\$0.046	\$0.006	0.19	0.16	\$0.00	-\$2.25	77.54%	2	500	99%	100%	100%	79	464,872	\$20,000	\$62,500
Stairwell Fixture with Integral Occupancy Sensor	Stainwell Fixture with Integral Occupancy Sensor	7	4,543	Stairwell Lighting Fixture	71	4,543	14	\$75	\$0	\$306.00	0.059	25%	18.62 14.0	3 291	\$0.257	\$0.018	0.06	0.05	\$0.00	-\$0.75	77.54%	5	200	99%	100%	100%	11	61,810	\$15,000	\$61,201
Integrated Occupancy Sensor	Lighting System with Occupancy Sensor	38	8,093	Lighting Fixture - Manual Switch	54	8,386	8.00	\$20	\$0	\$37.50	0.068	53%	3.85 1.8	146	\$0.137	\$0.017	0.02	0.02	\$0.00	-\$0.16	89.76%	20	800	99%	100%	100%	12	124,284	\$16,000	\$30,000
Integrated Photocell Integrated Occupancy & Photo Cell	Lighting System with Integrated Photocell Lighting System with Occupancy	34	6,324	Manual Switch Lighting Fixture -	53	7,010	8.00	\$8	\$0	\$12.50	0.068	64%	1.23 0.4		\$0.052	\$0.006	0.02	0.02	\$0.00	-\$0.30	86.52%	6	660	99%	100%	100%	11	108,159	\$5,280	\$8,250
Sensor	& Photo Sensor Lighting Fixture with Networked	32	6,216	Manual Switch Lighting Fixture with	53	6,901	8.00 15.00	\$28	\$0.00	\$50.00 \$98.74	0.068	56%	4.59 2.0		\$0.169	\$0.021	0.02	0.02	\$0.00	-\$0.33	85.96% 77.54%	6	2,000	99%	100%	100%	38	352,508	\$56,000	\$100,000
Networked Lighting Controls	Lighting Controls	33	4,543	Manual Switch Lighting Fixture with	63	4,543		\$25	φυ.00		0.068	25%	11.31 8.4	3 134	\$0.187	\$0.012	0.03	0.02	\$0.00	-\$0.34		29	5,800	99%	100%	100%	141	826,220	\$145,891	\$572,710
Standalone Controls	Lighting Fixture with Sensor	156	4,543	Manual Switch	210	4,543	8.00	\$13	\$0.00	\$128.80	0.068	10%	8.10 7.2		\$0.055	\$0.007	0.05	0.04	\$0.00	-\$0.64	77.54%	80	7,300	99%	100%	100%	324	1,896,165	\$97,618	\$940,223
Stairwell Fixture LED/LEC Exit Sign	LED Stairwell Fixture LED	28	7,673 8,760	Fixture Incandescent	58 35	7,673 8,760	20.00	\$40 \$25	\$0.00 \$0	\$277.25 \$82.01	0.059	14% 30%	21.40 18.3 4.69 3.2		\$0.174 \$0.084	\$0.009 \$0.004	0.03	0.03	\$0.00 \$0.00	-\$0.59 \$0.00	100.00%	0 50	1,250	99%	100%	100%	0 45	0 393,544	\$0 \$31,250	\$0 \$102,506
T8 Low Wattage Lamps	T8 Low Wattage Lamps	31	4,543	T8 32W Lamp Halogen,	38	4,543 4,637	8.00 5.24	\$2	\$0	\$4.00 \$15.76	0.059	38%	2.41 1.5		\$0.051	\$0.006	0.01	0.01	\$0 \$0.00	\$0 -\$0.33	77.54% 76.26%	1.036	30,000	99%	100%	100%	160	935,164	\$45,000	\$120,000
LED Midstream Interior Lamps LED Interior Fixture	LED Lamp	45	4,637	Incandescent, or CFL Lamp Incandescent Fixture	80	4,637	20.00	\$49	\$0	\$15.76	0.059	39%	19.82 15.1		\$0.048 \$0.306	\$0.009 \$0.015	0.03	0.02	\$0.00	-\$0.33	76.26%	1,036	172,190	99%	100%	100%	3,591	21,834,005	\$1,067,845 \$5,350	\$2,713,280 \$22,546
LED Exterior Wall Pack	LED Wall Pack Fixture	52	4,903	HID Wall Pack	240	4,903	20.00	\$32	\$0	\$350.43	0.068	9%	5.62 5.1		\$0.034	\$0.002	0.19	0.00	\$0.00	\$0.00	0.00%	15	1,850	99%	100%	100%	0	1,810,189	\$58,500	\$648,293
LED Parking Garage Wall Pack	LED Wall Pack Fixture	38	8,760	HID Wall Pack Fixture	187	8,760	20.00	\$50	\$0	\$354.64	0.059	14%	4.61 3.9	,,,,,	\$0.038	\$0.002	0.15	0.16	\$0.00	\$0.00	100.00%	4	225	99%	100%	100%	36	311,072	\$11,250	\$79,793
LED Outdoor Canopy Lighting LED Parking Garage Lighting	LED Canopy Fixture LED Parking Garage Fixture	47	4,903 8,760	HID Fixture HID Fixture	199	4,903 8,760	20.00	\$40 \$117	\$0.00	\$339.78 \$366.27	0.044 0.059	12% 32%	6.17 5.4 4.66 3.1		\$0.032 \$0.088	\$0.002 \$0.004	0.26 0.15	0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00%	8	400 2,500	99%	100%	100%	403	533,021 3,533,282	\$16,000 \$292,500	\$135,913 \$915,675
LED Ref and Frz Cases 5' or 6' doors	LED Strip lighting	51	8,760	T8 or T12 Fluorescent	139	8,760	20.00	\$45	\$0	\$163.75	0.059	27%	3.60 2.6		\$0.058	\$0.003	0.09	0.09	\$0.00	\$0.00	100.00%	20	1,000	99%	100%	100%	93	818,407	\$45,000	\$163,750
LED Street Lighting LED Area Lighting	LED Fixture LED Fixture	128 125	4,903 4,903	HID Fixture HID Fixture	314 412	4,903 4,903	20.00 20.00	\$38 \$152	\$0 \$0	\$559.71 \$636.76	0.044 0.044	7% 24%	13.97 13.0 10.33 7.8		\$0.042 \$0.108	\$0.002 \$0.005	0.19 0.29	0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00%	8 15	65 1,100	99% 99%	100% 100%	100% 100%	0	63,034 1,640,967	\$2,475 \$167,500	\$36,381 \$700,433
LED Troffer Fixture	LED Troffer Fixture	55	4,543	Fluorescent Fixture	99	4,543	20.00	\$50	\$0	\$170.75	0.068	29%	13.23 9.3		\$0.250	\$0.013	0.04	0.04	\$0.00	-\$0.62	77.54%	20	33,000	99%	100%	100%	1,195	7,001,834	\$1,650,000	\$5,634,750
LED Troffer Retrofit T12 LED Troffer Fixture	LED Troffer Fixture - Retrofit Kit LED Troffer T12 Fixture - Retrofit	39	4,543	Fluorescent Fixture	95 67	4,543 4,543	20.00	\$50 \$30	\$0 \$51	\$119.33 \$68.78	0.068	42%	9.16 5.3 8.47 4.7		\$0.248 \$0.236	\$0.012 \$0.012	0.04	0.04	\$0.00 \$0.00	-\$0.59 -\$0.49	77.54% 77.54%	10	6,000 55	99%	100%	100%	219	1,281,928 7,422	\$300,000 \$1,650	\$715,980 \$3,783
T12 LED Troffer Retrofit	Kit LED Troffer T12 Fixture	53	4,543	Fluorescent Fixture	92	4,543	20.00	\$30	\$51	\$120.12	0.068	25%	10.35 7.7		\$0.168	\$0.008	0.04	0.03	\$0.00	-\$0.46	77.54%	0	0	99%	100%	100%	0	0	\$0	\$0
LED High Bay Fixture Retrofit Kits for LED High-Bay Fixtures	LED High Bay	301 302	4,543 4,543	HID Fixture	571 587	4,543 4,543	20.00	\$156 \$58	0 \$0	\$684.41 \$431.49	0.068	23%	8.56 6.6 5.12 4.4		\$0.127 \$0.044	\$0.006 \$0.002	0.27	0.22	\$0.00 \$0.00	-\$3.15 -\$3.32	77.54% 77.54%	20 4	1,768 420	99% 99%	100% 100%	100%	393 98	2,304,894 577,016	\$276,500 \$24.200	\$1,209,701 \$181,225
LED Tubes (Linear Lamps)	LED Tubes (Linear Lamps)	22	4,543	T8 Fluorescent Lamps	33	4,543	12.09	\$5	\$2	\$11.37	0.068	43%	3.46 1.9	, , , ,	\$0.095	\$0.008	0.01	0.01	\$0.00	-\$0.18	77.54%	925	448,000	99%	100%	100%	4,160	24,372,151	\$2,186,000	\$5,092,781
LED High Bay Fixture	LED High Bay Fixture	408	4,543	HID Fixture	835	4,543	20.00	\$151	\$323	\$866.20	0.068	17%	6.88 5.6	1,937	\$0.078	\$0.004	0.43	0.35	\$0.00	-\$4.97	77.54%	8	8,000	99%	100%	100%	2,806	16,436,986	\$1,210,000	\$6,929,634
LED Interior Fixture	LED Downlight Fixture	35	4,543	Incandescent Fixture	69	4,543	20.00	\$33	\$34	\$124.92	0.068	26%	12.34 9.1		\$0.209	\$0.010	0.03	0.03	\$0.00	-\$0.40	77.54%	2	200	99%	100%	100%	6	33,015	\$6,500	\$24,984
LED Ref and Frz Cases 5' or 6' doors LED Exterior Wall Pack	LED Strip lighting LED Wall Pack Fixture	51 52	8,760 4,903	T8 Fluorescent HID Wall Pack	118	8,760 4,903	20.00	\$35 \$31	\$38 \$262	\$125 \$89	0.059 0.044	28% 35%	3.60 2.5 2.22 1.4		\$0.059 \$0.034	\$0.003 \$0.002	0.07	0.07	\$0.00 \$0.00	\$0.00 \$0.00	100.00%	20 16	1,000	99%	100%	100%	72	627,020 1,891,145	\$35,000 \$60,000	\$125,390 \$173,382
LED Parking Garage Wall Pack	LED Wall Pack Fixture	38	8,760	Fixture HID Wall Pack Fixture	181	8,760	20.00	\$26	\$225	\$131	0.059	19%	1.78 1.4		\$0.020	\$0.001	0.14	0.15	\$0.00	\$0.00	100.00%	6	225	99%	100%	100%	34	298,920	\$5,750	\$29,543
LED Outdoor Canopy Lighting	LED Canopy Fixture	74	4,903	HID Fixture	355	4,903	20.00	\$40	\$261	\$78	0.044	51%	1.30 0.6		\$0.029	\$0.001	0.28	0.00	\$0.00	\$0.00	0.00%	6	300	99%	100%	100%	0	438,358	\$12,000	\$23,489
LED Parking Garage Lighting T8 Low Wattage Lamps	LED Parking Garage Fixture T8 Low Wattage Lamps High Pay Flourescents With	54 31	8,760 4,543	HID Fixture T8 32W Lamp	215 38	8,760 4,543	20 8	\$29 \$2	\$269 \$2	\$114 \$2	0.059 0.068	25% 75%	1.37 1.0 1.05 0.2	5 29	\$0.020 \$0.051	\$0.001 \$0.006	0.16 0.01	0.17 0.01	\$0.00 \$0.00	\$0.00 -\$0.08	100.00% 77.54%	8 20	3,200 6,000	99% 99%	100%	100%	547 32	4,792,003 187,033	\$92,000 \$9,000	\$363,964 \$12,000
High Bay Fluorescent replacing HID CFL Pin Based	High Bay Flourescents With Electronic Ballasts Pin-Based CFL	319 34	4,543 4,543	HID Fixture Incandescent	578 102	4,543 4,543	20 20	\$11 \$2	\$240 \$44	\$108 \$10	0.068 0.068	10% 19%	1.41 1.2 0.51 0.4		\$0.009 \$0.006	\$0.000 \$0.000	0.26	0.22	\$0.00 \$0.00	-\$3.03 -\$0.79	77.54% 77.54%	9 65	125 300	99% 99%	100% 100%	100%	27 17	156,384 98,288	\$1,400 \$600	\$13,537 \$3,081
LED Street Lighting LED Area Lighting	LED Fixture LED Fixture	111 134	4,903 4,903	HID Fixture HID Fixture	275 427	4,903 4,903	20 20	\$34 \$48	\$259 \$248	\$271 \$410	0.044 0.044	13% 12%	7.70 6.7 6.50 5.7	803	\$0.042 \$0.033	\$0.002 \$0.002	0.16 0.29	0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00% 0.00%	6 15	100 420	99% 99%	100% 100%	100% 100%	0	85,206 641,329	\$3,400 \$20,125	\$27,119 \$172,174
LED Troffer Fixture	LED Troffer Fixture	55	4,543	Fluorescent Fixture	108	4,543	20	\$30	\$53	\$118	0.068	25%	7.56 5.6	1 240	\$0.125	\$0.006	0.05	0.04	\$0.00	-\$0.62	77.54%	12	5,900	99%	100%	100%	257	1,503,820	\$177,000	\$697,376
Custom Lighting Project Lighting Control System	High Efficiency Lighting Lighting Control System	7,074	4,363 8,433	Existing Lower Efficiency Lighting Manual Lighting Controls	20,176	4,363 8,433	16.59 15.00	\$5,495 \$1,579	\$2,066 \$0	\$19,946 \$6,632	0.068	28%	5.40 3.9 3.78 2.8		\$0.096 \$0.071	\$0.006 \$0.005	13.10	9.18	\$0.00 \$0.00	-\$170.17 \$245.63	65.53% 3.99%	215	400	99%	100%	100%	3,644	24,260,683	\$2,198,121 \$1,579	\$7,978,267 \$6,632
Lighting Control System LED Screw-in Lamps, HID Replacement	LED High Bay Replacement Lamp	220	4,543	Controls HID Fixture	421	4,543	9.64	\$63	\$11	\$6,632	0.068	29%	3.66 2.6		\$0.071	\$0.005	0.20	0.17	\$0.00	\$245.63 -\$2.35	77.54%	10	700	99%	100%	100%	116	679,242	\$1,579	\$152,499
LED PL/G based CFL Replacement lamp		21	4,543	CFL lamp	47	4,543	12.00	\$7	\$1.42	\$20	0.068	35%	2.64 1.7	116	\$0.060	\$0.005	0.03	0.02	\$0.00	-\$0.30	77.54%	10	4,500	99%	100%	100%	94	553,580	\$31,500	\$89,699
LED Interior Fixture (CFL Baseline)	LED Downlight Fixture	32	4,543	CFL fixture	75	4,543	20.00	\$30	0	\$144	0.068	21%	11.60 9.1		\$0.157	\$0.008	0.04	0.03	\$0.00	-\$0.49	77.54%	20	10,000	99%	100%	100%	346	2,025,988	\$300,000	\$1,441,023
LED Troffer Fixture (T12 baseline)	LED Troffer Fixture - Retrofit Kit	55	4,543	T12 Fluorescent Fixture T12 Fluorescent	130	4,543	20.00	\$70	\$0 \$0	\$171	0.068	41%	7.80 4.6		\$0.205	\$0.010	0.08	0.06	\$0.00	-\$1.17	77.54%	20	8,000	99%	100%	100%	494	2,892,722	\$560,000	\$1,366,000
T12 LED Troffer Retrofit (T12 baseline) LED Tubes (Linear Lamps) (T12	LED Troffer Fixture - Retrofit Kit LED Tubes (Linear Lamps)	51 17	4,543 4,543	Fixture T12 Fluorescent	130	4,543 4,543	20.00	\$50 \$12	\$0 \$2	\$119 \$19	0.068	42% 62%	5.14 2.9 2.21 0.8		\$0.139 \$0.088	\$0.007 \$0.007	0.08	0.07	\$0.00 \$0.00	-\$1.17 -\$0.39	77.54% 77.54%	10 27	1,600	99%	100%	100%	104 276	1,617,653	\$80,000 \$134,600	\$190,928 \$218,126
Baseline) LED Ref and Frz Cases 5' or 6' doors (T12 baseline)	LED Strip lighting	51	8,760	Lamps T12 Fluorescent	160	8,760	20.00	\$55	\$0	\$164	0.068	34%	2.54 1.6		\$0.058	\$0.003	0.11	0.12	\$0.00	\$0.00	100.00%	2	1,000	99%	100%	100%	115	1,009,794	\$55,000	\$163,750
LED Linear Ambient (T12 Baseline)	LED Linear Ambient Fixture	57	4,543	T12 Flourescent Ambient Fixture	119	4,543	20	\$113	\$11	\$205	0.068	55%	11.36 5.0	278	\$0.408	\$0.020	0.06	0.05	\$0.00	-\$0.71	77.54%	3	4,800	99%	100%	100%	241	1,414,480	\$544,000	\$985,482
LED Linear Ambient	LED Linear Ambient Fixture	91	4,543	Flourescent Ambient Fixture	153	4,543	20	\$74	\$30	\$249	0.068	30%	14.19 9.9	7 280	\$0.264	\$0.013	0.06	0.05	\$0.00	-\$1.42	77.54%	218	2,382	99%	100%	100%	121	707,721	\$176,370	\$592,212