Appendix C.14 Non-residential Energy Audit Program 2012-2018

Table 1		Participation							Energy Savings						
		Program Participants							Gross kWh						
		VA			NC			System	VA			NC			System
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	System Cum for IRP	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	System Cum for IRP
January	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
February	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
March	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
April	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
May	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
June	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
July	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
August	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
September	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
October	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
November	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410
December	2018	0		1,632	0		110	1,742	0		3,645,930	0		151,480	3,797,410

Table 2. EM&V Data Incremental by Vintage Year														
	Program Participants							Gross Incremental Energy (kWh)						
			VA IRP			NC IRP	System IRP			VA IRP			NC IRP	System IRP
2012			1			-	1			2,953			-	2,953
2013			302			-	302			943,530			-	943,530
2014			1,116			16	1,132			13,885,142			88,149	13,973,291
2015			73			78	151			635,097			104,520	739,618
2016			125			14	139			2,366,988			48,200	2,415,189
2017			15			2	17			191,896			777,278	969,174
2018			0			0	0			0			0	0

Table 3. EM&V Data Annualized by Vintage Year														
	Program Participants							Gross Annualized Energy (kWh/year)						
			VA IRP			NC IRP	System IRP			VA IRP			NC IRP	System IRP
2012			1			-	1			35,433			-	35,433
2013			302			-	302			4,498,061			-	4,498,061
2014			1,116			16	1,132			31,588,249			495,669	32,083,917
2015			73			78	151			667,407			225,418	892,825
2016			125			14	139			6,765,468			270,829	7,036,296
2017			15			2	17			196,549			825,840	1,022,389
2018			0			0	0			0			0	0

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)														
	Program Participants							Gross Energy (kWh) for PPI						
	VA					NC PPI	System	VA					NC PPI	System
2012						-							-	
2013						-							-	
2014						16							88,149	
2015						94							600,189	
2016						108							769,288	
2017						94							1,273,525	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)														
	Program Participants							Gross Energy (kWh)						
			VA IRP			NC IRP	System IRP			VA IRP			NC IRP	System IRP
2012			1			-	1			2,953			-	2,953
2013			303			-	303			978,963			-	978,963
2014			1,419			16	1,435			18,418,635			88,149	18,506,784
2015			1,492			94	1,586			36,756,839			600,189	37,357,028
2016			1,617			108	1,725			39,156,137			769,288	39,925,425
2017			1,632			110	1,742			43,746,512			1,769,194	45,515,707
2018			1,632			110	1,742			43,751,165			1,817,756	45,568,922

Appendix C.14 Non-residential Energy Audit Program 2012-2018

Table 1		Capacity Savings							Energy Savings / Participant			Capacity Savings / Participant		
		Gross kW							Gross kWh/Participant for IRP			Gross kW/Participant for IRP		
		VA			NC			System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	System Cum for IRP	VA	NC	System	VA	NC	System
January	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
February	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
March	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
April	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
May	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
June	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
July	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
August	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
September	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
October	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
November	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94
December	2018	0		3,868	0		264	3,382	1,998	1,050	1,939	1.96	1.68	1.94

Table 2. EM&V Data Incremental by Vintage Year								Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Gross Peak Demand (kW)							kWh/Parti			kW/Partic		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2012			10			-	10	2,953	-	2,953	10.05	-	10.05
2013			956			-	956	3,124	-	3,124	3.17	-	3.17
2014			2,104			57	2,161	12,442	5,509	12,344	1.89	3.55	1.91
2015			9			30	38	8,700	1,340	4,898	0.12	0.38	0.25
2016			765			31	795	18,936	3,443	17,375	6.12	2.18	5.72
2017			24			147	172	12,793	388,639.10	57,010	1.63	73.60	10.10
2018			0			0	0	-	-	-	-	-	-

Table 3. EM&V Data Annualized by Vintage Year								Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Gross Peak Demand (kW)							Gross kWh/Participant for IRP			Gross kW/Participant for IRP		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2012			10			-	10	35,433	-	35,433	10.05	-	10.05
2013			956			-	956	14,894	-	14,894	3.17	-	3.17
2014			2,104			57	2,161	28,305	30,979	28,343	1.89	3.55	1.91
2015			9			30	38	9,143	2,890	5,913	0.12	0.38	0.25
2016			765			31	795	54,124	19,345	50,621	6.12	2.18	5.72
2017			24			147	172	13,103	412,920	60,141	1.63	73.60	10.10
2018			0			0	0	-	-	-	-	-	-

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)								PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Gross Peak Demand (kW)							Gross kWh/Participant			Gross kW/Participant		
	VA					NC PPI	System	VA	NC	System	VA	NC	System
2012						-			-			-	
2013						-			-			-	
2014						57			5,509			3.55	
2015						87			6,385			0.92	
2016						117			7,123			1.09	
2017						208			13,548			2.21	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)								IRP Energy Savings/Participant			IRP Capacity Savings/Participant		
	Gross Peak Demand (kW)							Gross kWh/Participant			Gross kW/Participant		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2012			10			-	10	2,953	-	2,953	10.05	-	10.05
2013			966			-	966	3,231	-	3,231	3.19	-	3.19
2014			3,070			57	3,127	12,980	5,509	12,897	2.16	3.55	2.18
2015			3,079			87	3,165	24,636	6,385	23,554	2.06	0.92	2.00
2016			3,843			117	3,961	24,215	7,123	23,145	2.38	1.09	2.30
2017			3,868			264	4,132	26,805	16,084	26,128	2.37	2.40	2.37
2018			3,868			264	4,132	26,808	16,525	26,159	2.37	2.40	2.37

Appendix D

D. NET CUMULATIVE PERFORMANCE INDICATOR TABLES FOR VIRGINIA AND NORTH CAROLINA

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

PROGRAM: Residential Income and Age Qualifying Home Improvement Program
DSM Phase IV Program
Type: Energy Efficiency
Program Measure Life: 14.0 years (2015-2017); 15.0 years (after 2018)

Table 1		Participation										
		Program Participants										
		VA					NC					System
Month	Year	VA Monthly New [A]	VA Monthly Retired [-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [F] =Σ[A] + Σ[-A retired] + B	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
January	2015	0		0		0			0		0	[illegible]
February	2015	0		0		0			0		0	[illegible]
March	2015	0		0		0			0		0	[illegible]
April	2015	0		0		0			0		0	[illegible]
May	2015	0		0		0			0		0	[illegible]
June	2015	0		0		0			0		0	[illegible]
July	2015	0		0		0			0		0	[illegible]
August	2015	0		0		0			0		0	[illegible]
September	2015	0		0		0			0		0	[illegible]
October	2015	44		44		44			0		0	[illegible]
November	2015	712		756		756			0		0	[illegible]
December	2015	767		1,523		1,523			0		0	[illegible]
January	2016	114		1,637		1,637	0		0		0	[illegible]
February	2016	224		1,861		1,861	0		0		0	[illegible]
March	2016	295		2,156		2,156	0		0		0	[illegible]
April	2016	544		2,700		2,700	0		0		0	[illegible]
May	2016	319		3,019		3,019	0		0		0	[illegible]
June	2016	623		3,642		3,642	0		0		0	3,642
July	2016	638		4,280		4,280	20		20	20	20	4,300
August	2016	1,891		6,171		6,171	12		32	32	32	6,203
September	2016	769		6,940		6,940	9		41	41	41	6,981
October	2016	904		7,844		7,844	25		66	66	66	7,910
November	2016	1,566		9,410		9,410	37		103	103	103	9,513
December	2016	516		9,926		9,926	54		157		157	10,083
January	2017	428		10,354		10,354	42		199		199	[illegible]
February	2017	202		10,556		10,556	16		215		215	[illegible]
March	2017	737		11,293		11,293	12		227		227	[illegible]
April	2017	507		11,800		11,800	13		240		240	[illegible]
May	2017	617		12,417		12,417	6		246		246	[illegible]
June	2017	585		13,002		13,002	4		250		250	[illegible]
July	2017	443		13,445		13,445	2		252		252	[illegible]
August	2017	252		13,697		13,697	4		256		256	[illegible]
September	2017	101		13,798		13,798	2		258		258	[illegible]
October	2017	513		14,311		14,311	0		258		258	[illegible]
November	2017	822		15,133		15,133	7		265		265	[illegible]
December	2017	763		15,896		15,896	22		287		287	[illegible]
January	2018	2		15,898		15,898	1		288		288	[illegible]
February	2018	0		15,898		15,898	0		288		288	[illegible]
March	2018	0		15,898		15,898	0		288		288	[illegible]
April	2018	0		15,898		15,898	0		288		288	[illegible]
May	2018	0		15,898		15,898	0		288		288	[illegible]
June	2018	0		15,898		15,898	0		288		288	[illegible]
July	2018	0		15,898		15,898	0		288		288	[illegible]
August	2018	0		15,898		15,898	0		288		288	[illegible]
September	2018	75		15,973		15,973	0		288		288	[illegible]
October	2018	100		16,073		16,073	0		288		288	[illegible]
November	2018	387		16,460		16,460	0		288		288	[illegible]
December	2018	577		17,037		17,037	0		288		288	[illegible]

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

Table 1		Energy Savings										
		Net kWh										
		VA					NC					System
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
January	2015	0		0		0						[illegible]
February	2015	0		0		0						[illegible]
March	2015	0		0		0			0		0	[illegible]
April	2015	0		0		0			0		0	[illegible]
May	2015	0		0		0			0		0	[illegible]
June	2015	0		0		0			0		0	[illegible]
July	2015	0		0		0			0		0	[illegible]
August	2015	0		0		0			0		0	[illegible]
September	2015	0		0		0			0		0	[illegible]
October	2015	1,825		1,825		1,825			0		0	[illegible]
November	2015	43,106		44,931		44,931			0		0	[illegible]
December	2015	20,684		65,615		65,615			0		0	[illegible]
January	2016	3,631		69,246		69,246	0		0		0	[illegible]
February	2016	5,519		74,765		74,765	0		0		0	[illegible]
March	2016	11,453		86,218		86,218	0		0		0	[illegible]
April	2016	15,292		101,510		101,510	0		0		0	[illegible]
May	2016	7,940		109,450		109,450	0		0		0	[illegible]
June	2016	17,718		127,168		127,168	0		0		0	127,168
July	2016	19,386		146,554		146,554	779		779	779	779	147,333
August	2016	50,978		197,532		197,532	498		1,277	1,277	1,277	198,809
September	2016	24,586		222,118		222,118	435		1,712	1,712	1,712	223,830
October	2016	22,140		244,258		244,258	998		2,710	2,710	2,710	246,969
November	2016	45,168		289,427		289,427	2,372		5,082	5,082	5,082	294,509
December	2016	14,555		303,982		303,982	2,010		7,092		7,092	311,074
January	2017	14,682		318,663		318,663	2,738		9,829		9,829	[illegible]
February	2017	3,927		322,590		322,590	696		10,526		10,526	[illegible]
March	2017	31,043		353,633		353,633	735		11,260		11,260	[illegible]
April	2017	14,799		368,432		368,432	475		11,735		11,735	[illegible]
May	2017	20,750		389,182		389,182	288		12,023		12,023	[illegible]
June	2017	14,720		403,902		403,902	180		12,203		12,203	[illegible]
July	2017	9,294		413,196		413,196	121		12,324		12,324	[illegible]
August	2017	8,028		421,225		421,225	365		12,689		12,689	[illegible]
September	2017	2,272		423,496		423,496	354		13,043		13,043	[illegible]
October	2017	12,427		435,924		435,924	0		13,043		13,043	[illegible]
November	2017	16,075		451,999		451,999	291		13,334		13,334	[illegible]
December	2017	14,098		466,097		466,097	1,077		14,412		14,412	[illegible]
January	2018	58		466,156		466,156	48		14,460		14,460	[illegible]
February	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
March	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
April	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
May	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
June	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
July	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
August	2018	0		466,156		466,156	0		14,460		14,460	[illegible]
September	2018	1,718		467,874		467,874	0		14,460		14,460	[illegible]
October	2018	3,662		471,536		471,536	0		14,460		14,460	[illegible]
November	2018	14,789		486,325		486,325	0		14,460		14,460	[illegible]
December	2018	9,624		495,949		495,949	0		14,460		14,460	[illegible]

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

Table 1		Capacity Savings											Energy Savings / Participant			Capacity Savings / Participant		
		Net kW											Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA					NC					System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP	VA	NC	System	VA	NC	System
January	2015	0		0		0							-	-	-	-	-	-
February	2015	0		0		0							-	-	-	-	-	-
March	2015	0		0		0			0		0		-	-	-	-	-	-
April	2015	0		0		0			0		0		-	-	-	-	-	-
May	2015	0		0		0			0		0		-	-	-	-	-	-
June	2015	0		0		0			0		0		-	-	-	-	-	-
July	2015	0		0		0			0		0		-	-	-	-	-	-
August	2015	0		0		0			0		0		-	-	-	-	-	-
September	2015	0		0		0			0		0		-	-	-	-	-	-
October	2015	2		2		2			0		0		41	-	41	0.05	-	0.05
November	2015	36		38		38			0		0		59	-	59	0.05	-	0.05
December	2015	26		64		64			0		0		43	-	43	0.04	-	0.04
January	2016	4		68		68	0		0		0		42	-	42	0.04	-	0.04
February	2016	9		78		78	0		0		0		40	-	40	0.04	-	0.04
March	2016	14		92		92	0		0		0		40	-	40	0.04	-	0.04
April	2016	20		112		112	0		0		0		38	-	38	0.04	-	0.04
May	2016	10		122		122	0		0		0		36	-	36	0.04	-	0.04
June	2016	23		145		145	0		0		0	145	35	-	35	0.04	-	0.04
July	2016	24		169		169	1		1	1	1	170	34	39	34	0.04	0.05	0.04
August	2016	69		239		239	1		2	2	2	240	32	40	32	0.04	0.05	0.04
September	2016	28		267		267	1		2	2	2	269	32	42	32	0.04	0.05	0.04
October	2016	31		297		297	1		3	3	3	301	31	41	31	0.04	0.05	0.04
November	2016	67		365		365	3		6	6	6	371	31	49	31	0.04	0.06	0.04
December	2016	18		383		383	2		8		8	391	31	45	31	0.04	0.05	0.04
January	2017	15		398		398	3		11		11	[illegible]	31	49	31	0.04	0.06	0.04
February	2017	6		404		404	1		12		12	[illegible]	31	49	31	0.04	0.06	0.04
March	2017	29		433		433	1		13		13	[illegible]	31	50	32	0.04	0.06	0.04
April	2017	17		450		450	1		13		13	[illegible]	31	49	32	0.04	0.06	0.04
May	2017	23		473		473	0		14		14	[illegible]	31	49	32	0.04	0.06	0.04
June	2017	17		490		490	0		14		14	[illegible]	31	49	31	0.04	0.06	0.04
July	2017	12		502		502	0		14		14	[illegible]	31	49	31	0.04	0.06	0.04
August	2017	7		509		509	0		14		14	[illegible]	31	50	31	0.04	0.06	0.04
September	2017	3		512		512	0		14		14	[illegible]	31	51	31	0.04	0.06	0.04
October	2017	13		526		526	0		14		14	[illegible]	30	51	31	0.04	0.06	0.04
November	2017	21		547		547	0		15		15	[illegible]	30	50	30	0.04	0.06	0.04
December	2017	18		565		565	1		16		16	[illegible]	29	50	30	0.04	0.06	0.04
January	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
February	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
March	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
April	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
May	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
June	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
July	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
August	2018	0		565		565	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
September	2018	2		567		567	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
October	2018	3		569		569	0		16		16	[illegible]	29	50	30	0.04	0.05	0.04
November	2018	15		584		584	0		16		16	[illegible]	30	50	30	0.04	0.05	0.04
December	2018	9		593		593	0		16		16	[illegible]	29	50	29	0.03	0.05	0.04

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

Table 2. EM&V Data Incremental by Vintage Year

	Program Participants								
	[redacted]	VA IRP	[redacted]	VA NLR	[redacted]	NC IRP	[redacted]	NC NLR	System IRP
2015	[redacted]	1,523	[redacted]	1,523	[redacted]	-	[redacted]	-	1,523
2016	[redacted]	8,403	[redacted]	8,403	[redacted]	157	[redacted]	157	8,560
2017	[redacted]	5,970	[redacted]	5,970	[redacted]	130	[redacted]	130	6,100
2018	[redacted]	1,141	[redacted]	1,141	[redacted]	1	[redacted]	1	1,142

Table 3. EM&V Data Annualized by Vintage Year

	Program Participants								
	[redacted]	VA IRP	[redacted]	VA NLR	[redacted]	NC IRP	[redacted]	NC NLR	System IRP
2015	[redacted]	1,523	[redacted]	1,523	[redacted]	-	[redacted]	-	1,523
2016	[redacted]	8,403	[redacted]	8,403	[redacted]	157	[redacted]	157	8,560
2017	[redacted]	5,970	[redacted]	5,970	[redacted]	130	[redacted]	130	6,100
2018	[redacted]	1,141	[redacted]	1,141	[redacted]	1	[redacted]	1	1,142

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)

	Program Participants					
	[redacted]	[redacted]	[redacted]	NC PPI	[redacted]	[redacted]
2015	[redacted]	[redacted]	[redacted]	-	[redacted]	[redacted]
2016	[redacted]	[redacted]	[redacted]	157	[redacted]	[redacted]
2017	[redacted]	[redacted]	[redacted]	287	[redacted]	[redacted]
2018	[redacted]	[redacted]	[redacted]	288	[redacted]	[redacted]

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)

	Program Participants								
	[redacted]	VA IRP	[redacted]	VA NLR	[redacted]	NC IRP	[redacted]	NC NLR	System IRP
2015	[redacted]	1,523	[redacted]	1,523	[redacted]	-	[redacted]	-	1,523
2016	[redacted]	9,926	[redacted]	9,926	[redacted]	157	[redacted]	157	10,083
2017	[redacted]	15,896	[redacted]	15,896	[redacted]	287	[redacted]	287	16,183
2018	[redacted]	17,037	[redacted]	17,037	[redacted]	288	[redacted]	288	17,325

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

Table 2. EM&V Data Incremental by Vintage Year

	Net Incremental Energy (kWh)								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2015		112,372		112,372		-		-	112,372
2016		1,184,845		1,184,845		18,652		18,652	1,203,497
2017		1,120,561		1,120,561		61,320		61,320	1,181,880
2018		57,761		57,761		579		579	58,340

Table 3. EM&V Data Annualized by Vintage Year

	Net Annualized Energy (kWh)								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2015		787,384		787,384		-		-	787,384
2016		2,860,394		2,860,394		85,103		85,103	2,945,497
2017		1,945,390		1,945,390		87,835		87,835	2,033,225
2018		358,220		358,220		579		579	358,799

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)

	Net Energy (kWh) for PPI					
				NC PPI		
2015				-		
2016				18,652		
2017				146,423		
2018				173,518		

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)

	Net Energy (kWh)								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2015		112,372		112,372		-		-	112,372
2016		1,972,230		1,972,230		18,652		18,652	1,990,881
2017		4,768,339		4,768,339		146,423		146,423	4,914,762
2018		5,650,929		5,650,929		173,518		173,518	5,824,446

Appendix D.1 Residential Income and Age Qualifying Home Improvement Program 2015-2018

Table 2. EM&V Data Incremental by Vintage Year									Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2015		64		64		-		-	64	74	-	74	0.04	-	0.04
2016		318		318		8		8	327	141	119	141	0.04	0.05	0.04
2017		182		182		7		7	190	188	471.69	194	0.03	0.06	0.03
2018		28		28		0		0	28	51	579	51	0.02	0.05	0.02

Table 3. EM&V Data Annualized by Vintage Year									Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2015		64		64		-		-	64	517	-	517	0.04	-	0.04
2016		318		318		8		8	327	340	542	344	0.04	0.05	0.04
2017		182		182		7		7	190	326	675.66	333	0.03	0.06	0.03
2018		28		28		0		0	28	314	579	314	0.02	0.05	0.02

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)							PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Net Peak Demand (kW)						Net kWh/Participant			Net kW/Participant		
				NC PPI				NC			NC	
2015				-				-			-	
2016				8				119			0.05	
2017				16				510			0.06	
2018				16				602			0.05	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)									IRP Energy Savings/Participant			IRP Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant			Net kW/Participant		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2015		64		64		-		-	64	74	-	74	0.04	-	0.04
2016		383		383		8		8	391	199	119	197	0.04	0.05	0.04
2017		565		565		16		16	581	300	510	304	0.04	0.06	0.04
2018		593		593		16		16	609	332	602	336	0.03	0.05	0.04

Appendix D.2 Residential Retail LED Lighting Program 2017-2018

PROGRAM: Residential LED Program
DSM Phase VI Program
Type: Energy Efficiency
Program Measure Life: 20.0 years

Table 1		Participation										
		Program Participants										
		[redacted]					NC					System
Month	Year	[redacted] New [redacted]	[redacted]	VA Cum. for IRP (New + Retired) [E] = [redacted] A] + Σ[-A [redacted]	[redacted]	[redacted] Cum. for Net Lost Revenue (NLR) (New + Retired + Rate [redacted] Adj.) [F] = [redacted] Σ[-A [redacted]	NC Monthly New [C]	NC Monthly Retired [-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [H] = Σ[C] + Σ[-C retired] + D	System Cum for IRP
December	2016	[redacted]										0
January	2017	[redacted]					0		0		0	0
February	2017	[redacted]					0		0		0	0
March	2017	[redacted]					0		0		0	0
April	2017	[redacted]					0		0		0	0
May	2017	[redacted]					0		0		0	0
June	2017	[redacted]					0		0		0	0
July	2017	[redacted]					0		0		0	0
August	2017	[redacted]					5,018		5,018		5,018	5,018
September	2017	[redacted]					14,683		19,701		19,701	19,701
October	2017	[redacted]					14,758		34,459		34,459	34,459
November	2017	[redacted]					19,836		54,295		54,295	54,295
December	2017	[redacted]					15,966		70,261		70,261	70,261
January	2018	[redacted]					12,482		82,743		82,743	82,743
February	2018	[redacted]					29,279		112,022		112,022	112,022
March	2018	[redacted]					13,614		125,636		125,636	125,636
April	2018	[redacted]					21,629		147,265		147,265	147,265
May	2018	[redacted]					11,552		158,817		158,817	158,817
June	2018	[redacted]					14,694		173,511		173,511	173,511
July	2018	[redacted]					20,050		193,561		193,561	193,561
August	2018	[redacted]					25,185		218,746		218,746	218,746
September	2018	[redacted]					32,534		251,280		251,280	251,280
October	2018	[redacted]					11,899		263,179		263,179	263,179
November	2018	[redacted]					42,003		305,182		305,182	305,182
December	2018	[redacted]					29,315		334,497		334,497	334,497

Table 2. EM&V Data Incremental by Vintage Year										
	Program Participants									
	[redacted]			VA NLR			NC IRP		NC NLR	System IRP
2017	[redacted]						70,261		70,261	70,261
2018	[redacted]						264,236		264,236	264,236

Table 3. EM&V Data Annualized by Vintage Year										
	Program Participants									
	[redacted]			VA NLR			NC IRP		NC NLR	System IRP
2017	[redacted]						70,261		70,261	70,261
2018	[redacted]						264,236		264,236	264,236

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)										
	Program Participants									
	[redacted]						NC PPI	[redacted]		
2017	[redacted]						70,261			
2018	[redacted]						334,497			

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)										
	Program Participants									
	[redacted]			VA NLR			NC IRP		NC NLR	System IRP
2017	[redacted]						70,261		70,261	70,261
2018	[redacted]						334,497		334,497	334,497

Appendix D.2 Residential Retail LED Lighting Program 2017-2018

Table 1		Energy Savings										
		Net kWh										
							NC					System
Month	Year			VA Cum. for IRP (New + Retired)	Reset Adj	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
December	2016											0
January	2017						0		0		0	0
February	2017						0		0		0	0
March	2017						0		0		0	0
April	2017						0		0		0	0
May	2017						0		0		0	0
June	2017						0		0		0	0
July	2017						0		0		0	0
August	2017						11,080		11,080		11,080	11,080
September	2017						31,885		42,965		42,965	42,965
October	2017						32,204		75,170		75,170	75,170
November	2017						45,335		120,505		120,505	120,505
December	2017						36,296		156,801		156,801	156,801
January	2018						19,791		176,592		176,592	176,592
February	2018						47,825		224,417		224,417	224,417
March	2018						21,932		246,350		246,350	246,350
April	2018						33,671		279,020		279,020	279,020
May	2018						18,895		297,915		297,915	297,915
June	2018						24,434		322,349		322,349	322,349
July	2018						33,054		355,403		355,403	355,403
August	2018						39,443		394,846		394,846	394,846
September	2018						45,748		440,594		440,594	440,594
October	2018						20,327		460,921		460,921	460,921
November	2018						54,477		515,398		515,398	515,398
December	2018						56,814		572,211		572,211	572,211

Table 2. EM&V Data Incremental by Vintage Year											
	Net Incremental Energy (kWh)										
								NC IRP		NC NLR	System IRP
2017								406,822		406,822	406,822
2018								2,419,705		2,419,705	2,419,705

Table 3. EM&V Data Annualized by Vintage Year											
	Net Annualized Energy (kWh)										
								NC IRP		NC NLR	System IRP
2017								1,882,812		1,882,812	1,882,812
2018								5,030,524		5,030,524	5,030,524

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)											
	Net Energy (kWh) for PPI										
								NC PPI			
2017								406,822			
2018								4,302,517			

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)											
	Net Energy (kWh)										
								NC IRP		NC NLR	System IRP
2017								406,822		406,822	406,822
2018								4,302,517		4,302,517	4,302,517

Appendix D.2 Residential Retail LED Lighting Program 2017-2018

Table 1		Capacity Savings										Energy Savings / Participant			Capacity Savings / Participant		
		Net kW										Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA				NC					System						
Month	Year	[redacted]	VA Cum. for IRP (New+Retired)	[redacted]	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP	VA	NC	System	VA	NC	System
December	2016										0						
January	2017					0		0		0	0		-	-		-	-
February	2017					0		0		0	0		-	-		-	-
March	2017					0		0		0	0		-	-		-	-
April	2017					0		0		0	0		-	-		-	-
May	2017					0		0		0	0		-	-		-	-
June	2017					0		0		0	0		-	-		-	-
July	2017					0		0		0	0		-	-		-	-
August	2017					15		15		15	15		2	2		0.00	0.00
September	2017					42		56		56	56		2	2		0.00	0.00
October	2017					42		99		99	99		2	2		0.00	0.00
November	2017					60		158		158	158		2	2		0.00	0.00
December	2017					48		206		206	206		2	2		0.00	0.00
January	2018					24		230		230	230		2	2		0.00	0.00
February	2018					59		289		289	289		2	2		0.00	0.00
March	2018					27		316		316	316		2	2		0.00	0.00
April	2018					41		357		357	357		2	2		0.00	0.00
May	2018					23		381		381	381		2	2		0.00	0.00
June	2018					30		411		411	411		2	2		0.00	0.00
July	2018					39		450		450	450		2	2		0.00	0.00
August	2018					48		498		498	498		2	2		0.00	0.00
September	2018					56		555		555	555		2	2		0.00	0.00
October	2018					25		580		580	580		2	2		0.00	0.00
November	2018					79		659		659	659		2	2		0.00	0.00
December	2018					62		721		721	721		2	2		0.00	0.00

Table 2. EM&V Data Incremental by Vintage Year										Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)									Net kWh/Participant for IRP			Net kW/Participant for IRP		
	[redacted]	[redacted]	VA NLR	[redacted]	[redacted]	NC IRP	[redacted]	NC NLR	System IRP	VA	NC	System	VA	NC	System
2017						206		206	206		-	5.8		-	0.00
2018						515		515	515		-	9.2		-	0.00

Table 3. EM&V Data Annualized by Vintage Year										Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)									Net kWh/Participant for IRP			Net kW/Participant for IRP		
	[redacted]	[redacted]	VA NLR	[redacted]	[redacted]	NC IRP	[redacted]	NC NLR	System IRP	VA	NC	System	VA	NC	System
2017						206		206	206		27	27		0.00	0.00
2018						515		515	515		19	19		0.00	0.00

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)									PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant			Net kW/Participant		
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	NC PPI	[redacted]	[redacted]	[redacted]	NC	[redacted]	[redacted]	NC	[redacted]
2017						206				6			0.00	
2018						721				13			0.00	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)									IRP Energy Savings/Participant			IRP Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant			Net kW/Participant		
	[redacted]	[redacted]	VA NLR	[redacted]	[redacted]	NC IRP	[redacted]	NC NLR	System IRP	[redacted]	NC	System	[redacted]	NC	System
2017						206		206	206		6	6		0.00	0.00
2018						721		721	721		13	13		0.00	0.00

Appendix D.3 Non-residential Lighting Systems and Controls Program 2014-2018

PROGRAM:	Non-residential Lighting Systems and Controls
DSM Phase III Program	
Type: Energy Efficiency	
Program Measure Life: 9.8 years	

Table 1

Month	Year	Participation – Program Participants – VA: VA Monthly New [A]	VA Monthly Retired [-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [F] = Σ[A] + Σ[-A retired] + B	NC: NC Monthly New [C]	NC Monthly Retired [-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [H] = Σ[C] + Σ[-C retired] + D	[redacted]
January	2014	0		0		0						[redacted]
February	2014	0		0		0						[redacted]
March	2014	0		0		0						[redacted]
April	2014	0		0		0						[redacted]
May	2014	0		0		0						[redacted]
June	2014	0		0		0						[redacted]
July	2014	0		0		0						[redacted]
August	2014	0		0		0						[redacted]
September	2014	0		0		0						[redacted]
October	2014	14		14		14						[redacted]
November	2014	63		77		77						[redacted]
December	2014	41		118		118						[redacted]
January	2015	50		168		168	0		0		0	[redacted]
February	2015	48		216		216	0		0		0	[redacted]
March	2015	68		284		284	0		0		0	[redacted]
April	2015	71		355		355	1		1		1	[redacted]
May	2015	112		467		467	0		1		1	[redacted]
June	2015	110		577		577	1		2		2	[redacted]
July	2015	78		655		655	0		2		2	[redacted]
August	2015	127		782		782	0		2		2	[redacted]
September	2015	278		1,060		1,060	3		5		5	[redacted]
October	2015	162		1,222		1,222	5		10		10	[redacted]
November	2015	62		1,284		1,284	1		11		11	[redacted]
December	2015	75		1,359		1,359	2		13		13	[redacted]
January	2016	104		1,463		1,463	1		14		14	[redacted]
February	2016	53		1,516		1,516	1		15		15	[redacted]
March	2016	113		1,629		1,629	2		17		17	[redacted]
April	2016	71		1,700		1,700	1		18		18	[redacted]
May	2016	124		1,824		1,824	0		18		18	[redacted]
June	2016	160		1,984		1,984	10		28		28	2,012
July	2016	141		2,125		2,125	1		29	1	29	2,154
August	2016	139		2,264		2,264	16		45	17	45	2,309
September	2016	66		2,330		2,330	1		46	18	46	2,376
October	2016	74		2,404		2,404	5		51	23	51	2,455
November	2016	92		2,496		2,496	2		53	25	25	2,549
December	2016	66		2,562		2,562	3		56		28	2,618
January	2017	81		2,643		2,643	1		57		29	[redacted]
February	2017	78		2,721		2,721	1		58		30	[redacted]
March	2017	86		2,807		2,807	2		60		32	[redacted]
April	2017	81		2,888		2,888	5		65		37	[redacted]
May	2017	87		2,975		2,975	6		71		43	[redacted]
June	2017	78		3,053		3,053	0		71		43	[redacted]
July	2017	66		3,119		3,119	0		71		43	[redacted]
August	2017	77		3,196		3,196	1		72		44	[redacted]
September	2017	64		3,260		3,260	3		75		47	[redacted]
October	2017	78		3,338		3,338	3		78		50	[redacted]
November	2017	57		3,395		3,395	1		79		51	[redacted]
December	2017	33		3,430		3,430	0		79		51	[redacted]
January	2018	11		3,443		3,443	0		79		51	[redacted]
February	2018	60		3,503		3,503	2		81		53	[redacted]
March	2018	32		3,535		3,535	13		94		66	[redacted]
April	2018	22		3,557		3,557	5		99		71	[redacted]
May	2018	40		3,597		3,597	5		104		76	[redacted]
June	2018	47		3,644		3,644	6		110		82	[redacted]
July	2018	48		3,692		3,692	3		113		85	[redacted]
August	2018	64		3,756		3,756	0		113		85	[redacted]
September	2018	66		3,822		3,822	0		113		85	[redacted]
October	2018	134		3,956		3,956	4		117		89	[redacted]
November	2018	47		4,003		4,003	0		117		89	[redacted]
December	2018	76		4,079		4,079	5		122		94	[redacted]

Month	Year	Energy Savings – Net kWh – VA: VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC: NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	[redacted]
January	2014	0		0		0						[redacted]
February	2014	0		0		0						[redacted]
March	2014	0		0		0						[redacted]
April	2014	0		0		0						[redacted]
May	2014	0		0		0						[redacted]
June	2014	0		0		0						[redacted]
July	2014	0		0		0						[redacted]
August	2014	0		0		0						[redacted]
September	2014	0		0		0						[redacted]
October	2014	16,087		16,087		16,087						[redacted]
November	2014	117,366		133,453		133,453						[redacted]
December	2014	143,613		277,065		277,065						[redacted]
January	2015	56,266		333,331		333,331	0		0		0	[redacted]
February	2015	102,277		435,608		435,608	0		0		0	[redacted]
March	2015	227,785		663,393		663,393	0		0		0	[redacted]
April	2015	203,103		866,496		866,496	1,886		1,886		1,886	[redacted]
May	2015	337,569		1,204,065		1,204,065	0		1,886		1,886	[redacted]
June	2015	595,390		1,799,456		1,799,456	0		1,886		1,886	[redacted]
July	2015	138,951		1,938,407		1,938,407	0		1,886		1,886	[redacted]
August	2015	199,910		2,138,317		2,138,317	0		1,886		1,886	[redacted]
September	2015	290,990		2,449,307		2,449,307	6,919		8,805		8,805	[redacted]
October	2015	448,610		2,897,917		2,897,917	20,902		29,707		29,707	[redacted]
November	2015	124,664		3,022,581		3,022,581	840		30,547		30,547	[redacted]
December	2015	219,455		3,242,036		3,242,036	2,372		32,919		32,919	[redacted]
January	2016	253,371		3,495,407		3,495,407	698		33,617		33,617	[redacted]
February	2016	172,025		3,667,432		3,667,432	2,198		35,815		35,815	[redacted]
March	2016	289,450		3,956,882		3,956,882	53,113		88,928		88,928	[redacted]
April	2016	189,306		4,146,188		4,146,188	14,388		103,316		103,316	[redacted]
May	2016	271,746		4,417,934		4,417,934	0		103,316		103,316	[redacted]
June	2016	540,509		4,958,443		4,958,443	15,346		118,662		118,662	5,077,105
July	2016	419,112		5,377,555		5,377,555	4,953		123,616	4,953	123,616	5,501,170
August	2016	492,090		5,869,645		5,869,645	50,346		173,962	53,299	173,962	6,043,607
September	2016	273,973		6,143,618		6,143,618	3,323		177,284	58,622	177,284	6,320,902
October	2016	259,413		6,403,031		6,403,031	19,306		196,590	77,928	196,590	6,599,621
November	2016	471,215		6,874,246		6,874,246	8,575		205,165	86,503	86,503	7,079,411
December	2016	210,614		7,084,860		7,084,860	22,210		227,375		108,713	7,312,235
January	2017	397,897		7,482,756		7,482,756	4,332		231,707		113,044	[redacted]
February	2017	273,625		7,756,381		7,756,381	2,872		234,579		115,917	[redacted]
March	2017	432,898		8,189,279		8,189,279	9,476		244,056		125,393	[redacted]
April	2017	341,740		8,531,020		8,531,020	16,494		260,550		141,887	[redacted]
May	2017	304,194		8,835,213		8,835,213	30,000		290,550		171,887	[redacted]
June	2017	225,040		9,060,253		9,060,253	0		290,550		171,887	[redacted]
July	2017	182,221		9,242,475		9,242,475	0		290,550		171,887	[redacted]
August	2017	379,332		9,621,807		9,621,807	7,559		298,109		179,447	[redacted]
September	2017	407,718		10,029,525		10,029,525	28,033		326,141		207,479	[redacted]
October	2017	557,435		10,586,961		10,586,961	1,473		327,613		208,953	[redacted]
November	2017	448,585		11,035,546		11,035,546	1,107		328,722		210,060	[redacted]
December	2017	192,416		11,227,962		11,227,962	43		328,765		210,103	[redacted]
January	2018	54,229		11,282,191		11,282,191	0		328,765		210,103	[redacted]
February	2018	234,156		11,516,348		11,516,348	27,318		356,083		237,421	[redacted]
March	2018	163,120		11,679,467		11,679,467	17,362		373,446		254,783	[redacted]
April	2018	70,803		11,750,270		11,750,270	1,932		375,278		256,616	[redacted]
May	2018	295,086		12,045,356		12,045,356	2,077		377,355		258,693	[redacted]
June	2018	207,463		12,252,820		12,252,820	4,240		381,596		262,933	[redacted]
July	2018	216,181		12,469,001		12,469,001	45,099		426,694		308,032	[redacted]
August	2018	158,671		12,627,672		12,627,672	0		426,694		308,032	[redacted]
September	2018	210,809		12,838,481		12,838,481	0		426,694		308,032	[redacted]
October	2018	424,905		13,263,385		13,263,385	7,929		434,623		315,961	[redacted]
November	2018	215,586		13,478,971		13,478,971	0		434,623		315,961	[redacted]
December	2018	383,181		13,862,152		13,862,152	195,846		630,470		511,807	[redacted]

Table 1		Capacity Savings Net kW											Energy Savings / Participant Net kWh/Participant for IRP			Capacity Savings / Participant Net kW/Participant for IRP		
		VA					NC					System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	VA Rate Reset Adj	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum. for IRP	VA	NC	System	VA	NC	System
January	2014	0		0		0							-		-	-	-	-
February	2014	0		0		0							-		-	-	-	-
March	2014	0		0		0							-		-	-	-	-
April	2014	0		0		0							-		-	-	-	-
May	2014	0		0		0							-		-	-	-	-
June	2014	0		0		0							-		-	-	-	-
July	2014	0		0		0							-		-	-	-	-
August	2014	0		0		0							-		-	-	-	-
September	2014	0		0		0							-		-	-	-	-
October	2014	41		41		41							1,149		1,149	2.95		2.95
November	2014	295		336		336							1,713		1,713	4.96		4.96
December	2014	363		699		699							2,348		2,348	5.92		5.92
January	2015	137		836		836	0		0		0		1,984	-	1,984	4.98	-	4.98
February	2015	266		1,102		1,102	0		0		0		2,017	-	2,017	5.10	-	5.10
March	2015	657		1,758		1,758	0		0		0		2,336	-	2,336	6.19	-	6.19
April	2015	499		2,257		2,257	5		5		5		2,441	1,886	2,439	6.36	4.99	6.35
May	2015	841		3,098		3,098	0		5		5		2,578	1,886	2,577	6.63	4.99	6.63
June	2015	1,517		4,615		4,615	0		5		5		3,119	943	3,111	8.00	2.49	7.98
July	2015	394		5,009		5,009	0		5		5		2,990	943	2,984	7.65	2.49	7.63
August	2015	462		5,471		5,471	0		5		5		2,760	943	2,753	7.08	2.49	6.98
September	2015	673		6,143		6,143	15		20		20		2,311	1,761	2,308	5.90	4.08	5.79
October	2015	1,114		7,257		7,257	45		66		66		2,371	2,971	2,376	5.94	6.59	5.94
November	2015	294		7,551		7,551	2		68		68		2,354	2,777	2,358	5.88	6.16	5.88
December	2015	620		8,171		8,171	5		73		73		2,386	2,535	2,387	6.01	5.63	6.01
January	2016	741		8,912		8,912	2		75		75		2,389	2,401	2,389	6.09	5.37	6.08
February	2016	548		9,460		9,460	6		81		81		2,419	2,386	2,419	6.23	5.43	6.23
March	2016	804		10,263		10,263	157		238		238		2,429	5,231	2,438	6.29	14.07	6.37
April	2016	525		10,778		10,778	43		281		281		2,439	5,740	2,474	6.34	15.61	6.44
May	2016	758		11,537		11,537	0		281		281		2,425	5,740	2,455	6.32	15.61	6.42
June	2016	1,488		13,026		13,026	36		317		317	13,343	2,499	4,238	2,523	6.56	11.32	6.63
July	2016	1,221		14,246		14,246	14		331	14	331	14,577	2,531	4,263	2,594	6.70	11.41	6.77
August	2016	1,322		15,568		15,568	113		443	127	443	16,011	2,593	3,866	2,617	6.88	9.85	6.93
September	2016	785		16,353		16,353	9		452	135	452	16,805	2,617	3,854	2,660	7.02	9.83	7.07
October	2016	664		17,017		17,017	57		510	193	510	17,527	2,653	3,855	2,688	7.09	9.99	7.15
November	2016	1,539		18,556		18,556	28		538	221	221	18,894	2,754	3,871	2,777	7.35	10.15	7.41
December	2016	381		18,937		18,937	50		593		277	19,530	2,765	4,060	2,793	7.39	10.60	7.46
January	2017	779		19,716		19,716	0		593		277		2,831	4,065	2,857	7.46	10.41	7.52
February	2017	564		20,279		20,279	0		593		277		2,851	4,064	2,874	7.45	10.23	7.51
March	2017	832		21,112		21,112	25		618		302		2,917	4,088	2,945	7.52	10.31	7.58
April	2017	664		21,775		21,775	39		657		340		2,954	4,008	2,977	7.54	10.11	7.60
May	2017	611		22,387		22,387	81		738		422		2,970	4,093	2,994	7.52	10.40	7.59
June	2017	353		22,740		22,740	0		738		422		2,968	4,092	2,993	7.45	10.40	7.52
July	2017	323		23,063		23,063	0		738		422		2,963	4,092	2,988	7.39	10.40	7.46
August	2017	675		23,738		23,738	15		754		437		3,011	4,140	3,035	7.43	10.48	7.49
September	2017	857		24,595		24,595	66		820		503		3,077	4,346	3,105	7.54	10.93	7.63
October	2017	1,154		25,749		25,749	5		825		508		3,177	4,290	3,195	7.71	10.58	7.75
November	2017	1,076		26,826		26,826	3		828		511		3,251	4,161	3,271	7.90	10.48	7.96
December	2017	482		27,308		27,308	0		828		511		3,275	4,163	3,293	7.96	10.48	8.02
January	2018	93		27,401		27,401	0		828		511		3,277	4,162	3,297	7.96	10.48	8.01
February	2018	478		27,879		27,879	64		892		575		3,288	4,396	3,319	7.95	11.01	8.01
March	2018	150		28,029		28,029	44		936		619		3,304	3,973	3,321	7.93	9.96	7.98
April	2018	101		28,130		28,130	3		939		622		3,303	3,791	3,317	7.91	9.49	7.95
May	2018	666		28,796		28,796	3		942		625		3,349	3,628	3,357	8.01	9.06	8.04
June	2018	349		29,145		29,145	3		947		630		3,362	3,469	3,366	8.00	8.61	8.02
July	2018	186		29,331		29,331	111		1,058		741		3,377	3,776	3,389	8.02	9.36	8.06
August	2018	309		29,641		29,641	0		1,058		741		3,367	3,776	3,374	7.94	9.36	7.99
September	2018	425		30,066		30,066	0		1,058		741		3,359	3,776	3,371	7.92	9.36	7.96
October	2018	930		31,196		31,196	14		1,072		755		3,353	3,715	3,363	7.89	9.16	7.93
November	2018	337		31,533		31,533	0		1,072		755		3,367	3,715	3,377	7.88	9.16	7.92
December	2018	810		32,343		32,343	533		1,605		1,288		3,398	5,168	3,450	7.95	13.15	8.08

Appendix D.3 Non-residential Lighting Systems and Controls Program 2014-2018

Table 2. EM&V Data Incremental by Vintage Year

	Program Participants						Net Incremental Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	118	118	-	-	118		426,605	426,605	-	-	426,605
2015	1,241	1,241	13	13	1,254		17,706,128	17,706,128	111,408	111,408	17,817,536
2016	1,203	1,203	43	28	1,246		23,490,812	23,490,812	1,192,670	1,021,133	24,683,432
2017	868	868	23	23	891		26,580,861	26,580,861	723,396	723,396	27,304,257
2018	649	649	43	43	692		14,330,571	14,330,571	1,027,040	1,027,040	15,357,611

Table 3. EM&V Data Annualized by Vintage Year

	Program Participants						Net Annualized Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	118	118	-	-	118		3,324,785	3,324,785	-	-	3,324,785
2015	1,241	1,241	13	13	1,254		35,579,643	35,579,643	395,028	395,028	35,974,671
2016	1,203	1,203	43	28	1,246		46,113,890	46,113,890	2,333,469	1,394,949	48,447,359
2017	868	868	23	23	891		49,717,225	49,717,225	1,216,685	1,216,685	50,933,910
2018	649	649	43	43	692		31,610,279	31,610,279	3,620,453	3,620,453	35,230,732

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)

	Program Participants		Net Energy (kWh) for PPI	
	NC PPI		NC PPI	
2014	-		-	
2015	13		111,408	
2016	56		1,587,648	
2017	79		3,451,893	
2018	100		5,577,194	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)

	Program Participants						Net Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	118	118	-	-	118		426,605	426,605	-	-	426,605
2015	1,359	1,359	13	13	1,372		21,030,913	21,030,913	111,408	111,408	21,142,321
2016	2,562	2,562	56	28	2,618		62,395,240	62,395,240	1,587,648	1,350,323	63,982,888
2017	3,430	3,430	79	51	3,509		111,599,179	111,599,179	3,451,893	2,027,944	115,051,071
2018	4,079	4,079	122	94	4,201		149,066,114	149,066,114	4,972,227	3,548,273	154,038,336

Table 2. EM&V Data Incremental by Vintage Year								Incremental Energy Savings/Participant Net kWh/Participant for IRP			Incremental Capacity Savings/Participant Net kW/Participant for IRP		
	Net Peak Demand (kW)												
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	699	699	-	-	699	3,615	-	3,615	5.92	-	5.92
2015	7,472	7,472	73	73	7,545	14,268	8,570	14,209	6.02	5.63	6.02
2016	10,766	10,766	520	277	11,286	19,527	27,735	19,810	8.95	12.10	9.06
2017	8,371	8,371	234	234	8,605	30,622	31,452	30,645	9.64	10.18	9.66
2018	5,056	5,056	777	777	5,833	22,081	23,885	22,193	7.79	18.07	8.43

Table 3. EM&V Data Annualized by Vintage Year								Annualized Energy Savings/Participant Net kWh/Participant for IRP			Annualized Capacity Savings/Participant Net kW/Participant for IRP		
	Net Peak Demand (kW)												
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	699	699	-	-	699	28,176	-	28,176	5.92	-	5.92
2015	7,472	7,472	73	73	7,545	28,670	30,387	28,688	6.02	5.63	6.02
2016	10,766	10,766	520	277	11,286	38,332	54,267	38,882	8.95	12.10	9.06
2017	8,371	8,371	234	234	8,605	57,278	52,809	57,165	9.64	10.18	9.66
2018	5,056	5,056	777	777	5,833	48,706	84,197	50,911	7.79	18.07	8.43

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)				PPI Energy Savings/Participant Net kWh/Participant		PPI Capacity Savings/Participant Net kW/Participant	
	Net Peak Demand (kW)						
	NC PPI			NC		NC	
2014	-					-	
2015	73			8,570		5.63	
2016	593			28,351		16.80	
2017	828			33,693		16.48	
2018	1,511			41,993		14.05	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)								IRP Energy Savings/Participant Net kWh/Participant			IRP Capacity Savings/Participant Net kW/Participant		
	Net Peak Demand (kW)												
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	699	699	-	-	699	3,615	-	3,615	5.92	-	5.92
2015	8,171	8,171	73	73	8,244	15,475	8,570	15,410	6.01	5.63	6.01
2016	18,937	18,937	593	277	19,530	24,354	28,351	24,440	7.39	10.60	7.46
2017	27,308	27,308	828	511	28,135	32,536	43,695	32,787	7.96	10.48	8.02
2018	32,363	32,363	1,605	1,288	33,968	36,545	40,756	36,667	7.93	13.15	8.09

Appendix D.4 Non-residential Heating and Cooling Efficiency Program 2014-2018

PROGRAM:	Non-Residential Heating and Cooling Efficiency
DSM Phase III Program	
Type: Energy Efficiency	
Program Measure Life: 15.0 years	

Table 1

		Participation										Energy Savings									
		Program Participants										Net kWh									
		VA					NC					VA					NC				
Month	Year	VA Monthly New [A]	VA Monthly Retired [-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [F] =Σ[A] + Σ[-A retired] + B	NC Monthly New [C]	NC Monthly Retired [-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [H] = Σ[C] + Σ[-C retired] + D	System Cum for IRP [E+G]	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
January	2014	0		0		0								0		0		0						
February	2014	0		0		0								0		0		0						
March	2014	0		0		0								0		0		0						
April	2014	0		0		0								0		0		0						
May	2014	0		0		0								0		0		0						
June	2014	0		0		0								0		0		0						
July	2014	0		0		0								0		0		0						
August	2014	0		0		0								0		0		0						
September	2014	0		0		0								0		0		0						
October	2014	0		0		0								0		0		0						
November	2014	1		1		1								50,347		50,347		50,347						
December	2014	5		6		6								34,644		84,991		84,991						
January	2015	0		6		6	0		0		0			0		84,991		84,991	0		0		0	
February	2015	1		7		7	0		0		0			1,891		86,882		86,882	0		0		0	
March	2015	0		7		7	0		0		0			0		86,882		86,882	0		0		0	
April	2015	16		33		23	2		2		3			172,470		259,352		259,352	2,214		2,214		2,214	
May	2015	34		57		57	1		3		3			83,052		342,404		342,404	3,103		5,317		5,317	
June	2015	16		73		73	0		3		3			24,256		366,660		366,660	0		5,317		5,317	
July	2015	26		99		99	0		3		3			117,432		484,092		484,092	0		5,317		5,317	
August	2015	2		101		101	0		3		3			797		484,890		484,890	0		5,317		5,317	
September	2015	7		108		108	0		3		3			133,376		618,266		618,266	0		5,317		5,317	
October	2015	5		113		113	0		3		3			49,146		667,412		667,412	0		5,317		5,317	
November	2015	3		115		115	0		3		3			36,808		704,220		704,220	0		5,317		5,317	
December	2015	5		120		120	0		3		3			30,012		734,232		734,232	0		5,317		5,317	
January	2016	7		127		127	0		3		3			20,785		755,017		755,017	0		5,317		5,317	
February	2016	9		136		136	0		3		3			19,914		774,931		774,931	0		5,317		5,317	
March	2016	4		140		140	0		3		3			17,139		792,070		792,070	0		5,317		5,317	
April	2016	6		146		146	1		4		4			141,968		934,037		934,037	640		5,957		5,957	
May	2016	6		152		152	1		5		5			53,218		987,255		987,255	3,590		9,547		9,547	
June	2016	12		164		164	2		7		7	171		56,304		1,043,559		1,043,559	12,212		21,759		21,759	1,065,318
July	2016	7		171		171	0		7	0	7	178		25,740		1,069,299		1,069,299	0		21,759	0	21,759	1,091,058
August	2016	12		183		183	1		8	1	8	191		148,579		1,217,878		1,217,878	374		22,132	374	22,132	1,240,010
September	2016	7		190		190	0		8	1	8	196		178,828		1,396,706		1,396,706	0		22,132	374	22,132	1,418,838
October	2016	6		196		196	0		8	1	8	204		41,980		1,438,685		1,438,685	0		22,132	374	22,132	1,460,818
November	2016	6		202		202	1		9	2	2	211		42,293		1,480,978		1,480,978	72		22,204	445	445	1,503,183
December	2016	7		209		209	0		9		2	216		49,346		1,530,325		1,530,325	0		22,204		445	1,552,529
January	2017	9		218		218	0		9		2			7,215		1,537,540		1,537,540	0		22,204		445	
February	2017	9		227		227	0		9		2			33,247		1,570,787		1,570,787	0		22,204		445	
March	2017	1		228		228	0		9		2			5,038		1,575,825		1,575,825	0		22,204		445	
April	2017	2		230		230	0		9		2			11,998		1,587,823		1,587,823	0		22,204		445	
May	2017	13		243		243	1		10		3			139,193		1,727,016		1,727,016	4,318		26,523		4,764	
June	2017	23		266		266	1		11		4			39,301		1,766,318		1,766,318	25		26,547		4,788	
July	2017	12		278		278	0		11		4			58,370		1,824,688		1,824,688	0		26,547		4,788	
August	2017	10		288		288	0		11		4			9,039		1,833,727		1,833,727	0		26,547		4,788	
September	2017	8		296		296	1		12		5			58,800		1,892,527		1,892,527	497		27,044		5,285	
October	2017	5		301		301	0		12		5			24,408		1,916,935		1,916,935	0		27,044		5,285	
November	2017	10		311		311	0		12		5			31,487		1,948,423		1,948,423	0		27,044		5,285	
December	2017	1		312		312	0		12		5			20,970		1,969,392		1,969,392	0		27,044		5,285	
January	2018	0		312		312	0		12		5			0		1,969,392		1,969,392	0		27,044		5,285	
February	2018	10		322		322	0		12		5			42,248		2,011,640		2,011,640	0		27,044		5,285	
March	2018	3		325		325	1		13		6			10,931		2,022,571		2,022,571	4,435		31,479		9,721	
April	2018	7		332		332	2		15		8			27,965		2,050,536		2,050,536	8,735		40,214		18,456	
May	2018	5		337		337	0		15		8			28,149		2,078,686		2,078,686	0		40,214		18,456	
June	2018	4		341		341	0		15		8			23,781		2,102,467		2,102,467	0		40,214		18,456	
July	2018	10		351		351	0		15		8			59,309		2,161,776		2,161,776	0		40,214		18,456	
August	2018	10		361		361	0		15		8			237,839		2,399,615		2,399,615	0		40,214		18,456	
September	2018	10		371		371	0		15		8			56,720		2,456,335		2,456,335	0		40,214		18,456	
October	2018	10		381		381	0		15		8			45,598		2,501,932		2,501,932	0		40,214		18,456	
November	2018	4		385		385	0		15		8			7,639		2,509,572		2,509,572	0		40,214		18,456	
December	2018	4		389		389	0		15		8			32,584		2,542,155		2,542,155	0		40,214		18,456	

Appendix D.4 Non-residential Heating and Cooling Efficiency Program 2014-2018

Table 1		Capacity Savings Net kW											Energy Savings / Participant Net kWh/Participant for IRP			Capacity Savings / Participant Net kW/Participant for IRP		
		VA					NC					System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP	VA	NC	System	VA	NC	System
January	2014	0		0		0							-		-	-		-
February	2014	0		0		0							-		-	-		-
March	2014	0		0		0							-		-	-		-
April	2014	0		0		0							-		-	-		-
May	2014	0		0		0							-		-	-		-
June	2014	0		0		0							-		-	-		-
July	2014	0		0		0							-		-	-		-
August	2014	0		0		0							-		-	-		-
September	2014	0		0		0							-		-	-		-
October	2014	0		0		0							-		-	-		-
November	2014	237		237		237							50,347		50,347	236.82		236.82
December	2014	120		357		357							14,165		14,165	59.51		59.51
January	2015	0		357		357	0		0		0		14,165	-	14,165	59.51	-	59.51
February	2015	1		359		359	0		0		0		12,412	-	12,412	51.22	-	51.22
March	2015	0		359		359	0		0		0		12,412	-	12,412	51.22	-	51.22
April	2015	435		794		794	16		16		16		11,276	1,107	10,463	34.51	8.24	32.41
May	2015	270		1,064		1,064	2		19		19		6,007	1,772	5,795	18.67	6.28	18.05
June	2015	206		1,270		1,270	0		19		19		5,023	1,772	4,894	17.40	6.28	16.96
July	2015	292		1,562		1,562	0		19		19		4,890	1,772	4,798	15.78	6.28	15.50
August	2015	10		1,572		1,572	0		19		19		4,801	1,772	4,714	15.57	6.28	15.30
September	2015	390		1,963		1,963	0		19		19		5,725	1,772	5,618	18.17	6.28	17.85
October	2015	189		2,152		2,152	0		19		19		5,906	1,772	5,799	19.04	6.28	18.71
November	2015	45		2,196		2,196	0		19		19		6,124	1,772	6,013	19.10	6.28	18.77
December	2015	105		2,301		2,301	0		19		19		6,119	1,772	6,019	19.17	6.28	18.86
January	2016	58		2,359		2,359	0		19		19		5,845	1,772	5,849	18.57	6.28	18.29
February	2016	153		2,512		2,512	0		19		19		5,698	1,772	5,613	18.47	6.28	18.21
March	2016	54		2,566		2,566	0		19		19		5,658	1,772	5,578	18.33	6.28	18.07
April	2016	189		2,755		2,755	0		19		19		6,398	1,489	6,267	18.87	4.80	18.49
May	2016	35		2,789		2,789	55		74		74		6,495	1,909	6,349	18.35	14.78	18.24
June	2016	188		2,977		2,977	10		83		83	3,060	6,363	3,108	6,230	18.15	11.92	17.90
July	2016	96		3,073		3,073	0		83	0	83	3,156	6,253	3,108	6,130	17.97	11.92	17.73
August	2016	204		3,277		3,277	0		84	0	84	3,361	6,655	2,767	6,492	17.91	10.48	17.60
September	2016	127		3,404		3,404	0		84	0	84	3,488	7,351	2,767	7,166	17.92	10.48	17.62
October	2016	102		3,506		3,506	0		84	0	84	3,590	7,340	2,767	7,161	17.89	10.48	17.60
November	2016	122		3,628		3,628	0		84	1	1	3,712	7,332	2,467	7,124	17.96	9.34	17.59
December	2016	132		3,760		3,760	0		84		1	3,844	7,322	2,467	7,122	17.99	9.34	17.63
January	2017	18		3,778		3,778	0		84		1		7,033	2,467	6,877	17.33	9.34	17.01
February	2017	47		3,825		3,825	0		84		1		6,920	2,467	6,750	16.85	9.34	16.56
March	2017	8		3,833		3,833	0		84		1		6,912	2,467	6,743	16.81	9.34	16.53
April	2017	5		3,838		3,838	0		84		1		6,904	2,467	6,737	16.69	9.34	16.41
May	2017	1,029		4,868		4,868	-27		57		-27		7,107	2,652	6,931	20.03	5.69	19.46
June	2017	25		4,892		4,892	0		57		-27		6,640	2,413	6,472	18.39	5.17	17.87
July	2017	59		4,952		4,952	0		57		-27		6,564	2,413	6,406	17.81	5.17	17.33
August	2017	5		4,957		4,957	0		57		-27		6,367	2,413	6,212	17.21	5.17	16.77
September	2017	93		5,051		5,051	-1		56		-28		6,394	2,254	6,232	17.06	4.66	16.58
October	2017	34		5,084		5,084	0		56		-28		6,369	2,254	6,211	16.89	4.66	16.42
November	2017	28		5,113		5,113	0		56		-28		6,265	2,254	6,116	16.44	4.66	16.00
December	2017	10		5,123		5,123	0		56		-28		6,312	2,254	6,162	16.42	4.66	15.98
January	2018	0		5,123		5,123	0		56		-28		6,312	2,254	6,162	16.42	4.66	15.98
February	2018	20		5,143		5,143	0		56		-28		6,247	2,254	6,104	15.97	4.66	15.56
March	2018	14		5,157		5,157	4		60		-24		6,223	2,421	6,077	15.87	4.59	15.43
April	2018	11		5,168		5,168	55		115		32		6,176	2,681	6,025	15.57	7.68	15.23
May	2018	19		5,187		5,187	0		115		32		6,168	2,681	6,020	15.39	7.68	15.06
June	2018	62		5,249		5,249	0		115		32		6,166	2,681	6,019	15.39	7.68	15.07
July	2018	47		5,297		5,297	0		115		32		6,159	2,681	6,016	15.09	7.68	14.79
August	2018	151		5,448		5,448	0		115		32		6,647	2,681	6,489	15.09	7.68	14.79
September	2018	42		5,490		5,490	0		115		32		6,671	2,681	6,468	14.80	7.68	14.52
October	2018	45		5,534		5,534	0		115		32		6,567	2,681	6,420	14.53	7.68	14.27
November	2018	-30		5,504		5,504	0		115		32		6,518	2,681	6,374	14.30	7.68	14.05
December	2018	17		5,521		5,521	0		115		32		6,535	2,681	6,392	14.19	7.68	13.95

Appendix D.4 Non-residential Heating and Cooling Efficiency Program 2014-2018

Table 2. EM&V Data Incremental by Vintage Year

	Program Participants						Net Incremental Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	6	6	-	-	6		135,338	135,338	-	-	135,338
2015	114	114	3	3	117		3,900,391	3,900,391	44,748	44,748	3,945,139
2016	89	89	6	2	95		4,609,959	4,609,959	121,977	89,092	4,731,936
2017	103	103	3	3	106		2,787,106	2,787,106	36,707	36,707	2,823,813
2018	77	77	3	3	80		3,173,969	3,173,969	122,967	122,967	3,296,936

Table 3. EM&V Data Annualized by Vintage Year

	Program Participants						Net Annualized Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	6	6	-	-	6		1,019,894	1,019,894	-	-	1,019,894
2015	114	114	3	3	117		7,790,886	7,790,886	63,801	63,801	7,854,687
2016	89	89	6	2	95		9,553,114	9,553,114	202,650	5,344	9,755,764
2017	103	103	3	3	106		5,268,813	5,268,813	58,080	58,080	5,326,893
2018	77	77	3	3	80		6,873,157	6,873,157	158,042	158,042	7,031,199

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)

	Program Participants						Net Energy (kWh) for PPI					
				NC PPI						NC PPI		
2014												
2015				1						44,748		
2016				9						185,778		
2017				12						303,158		
2018				12						381,696		

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)

	Program Participants						Net Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	6	6	-	-	6		135,338	135,338	-	-	135,338
2015	120	120	3	3	123		4,920,284	4,920,284	44,748	44,748	4,965,032
2016	209	209	9	2	218		13,420,739	13,420,739	185,778	142,260	13,606,517
2017	312	312	12	5	324		21,151,000	21,151,000	303,158	42,051	21,454,158
2018	389	389	15	8	404		26,806,677	26,806,677	447,498	186,391	27,254,174

Appendix D.4 Non-residential Heating and Cooling Efficiency Program 2014-2018

Table 2. EM&V Data Incremental by Vintage Year								Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)							Net kWh/Participant for IRP			Net kW/Participant for IRP		
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	357	357	-	-	357	22,556	-	22,556	59.51	-	59.51
2015	1,944	1,944	19	19	1,963	34,214	14,916	33,719	17.05	6.28	16.78
2016	1,459	1,459	65	1	1,524	51,797	20,329	49,810	16.39	10.88	16.04
2017	1,363	1,363	-28	-28	1,334	27,059	12,736	26,640	13.23	-9.40	12.59
2018	398	398	59	59	457	41,220	40,989	41,212	5.17	19.76	5.72

Table 3. EM&V Data Annualized by Vintage Year								Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)							Net kWh/Participant for IRP			Net kW/Participant for IRP		
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	357	357	-	-	357	169,982	-	169,982	59.51	-	59.51
2015	1,944	1,944	19	19	1,963	68,341	21,267	67,134	17.05	6.28	16.78
2016	1,459	1,459	65	1	1,524	107,338	33,775	103,692	16.39	10.88	16.04
2017	1,363	1,363	-28	(28)	1,334	51,154	19,360	50,254	13.23	-9.40	12.59
2018	398	398	59	59	457	89,262	52,681	87,890	5.17	19.76	5.72

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)						PPI Energy Savings/Participant		PPI Capacity Savings/Participant	
	Net Peak Demand (kW)					Net kWh/Participant		Net kW/Participant	
			NC PPI			NC		NC	
2014			-			-		-	
2015			19			14,916		6.28	
2016			84			20,642		9.34	
2017			56			15,263		4.66	
2018			96			11,975		8	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)								IRP Energy Savings/Participant			IRP Capacity		
	Net Peak Demand (kW)							Net kWh/Participant			Net kW/Participant		
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP	VA	NC	System	VA	NC	System
2014	357	357	-	-	357	22,556	-	22,556	59.51	-	59.51
2015	2,301	2,301	19	19	2,320	41,002	14,916	40,366	19.17	6.28	18.86
2016	3,760	3,760	84	1	3,844	64,214	20,642	62,415	17.99	9.34	17.63
2017	5,123	5,123	56	(28)	5,179	67,792	25,263	66,217	16.42	4.66	15.98
2018	5,521	5,521	115	32	5,636	68,912	29,833	67,461	14.19	7.68	13.95

Appendix D.5 Non-residential Window Film Program 2014-2018

PROGRAM:	Non-residential Window Film
DSM Phase III Program	
Type: Energy Efficiency	
Program Measure Life: 10.0 years	

Table 1 — Participation — Program Participants

Month	Year	VA Monthly New [A]	VA Monthly Retired retired]	VA Cum. for IRP (New + Retired) retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) retired] + B	NC Monthly New [C]	NC Monthly Retired retired]	NC Cum. for IRP (New + Retired) retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) retired] + D	System Cum for IRP [A+C]
January	2014	0		0		0						
February	2014	0		0		0						
March	2014	0		0		0						
April	2014	0		0		0						
May	2014	0		0		0						
June	2014	0		0		0						
July	2014	0		0		0						
August	2014	0		0		0						
September	2014	0		0		0						
October	2014	1		1		1						
November	2014	0		1		1						
December	2014	2		3		3						
January	2015	2		5		5						
February	2015	3		8		8						
March	2015	1		9		9						
April	2015	2		11		11						
May	2015	2		13		13						
June	2015	3		16		16						
July	2015	1		17		17						
August	2015	2		19		19						
September	2015	1		20		20						
October	2015	2		22		22						
November	2015	1		23		23						
December	2015	2		25		25						
January	2016	4		29		29	0		0		0	
February	2016	4		33		33	0		0		0	
March	2016	7		40		40	0		0		0	
April	2016	7		47		47	0		0		0	
May	2016	6		53		53	0		0		0	
June	2016	4		57		57	0		0		0	57
July	2016	3		60		60	0		0	0	0	60
August	2016	11		71		71	0		0	0	0	71
September	2016	10		81		81	0		0	0	0	81
October	2016	7		88		88	0		0	0	0	88
November	2016	6		94		94	0		0	0	0	94
December	2016	1		95		95	0		0		0	95
January	2017	4		99		99	0		0		0	
February	2017	3		102		102	0		0		0	
March	2017	4		106		106	0		0		0	
April	2017	1		107		107	0		0		0	
May	2017	7		114		114	0		0		0	
June	2017	1		115		115	0		0		0	115
July	2017	3		118		118	0		0		0	118
August	2017	15		133		133	0		0		0	
September	2017	7		140		140	0		0		0	
October	2017	8		148		148	0		0		0	
November	2017	6		154		154	0		0		0	
December	2017	0		154		154	0		0		0	
January	2018	3		157			0		0		0	
February	2018	10		167			0		0		0	
March	2018	2		169			0		0		0	
April	2018	4		173			0		0		0	
May	2018	12		185			0		0		0	
June	2018	6		191			0		0		0	
July	2018	3		194			0		0		0	
August	2018	9		203			1		1		1	
September	2018	10		213			0		1		1	
October	2018	12		225			0		1		1	
November	2018	6		231			0		1		1	
December	2018	14		245			0		1		1	

Energy Savings — Net kWh

Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
January	2014	0		0		0						
February	2014	0		0		0						
March	2014	0		0		0						
April	2014	0		0		0						
May	2014	0		0		0						
June	2014	0		0		0						
July	2014	0		0		0						
August	2014	0		0		0						
September	2014	0		0		0						
October	2014	177		177		177						
November	2014	0		177		177						
December	2014	76,654		76,832		76,832						
January	2015	0		76,840		76,840						
February	2015	145		76,985		76,985						
March	2015	35		77,020		77,020						
April	2015	204,145		281,165		281,165						
May	2015	24		281,189		281,189						
June	2015	264		281,453		281,453						
July	2015	-2		281,452		281,452						
August	2015	113		281,564		281,564						
September	2015	0		281,564		281,564						
October	2015	294		281,858		281,858						
November	2015	132		281,990		281,990						
December	2015	30		282,019		282,019						
January	2016	11,318		293,337		293,337	0		0		0	
February	2016	612		293,949		293,949	0		0		0	
March	2016	1,908		295,857		295,857	0		0		0	
April	2016	1,688		297,545		297,545	0		0		0	
May	2016	358		297,903		297,903	0		0		0	
June	2016	283		298,185		298,185	0		0		0	298,185
July	2016	2,429		300,614		300,614	0		0	0	0	300,614
August	2016	1,315		301,929		301,929	0		0	0	0	301,929
September	2016	3,332		305,261		305,261	0		0	0	0	305,261
October	2016	1,670		306,931		306,931	0		0	0	0	306,931
November	2016	6,062		312,992		312,992	0		0	0	0	312,992
December	2016	14		313,006		313,006	0		0		0	313,006
January	2017	1,721		314,727		314,727	0		0		0	
February	2017	12,469		327,196		327,196	0		0		0	
March	2017	7,936		335,122		335,122	0		0		0	
April	2017	10,276		345,408		345,408	0		0		0	
May	2017	797		346,205		346,205	0		0		0	
June	2017	2,600		348,805		348,805	0		0		0	
July	2017	12,911		361,716		361,716	0		0		0	
August	2017	32,299		394,015		394,015	0		0		0	
September	2017	1,253		395,268		395,268	0		0		0	
October	2017	5,118		400,386		400,386	0		0		0	
November	2017	28,160		428,546		428,546	0		0		0	
December	2017	104		428,650		428,650	0		0		0	
January	2018	4,014		432,664		432,664	0		0		0	
February	2018	-25		432,639		432,639	0		0		0	
March	2018	343		432,982		432,982	0		0		0	
April	2018	725		433,707		433,707	0		0		0	
May	2018	266		433,974		433,974	0		0		0	
June	2018	589		434,562		434,562	0		0		0	
July	2018	219		434,781		434,781	0		0		0	
August	2018	1,467		436,248		436,248	301		301		301	
September	2018	1,146		437,394		437,394	0		301		301	
October	2018	790		438,184		438,184	0		301		301	
November	2018	632		438,816		438,816	0		301		301	
December	2018	1,231		440,047		440,047	0		301		301	

Appendix D.5 Non-residential Window Film Program 2014-2018

Table 1		Capacity Savings											Energy Savings / Participant			Capacity Savings / Participant		
		Net kW											Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA					NC					System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP	VA	NC	System	VA	NC	System
January	2014	0		0		0							-		-	-		-
February	2014	0		0		0							-		-	-		-
March	2014	0		0		0							-		-	-		-
April	2014	0		0		0							-		-	-		-
May	2014	0		0		0							-		-	-		-
June	2014	0		0		0							-		-	-		-
July	2014	0		0		0							-		-	-		-
August	2014	0		0		0							-		-	-		-
September	2014	0		0		0							-		-	-		-
October	2014	1		1		1							177		177	0.64		0.64
November	2014	0		1		1							177		177	0.64		0.64
December	2014	186		187		187							25,611		25,611	62.17		62.17
January	2015	0		187		187							15,368		15,368	37.32		37.32
February	2015	1		187		187							9,623		9,623	23.43		23.43
March	2015	0		188		188							8,558		8,558	20.84		20.84
April	2015	497		684		684							25,560		25,560	62.20		62.20
May	2015	0		684		684							21,630		21,630	52.65		52.65
June	2015	1		685		685							17,591		17,591	42.84		42.84
July	2015	0		686		686							16,556		16,556	40.32		40.32
August	2015	0		686		686							14,819		14,819	36.10		36.10
September	2015	0		686		686							14,078		14,078	34.30		34.30
October	2015	1		687		687							12,812		12,812	31.24		31.24
November	2015	0		688		688							12,260		12,260	29.90		29.90
December	2015	0		688		688							11,281		11,281	27.51		27.51
January	2016	46		733		733	0		0		0		10,115	-	10,115	25.29	-	25.29
February	2016	2		735		735	0		0		0		8,908	-	8,908	22.29	-	22.29
March	2016	10		746		746	0		0		0		7,396	-	7,396	18.65	-	18.65
April	2016	6		752		752	0		0		0		6,331	-	6,331	16.00	-	16.00
May	2016	1		753		753	0		0		0		5,621	-	5,621	14.21	-	14.21
June	2016	1		754		754	0		0		0	754	5,231	-	5,231	13.23	-	13.23
July	2016	7		761		761	0		0	0	0	761	5,010	-	5,010	12.68	-	12.68
August	2016	4		765		765	0		0	0	0	765	4,253	-	4,253	10.78	-	10.78
September	2016	9		775		775	0		0	0	0	775	3,769	-	3,769	9.56	-	9.56
October	2016	6		781		781	0		0	0	0	781	3,488	-	3,488	8.87	-	8.87
November	2016	19		799		799	0		0	0	0	799	3,330	-	3,330	8.50	-	8.50
December	2016	0		800		800	0		0		0	800	3,295	-	3,295	8.42	-	8.42
January	2017	7		807		807	0		0		0		3,179	-	3,179	8.15	-	8.15
February	2017	43		850		850	0		0		0		3,208	-	3,208	8.33	-	8.33
March	2017	25		875		875	0		0		0		3,162	-	3,162	8.26	-	8.26
April	2017	34		909		909	0		0		0		3,228	-	3,228	8.49	-	8.49
May	2017	3		912		912	0		0		0		3,037	-	3,037	8.00	-	8.00
June	2017	13		925		925	0		0		0		3,033	-	3,033	8.04	-	8.04
July	2017	44		969		969	0		0		0		3,065	-	3,065	8.20	-	8.20
August	2017	93		1,061		1,061	0		0		0		2,963	-	2,963	7.98	-	7.98
September	2017	5		1,066		1,066	0		0		0		2,823	-	2,823	7.62	-	7.62
October	2017	23		1,089		1,089	0		0		0		2,705	-	2,705	7.36	-	7.36
November	2017	87		1,176		1,176	0		0		0		2,783	-	2,783	7.64	-	7.64
December	2017	0		1,177		1,177	0		0		0		2,783	-	2,783	7.64	-	7.64
January	2018	15		1,192		1,192	0		0		0		2,756	-	2,756	7.59	-	7.59
February	2018	1		1,193		1,193	0		0		0		2,591	-	2,591	7.14	-	7.14
March	2018	1		1,194		1,194	0		0		0		2,562	-	2,562	7.06	-	7.06
April	2018	2		1,196		1,196	0		0		0		2,507	-	2,507	6.91	-	6.91
May	2018	2		1,198		1,198	0		0		0		2,346	-	2,346	6.48	-	6.48
June	2018	2		1,201		1,201	0		0		0		2,275	-	2,275	6.29	-	6.29
July	2018	1		1,202		1,202	0		0		0		2,241	-	2,241	6.20	-	6.20
August	2018	6		1,208		1,208	1		1		1		2,149	301	2,140	5.95	0.59	5.92
September	2018	6		1,214		1,214	0		1		1		2,053	301	2,045	5.70	0.59	5.67
October	2018	3		1,219		1,219	0		1		1		1,947	301	1,940	5.41	0.59	5.39
November	2018	3		1,219		1,219	0		1		1		1,900	301	1,893	5.28	0.59	5.26
December	2018	4		1,223		1,223	0		1		1		1,796	301	1,790	4.99	0.59	4.97

Appendix D.5 Non-residential Window Film Program 2014-2018

Table 2. EM&V Data Incremental by Vintage Year

	Program Participants						Net Incremental Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	3	3	-	-	3		77,187	77,187	-	-	77,187
2015	22	22	-	-	22		1,843,118	1,843,118	-	-	1,843,118
2016	70	70	0	-	70		233,275	233,275	0	-	233,275
2017	59	59	0	-	59		669,985	669,985	0	-	669,985
2018	91	91	1		92		82,201	82,201	1,505	1,505	83,706

Table 3. EM&V Data Annualized by Vintage Year

	Program Participants						Net Annualized Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	3	3	-	-	3		921,980	921,980	-	-	921,980
2015	22	22	-	-	22		2,462,252	2,462,252	-	-	2,462,252
2016	70	70	0	-	70		371,835	371,835	0	-	371,835
2017	59	59	0	-	59		1,387,732	1,387,732	0	-	1,387,732
2018	91	91	1		92		136,764	136,764	3,613	3,613	140,376

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)

	Program Participants		Net Energy (kWh) for PPI	
		NC PPI		NC PPI
2014		-		-
2015		-		-
2016		0		-
2017		0		0
2018		1		1,505

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)

	Program Participants						Net Energy (kWh)					
	VA IRP	VA NLR	NC IRP	NC NLR	System IRP		VA IRP	VA NLR	NC IRP	NC NLR	System IRP
2014	3	3	-	-	3		77,187	77,187	-	-	77,187
2015	25	25	-	-	25		2,765,099	2,765,099	-	-	2,765,099
2016	95	95	0	-	95		3,617,507	3,617,507	0	-	3,617,507
2017	154	154	0	-	154		4,426,053	4,426,053	0	-	4,426,053
2018	245		1		246		5,226,001	5,226,001	1,505	1,505	5,227,506

Appendix D.5 Non-residential Window Film Program 2014-2018

Table 2. EM&V Data Incremental by Vintage Year									Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2014		187		187		-			187	25,729	-	25,729	62.17	-	62.17
2015		501		501		-		-	501	83,778	-	83,778	22.78	-	22.78
2016		112		112		-		-	112	3,332	-	3,332	1.60	-	1.60
2017		377		377		-		-	377	11,356	-	11,356	6.39	-	6.39
2018		46				0.59		0.59	47	903	1,505	910	0.51	0.59	0.51

Table 3. EM&V Data Annualized by Vintage Year									Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2014		187		187		-		-	187	307,327	-	307,327	62.17	-	62.17
2015		501		501		-		-	501	111,921	-	111,921	22.78	-	22.78
2016		112		112		-		-	112	5,312	-	5,312	1.60	-	1.60
2017		377		377		-		-	377	23,521	-	23,521	6.39	-	6.39
2018		46		46		0.59		0.59	47	1,503	3,612.77	1,526	0.51	0.59	0.51

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)						PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Net Peak Demand (kW)					Net kWh/Participant			Net kW/Participant		
			NC PPI				NC			NC	
2014			-				-			-	
2015			-				-			-	
2016			-				-			-	
2017			-				-			-	
2018			0.59				1,505.37			0.59	

Table 3. EM&V Data Accumulated through Vintage Year (for IRP and NLR)									IRP Energy Savings/Participant			IRP Capacity		
	Net Peak Demand (kW)								Net kWh/Participant			Net kW/Participant		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2014		187		187		-			187	25,729	-	25,729	62.17	-	62.17
2015		688		688		-		-	688	110,604	-	110,604	27.51	-	27.51
2016		800		800		-		-	800	38,079	-	38,079	8.42	-	8.42
2017		1,177		1,177		-		-	1,177	28,741	-	28,741	7.64	-	7.64
2018		1,223		1,223		0.59		0.59	1,223	21,331	1,505.37	21,250	4.98	0.59	4.97

Appendix D.6 Non-residential Small Business Improvement Program 2016-2018

PROGRAM: Small Business Improvement Program
DSM Phase V Program
Type: Energy Efficiency
Program Measure Life: 14.0 years

Table 1		Participation										
		Program Participants										
		VA					NC					
Month	Year	VA Monthly New [A]	VA Monthly Retired [-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [F] =Σ[A] + Σ[-A retired] + B	NC Monthly New [C]	NC Monthly Retired [-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [H] = Σ[C] + Σ[-C retired] + D	[redacted]
December	2015											
January	2016	0		0		0	0		0		0	[redacted]
February	2016	0		0		0	0		0		0	[redacted]
March	2016	0		0		0	0		0		0	[redacted]
April	2016	0		0		0	0		0		0	[redacted]
May	2016	0		0		0	0		0		0	[redacted]
June	2016	0		0		0	0		0		0	0
July	2016	0		0		0	0		0	0	0	0
August	2016	0		0		0	0		0	0	0	0
September	2016	0		0		0	0		0	0	0	0
October	2016	4		4		4	0		0	0	0	4
November	2016	34		38		38	0		0	0	0	38
December	2016	29		67		67	0		0		0	67
January	2017	73		140		140	0		0		0	[redacted]
February	2017	37		177		177	0		0		0	[redacted]
March	2017	92		269		269	0		0		0	[redacted]
April	2017	101		370		370	0		0		0	[redacted]
May	2017	165		535		535	0		0		0	[redacted]
June	2017	101		636		636	1		1		1	[redacted]
July	2017	89		725		725	1		2		2	[redacted]
August	2017	89		814		814	0		2		2	[redacted]
September	2017	40		854		854	0		2		2	[redacted]
October	2017	74		928		928	0		2		2	[redacted]
November	2017	38		966		966	0		2		2	[redacted]
December	2017	38		1,004		1,004	5		7		7	[redacted]
January	2018	28		1,032		1,032	0		7		7	[redacted]
February	2018	77		1,109		1,109	1		8		8	[redacted]
March	2018	36		1,145		1,145	1		9		9	[redacted]
April	2018	37		1,182		1,182	1		10		10	[redacted]
May	2018	38		1,220		1,220	3		13		13	[redacted]
June	2018	65		1,285		1,285	9		22		22	[redacted]
July	2018	36		1,321		1,321	9		31		31	[redacted]
August	2018	47		1,368		1,368	0		31		31	[redacted]
September	2018	33		1,401		1,401	0		31		31	[redacted]
October	2018	54		1,455		1,455	11		42		42	[redacted]
November	2018	35		1,490		1,490	0		42		42	[redacted]
December	2018	24		1,514		1,514	1		43		43	[redacted]

Table 2. EM&V Data Incremental by Vintage Year	Program Participants								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2016		67		67		-		-	67
2017		937		937		7		7	944
2018		510		510		36		36	546

Table 3. EM&V Data Annualized by Vintage Year	Program Participants								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2016		67		67		-		-	67
2017		937		937		7		7	944
2018		510		1,447		36		43	546

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)	Program Participants		
		NC PPI	
2016		-	
2017		7	
2018		43	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)	Program Participants								
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP
2016		67		67		-		-	67
2017		1,004		1,004		7		7	1,011
2018		1,514		1,514		43		43	1,557

Appendix D.6 Non-residential Small Business Improvement Program 2016-2018

Table 1		Energy Savings										
		Net kWh										
		VA					NC					
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	[redacted]
December	2015											[redacted]
January	2016	0		0		0	0		0		0	[redacted]
February	2016	0		0		0	0		0		0	[redacted]
March	2016	0		0		0	0		0		0	[redacted]
April	2016	0		0		0	0		0		0	[redacted]
May	2016	0		0		0	0		0		0	[redacted]
June	2016	0		0		0	0		0		0	0
July	2016	0		0		0	0		0	0	0	0
August	2016	0		0		0	0		0	0	0	0
September	2016	0		0		0	0		0	0	0	0
October	2016	3,202		3,202		3,202	0		0	0	0	3,202
November	2016	10,951		14,153		14,153	0		0	0	0	14,153
December	2016	36,750		50,902		50,902	0		0		0	50,902
January	2017	66,459		117,361		117,361	0		0		0	[redacted]
February	2017	24,535		141,896		141,896	0		0		0	[redacted]
March	2017	98,470		240,365		240,365	0		0		0	[redacted]
April	2017	69,281		309,646		309,646	0		0		0	[redacted]
May	2017	133,180		442,826		442,826	0		0		0	[redacted]
June	2017	97,421		540,247		540,247	1,049		1,049		1,049	[redacted]
July	2017	117,803		658,050		658,050	3,982		5,031		5,031	[redacted]
August	2017	104,019		762,069		762,069	0		5,031		5,031	[redacted]
September	2017	93,147		855,216		855,216	0		5,031		5,031	[redacted]
October	2017	167,604		1,022,821		1,022,821	0		5,031		5,031	[redacted]
November	2017	99,941		1,122,762		1,122,762	0		5,031		5,031	[redacted]
December	2017	67,313		1,190,075		1,190,075	7,873		12,904		12,904	[redacted]
January	2018	64,722		1,254,797		1,254,797	0		12,904		12,904	[redacted]
February	2018	144,592		1,399,389		1,399,389	2,963		15,867		15,867	[redacted]
March	2018	80,223		1,479,612		1,479,612	1,746		17,613		17,613	[redacted]
April	2018	86,331		1,565,943		1,565,943	2,643		20,256		20,256	[redacted]
May	2018	52,809		1,618,753		1,618,753	17,548		37,805		37,805	[redacted]
June	2018	431,732		2,050,485		2,050,485	17,101		54,905		54,905	[redacted]
July	2018	51,128		2,101,613		2,101,613	8,161		63,066		63,066	[redacted]
August	2018	50,638		2,152,251		2,152,251	0		63,066		63,066	[redacted]
September	2018	55,251		2,207,502		2,207,502	0		63,066		63,066	[redacted]
October	2018	101,831		2,309,334		2,309,334	25,309		88,375		88,375	[redacted]
November	2018	70,766		2,380,100		2,380,100	0		88,375		88,375	[redacted]
December	2018	49,891		2,429,991		2,429,991	2,085		90,460		90,460	[redacted]

Table 2. EM&V Data Incremental by Vintage Year	Net Incremental Energy (kWh)										
	[redacted]		VA IRP	[redacted]	VA NLR	[redacted]		NC IRP	[redacted]	NC NLR	System IRP
2016	[redacted]		68,256	[redacted]	68,256	[redacted]		-	[redacted]	-	68,256
2017	[redacted]		6,792,509	[redacted]	6,792,509	[redacted]		39,109	[redacted]	39,109	6,831,618
2018	[redacted]		8,668,870	[redacted]	8,668,870	[redacted]		460,906	[redacted]	460,906	9,129,776

Table 3. EM&V Data Annualized by Vintage Year	Net Annualized Energy (kWh)										
	[redacted]		VA IRP	[redacted]	VA NLR	[redacted]		NC IRP	[redacted]	NC NLR	System IRP
2016	[redacted]		610,825	[redacted]	610,825	[redacted]		-	[redacted]	-	610,825
2017	[redacted]		13,670,074	[redacted]	13,670,074	[redacted]		154,851	[redacted]	154,851	13,824,925
2018	[redacted]		14,878,990	[redacted]	14,878,990	[redacted]		930,665	[redacted]	930,665	15,809,655

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)	Net Energy (kWh) for PPI										
	[redacted]					[redacted]		NC PPI	[redacted]		[redacted]
2016	[redacted]					[redacted]		-	[redacted]		[redacted]
2017	[redacted]					[redacted]		39,109	[redacted]		[redacted]
2018	[redacted]					[redacted]		615,758	[redacted]		[redacted]

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)	Net Energy (kWh)										
	[redacted]		VA IRP	[redacted]	VA NLR	[redacted]		NC IRP	[redacted]	NC NLR	System IRP
2016	[redacted]		68,256	[redacted]	68,256	[redacted]		-	[redacted]	-	68,256
2017	[redacted]		7,403,334	[redacted]	7,403,334	[redacted]		39,109	[redacted]	39,109	7,442,443
2018	[redacted]		22,949,769	[redacted]	22,949,769	[redacted]		615,758	[redacted]	615,758	23,565,527

Appendix D.6 Non-residential Small Business Improvement Program 2016-2018

Table 1		Capacity Savings											Energy Savings / Participant			Capacity Savings / Participant		
		Net kW											Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA					NC					System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System	VA	NC	System	VA	NC	System
December	2015																	
January	2016	0		0		0	0		0		0		-	-	-	-	-	-
February	2016	0		0		0	0		0		0		-	-	-	-	-	-
March	2016	0		0		0	0		0		0		-	-	-	-	-	-
April	2016	0		0		0	0		0		0		-	-	-	-	-	-
May	2016	0		0		0	0		0		0		-	-	-	-	-	-
June	2016	0		0		0	0		0		0	0	-	-	-	-	-	-
July	2016	0		0		0	0		0	0	0	0	-	-	-	-	-	-
August	2016	0		0		0	0		0	0	0	0	-	-	-	-	-	-
September	2016	0		0		0	0		0	0	0	0		-	-	-	-	-
October	2016	6		6		6	0		0	0	0	6	800	-	800	1.58	-	1.58
November	2016	17		24		24	0		0	0	0	24	372	-	372	0.62	-	0.62
December	2016	99		122		122	0		0		0	122	760	-	760	1.83	-	1.83
January	2017	162		285		285	0		0		0	[illegible]	838	-	838	2.03	-	2.03
February	2017	61		346		346	0		0		0	[illegible]	802	-	802	1.95	-	1.95
March	2017	262		608		608	0		0		0	[illegible]	894	-	894	2.26	-	2.26
April	2017	186		794		794	0		0		0	[illegible]	837	-	837	2.14	-	2.14
May	2017	302		1,095		1,095	0		0		0	[illegible]	828	-	828	2.05	-	2.05
June	2017	252		1,347		1,347	0		0		0	[illegible]	849	1,049	850	2.12	0.00	2.12
July	2017	298		1,645		1,645	7		7		7	[illegible]	908	2,516	912	2.27	3.36	2.27
August	2017	280		1,925		1,925	0		7		7	[illegible]	936	2,516	940	2.37	3.36	2.37
September	2017	248		2,173		2,173	0		7		7	[illegible]	1,001	2,516	1,005	2.54	3.36	2.55
October	2017	388		2,561		2,561	0		7		7	[illegible]	1,102	2,516	1,105	2.76	3.36	2.76
November	2017	260		2,821		2,821	0		7		7	[illegible]	1,162	2,516	1,165	2.92	3.36	2.92
December	2017	183		3,004		3,004	24		30		30	[illegible]	1,185	1,843	1,190	2.99	4.33	3.00
January	2018	178		3,182		3,182	0		30		30	[illegible]	1,216	1,843	1,220	3.08	4.33	3.09
February	2018	357		3,538		3,538	4		34		34	[illegible]	1,262	1,983	1,267	3.19	4.27	3.20
March	2018	193		3,731		3,731	7		41		41	[illegible]	1,292	1,957	1,297	3.26	4.56	3.27
April	2018	208		3,939		3,939	7		48		48	[illegible]	1,325	2,026	1,331	3.33	4.84	3.35
May	2018	131		4,070		4,070	49		98		98	[illegible]	1,327	2,908	1,344	3.34	7.53	3.38
June	2018	1,154		5,224		5,224	45		143		143	[illegible]	1,596	2,496	1,611	4.07	6.50	4.11
July	2018	136		5,360		5,360	19		162		162	[illegible]	1,591	2,034	1,601	4.06	5.24	4.08
August	2018	140		5,500		5,500	0		162		162	[illegible]	1,573	2,034	1,584	4.02	5.24	4.05
September	2018	127		5,627		5,627	0		162		162	[illegible]	1,576	2,034	1,586	4.02	5.24	4.04
October	2018	269		5,896		5,896	67		230		230	[illegible]	1,587	2,104	1,602	4.05	5.47	4.09
November	2018	190		6,087		6,087	0		230		230	[illegible]	1,597	2,104	1,611	4.08	5.47	4.12
December	2018	149		6,236		6,236	5		234		234	[illegible]	1,605	2,104	1,619	4.12	5.44	4.16

Table 2. EM&V Data Incremental by Vintage Year									Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2016		122		122		-		-	122	1,019	-	1,019	1.83	-	1.83
2017		2,881		2,881		30		30	2,912	7,249	5,587	7,237	3.07	4.33	3.08
2018		3,232		3,232		204		204	3,436	16,998	12,803	16,721	6.34	5.66	6.29

Table 3. EM&V Data Annualized by Vintage Year									Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2016		122		122		-		-	122	9,117	-	9,117	1.83	-	1.83
2017		2,881		2,881		30		30	2,912	14,589	22,122	14,645	3.07	4.33	3.08
2018		3,232		6,114		204		234	3,436	29,174	25,852	28,955	6.34	5.66	6.29

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)							PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Net Peak Demand (kW)						Net kWh/Participant			Net kW/Participant		
				NC PPI				NC			NC	
2016				-				-			-	
2017				30				5,587			4.33	
2018				234				14,320			5.44	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)									IRP Energy Savings/Participant			IRP Capacity Savings/Participant		
	Net Peak Demand (kW)								Net kWh/Participant			Net kW/Participant		
		VA IRP		VA NLR		NC IRP		NC NLR	System IRP	VA	NC	System	VA	NC	System
2016		122		122		-		-	122	1,019	-	1,019	1.83	-	1.83
2017		3,004		3,004		30		30	3,034	7,374	5,587	7,361	2.99	4.33	3.00
2018		6,236		6,236		234		234	6,470	15,158	14,320	15,135	4.12	5.44	4.16

Appendix D.7 Non-residential Prescriptive Program 2017-2018

PROGRAM: Nonresidential Prescriptive Program
DSM Phase VI Program
Type: Energy Efficiency
Program Measure Life: 6.3 years (6 years, 4 months)

Table 1		Participation										
		Program Participants										
		VA					NC					System
Month	Year	VA Monthly New [A]	VA Monthly Retired [-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	VA Rate Reset Adj. [B]	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [F] =Σ[A] + Σ[-A retired] + B	NC Monthly New [C]	NC Monthly Retired [-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	NC Rate Reset Adj. [D]	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.) [H] = Σ[C] + Σ[-C retired] + D	System Cum for IRP E+G
December	2015											
January	2016											
February	2016											
March	2016											
April	2016											
May	2016											
June	2016											
July	2016											
August	2016											
September	2016											
October	2016											
November	2016											
December	2016											
January	2017	0		0		0	0		0		0	0
February	2017	0		0		0	0		0		0	0
March	2017	0		0		0	0		0		0	0
April	2017	0		0		0	0		0		0	0
May	2017	0		0		0	0		0		0	0
June	2017	0		0		0	0		0		0	0
July	2017	0		0		0	0		0		0	0
August	2017	0		0		0	0		0		0	0
September	2017	0		0		0	0		0		0	0
October	2017	0		0		0	0		0		0	0
November	2017	0		0		0	0		0		0	0
December	2017	4		4		4	0		0		0	4
January	2018	49		53		53	0		0		0	53
February	2018	181		234		234	0		0		0	234
March	2018	115		349		349	0		0		0	349
April	2018	56		405		405	0		0		0	405
May	2018	123		528		528	0		0		0	528
June	2018	100		628		628	0		0		0	628
July	2018	64		692		692	0		0		0	692
August	2018	47		739		739	0		0		0	739
September	2018	83		822		822	0		0		0	822
October	2018	11		833		833	0		0		0	833
November	2018	21		854		854	11		11		11	865
December	2018	15		869		869	10		21		21	890

Table 2. EM&V Data Incremental by Vintage Year										
	Program Participants									
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			4		4			0		-	4
2018			865		865			21		21	886

Table 3. EM&V Data Annualized by Vintage Year										
	Program Participants									
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			4		4			0		-	4
2018			865		865			21		21	886

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)									
	Program Participants								
	VA					NC PPI			System
2016						-			
2017						0			
2018						21			

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)										
	Program Participants									
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			4		4			0		-	4
2018			869		869			21		21	890

Appendix D.7 Non-residential Prescriptive Program 2017-2018

Table 1		Energy Savings										
		Net kWh										
		VA					NC					System
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New + Retired)	VA Rate Reset Adj.	VA Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	NC Rate Reset Adj.	NC Cum. for Net Lost Revenue (NLR) (New + Retired + Rate Reset Adj.)	System Cum for IRP
December	2015											
January	2016											
February	2016											
March	2016											
April	2016											
May	2016											
June	2016											
July	2016											
August	2016											
September	2016											
October	2016											
November	2016											
December	2016											
January	2017	0		0		0	0		0		0	[illegible]
February	2017	0		0		0	0		0		0	[illegible]
March	2017	0		0		0	0		0		0	[illegible]
April	2017	0		0		0	0		0		0	[illegible]
May	2017	0		0		0	0		0		0	[illegible]
June	2017	0		0		0	0		0		0	[illegible]
July	2017	0		0		0	0		0		0	[illegible]
August	2017	0		0		0	0		0		0	[illegible]
September	2017	0		0		0	0		0		0	[illegible]
October	2017	0		0		0	0		0		0	[illegible]
November	2017	0		0		0	0		0		0	[illegible]
December	2017	50		50		50	0		0		0	[illegible]
January	2018	10,907		10,957		10,957	0		0		0	[illegible]
February	2018	98,870		109,827		109,827	0		0		0	[illegible]
March	2018	46,097		155,924		155,924	0		0		0	[illegible]
April	2018	27,038		182,962		182,962	0		0		0	[illegible]
May	2018	67,485		250,447		250,447	0		0		0	[illegible]
June	2018	55,611		306,058		306,058	0		0		0	[illegible]
July	2018	74,894		380,952		380,952	0		0		0	[illegible]
August	2018	27,030		407,983		407,983	0		0		0	[illegible]
September	2018	52,385		460,367		460,367	0		0		0	[illegible]
October	2018	7,945		468,312		468,312	0		0		0	[illegible]
November	2018	2,785		471,098		471,098	11,360		11,360		11,360	[illegible]
December	2018	7,089		478,186		478,186	4,349		15,709		15,709	[illegible]

Table 2. EM&V Data Incremental by Vintage Year											
	Net Incremental Energy (kWh)										
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			50		50			0		0	50
2018			3,682,480		3,682,480			27,070		27,070	3,709,550

Table 3. EM&V Data Annualized by Vintage Year											
	Net Annualized Energy (kWh)										
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			594		594			0		0	594
2018			5,737,642		5,737,642			188,512		188,512	5,926,154

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)											
	Net Energy (kWh) for PPI										
	VA							NC PPI			System
2016								-			
2017								0			
2018								27,070			

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)											
	Net Energy (kWh)										
			VA IRP		VA NLR			NC IRP		NC NLR	System IRP
2016			-		-			-		-	-
2017			50		50			0		-	50
2018			3,683,074		3,683,074			27,070		27,070	3,710,144

Appendix D.7 Non-residential Prescriptive Program 2017-2018

Table 1		Capacity Savings							Energy Savings / Participant			Capacity Savings / Participant		
		Net kW							Net kWh/Participant for IRP			Net kW/Participant for IRP		
		VA			NC			System						
Month	Year	VA Monthly New	VA Monthly Retired	VA Cum. for IRP (New+Retired)	NC Monthly New	NC Monthly Retired	NC Cum. for IRP (New + Retired)	System Cum for IRP	VA	NC	System	VA	NC	System
December	2015													
January	2016													
February	2016													
March	2016													
April	2016													
May	2016													
June	2016													
July	2016													
August	2016													
September	2016													
October	2016													
November	2016													
December	2016													
January	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
February	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
March	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
April	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
May	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
June	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
July	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
August	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
September	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
October	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
November	2017	0.00		0.00	0.00		0		-	-	-	-	-	-
December	2017	0.07		0.07	0.00		0		12	-	12	0.02	-	0.02
January	2018	20		20	0.00		0		207	-	207	0.37	-	0.37
February	2018	311		331	0.00		0		469	-	469	1.42	-	1.42
March	2018	164		495	0.00		0		447	-	447	1.42	-	1.42
April	2018	90		585	0.00		0		452	-	452	1.45	-	1.45
May	2018	150		735	0.00		0		474	-	474	1.39	-	1.39
June	2018	104		839	0.00		0		487	-	487	1.34	-	1.34
July	2018	210		1,048	0.00		0		551	-	551	1.52	-	1.52
August	2018	1,390		2,438	0.00		0		552	-	552	3.30	-	3.30
September	2018	124		2,562	0.00		0		560	-	560	3.12	-	3.12
October	2018	38		2,600	0.00		0		562	-	562	3.12	-	3.12
November	2018	3		2,603	15.52		16		552	1,033	558	3.05	1.41	3.03
December	2018	18		2,621	5.95		21		550	748	555	3.02	1.02	2.97

Table 2. EM&V Data Incremental by Vintage Year								Incremental Energy Savings/Participant			Incremental Capacity Savings/Participant		
	Net Peak Demand (kW)							Net kWh/Participant for IRP			Net kW/Participant for IRP		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2016			-			-	-	-	-	-	-	-	-
2017			0.07			0	0.07	12	-	12	0.02	-	0.02
2018			2,621.05			21	2,643	4,257	1,289.03	4,187	3.03	1.02	2.98

Table 3. EM&V Data Annualized by Vintage Year								Annualized Energy Savings/Participant			Annualized Capacity Savings/Participant		
	Net Peak Demand (kW)							Net kWh/Participant for IRP			Net kW/Participant for IRP		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2016			-			-	-	-	-	-	-	-	-
2017			0.07			0.00	0.07	149	-	149	0.02	-	0.02
2018			2,621			21	2,643	6,633	8,976.76	6,689	3.03	1.02	2.98

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)						PPI Energy Savings/Participant			PPI Capacity Savings/Participant		
	Net Peak Demand (kW)					Net kWh/Participant			Net kW/Participant		
					NC PPI		NC			NC	
2016					-		-			-	
2017					0		-			-	
2018					21		1,289			1.02	

Table 5. EM&V Data Accumulated through Vintage Year (for IRP and NLR)						IRP Energy Savings/Participant			IRP Capacity Savings/Participant		
	Net Peak Demand (kW)					Net kWh/Participant			Net kW/Participant		
			VA IRP			NC IRP	System IRP	VA	NC	System	VA	NC	System
2016			-			-	-	-	-	-	-	-	-
2017			0.07			0	0	12	-	12	0.02	-	0.02
2018			2,621.12			21	2,643	4,238	1,289	4,169	3.02	1.02	2.97

Appendix D.8 Residential Air Conditioner Cycling Program 2010-2018

PROGRAM: Residential AC Cycling
DSM Phase I Program
Type: Peak Shaving
Measure Life: N/A

Table 1										
		Program Participants (Net)[1]			Peak Capacity Savings Net KW			Peak Capacity Savings / Participant Net kW/Participant		
Month	Year	VA	NC	System	VA	NC	System	VA	NC	System
May	2010	-		-	-		-			
June	2010	29		29	30		30	1.06		1.06
July	2010	332		332	351		351	1.06		1.06
August	2010	1,376		1,376	1,457		1,457	1.06		1.06
September	2010	3,104		3,104	3,287		3,287	1.06		1.06
October	2010	6,431		6,431	6,810		6,810	1.06		1.06
November	2010	8,054		8,054	8,529		8,529	1.06		1.06
December	2010	10,276		10,276	10,880		10,880	1.06		1.06
January	2011	11,788		11,788	14,408		14,408	1.22		1.22
February	2011	13,646		13,646	16,679		16,679	1.22		1.22
March	2011	16,816		16,816	20,553		20,553	1.22		1.22
April	2011	19,212		19,212	23,481		23,481	1.22		1.22
May	2011	21,091		21,091	25,779		25,779	1.22		1.22
June	2011	22,940		22,940	28,042		28,042	1.22		1.22
July	2011	24,809		24,809	30,352		30,352	1.22		1.22
August	2011	25,341	28	25,369	31,041	34	31,075	1.22	1.22	1.22
September	2011	26,908	28	26,935	32,978	34	33,012	1.23	1.22	1.23
October	2011	29,100	320	29,419	35,661	390	36,052	1.23	1.22	1.23
November	2011	31,085	765	31,851	38,092	935	39,027	1.23	1.22	1.23
December	2011	32,168	953	33,121	39,420	1,164	40,584	1.23	1.22	1.23
January	2012	35,431	1,334	36,765	38,863	1,459	40,321	1.10	1.09	1.10
February	2012	38,284	1,763	40,047	41,987	1,926	43,912	1.10	1.09	1.10
March	2012	40,408	2,357	42,765	44,314	2,575	46,889	1.10	1.09	1.10
April	2012	44,143	2,627	46,770	48,404	2,870	51,274	1.10	1.09	1.10
May	2012	47,425	2,634	50,059	51,999	2,876	54,876	1.10	1.09	1.10
June	2012	49,081	2,638	51,719	53,826	2,874	56,701	1.10	1.09	1.10
July	2012	50,600	2,596	53,196	55,326	2,843	58,169	1.09	1.09	1.09
August	2012	51,542	2,469	54,011	56,356	2,709	59,066	1.09	1.10	1.09
September	2012	52,897	2,464	55,361	57,838	2,704	60,542	1.09	1.10	1.09
October	2012	54,818	2,465	57,283	59,938	2,706	62,644	1.09	1.10	1.09
November	2012	57,874	2,471	60,345	63,279	2,714	65,993	1.09	1.10	1.09
December	2012	58,901	2,478	61,379	64,403	2,721	67,124	1.09	1.10	1.09
January	2013	60,429	2,506	62,935	51,954	2,155	54,109	0.86	0.86	0.86
February	2013	61,601	2,474	64,076	52,962	2,127	55,090	0.86	0.86	0.86
March	2013	63,316	2,450	65,766	54,436	2,107	56,543	0.86	0.86	0.86
April	2013	65,506	2,475	67,981	56,319	2,128	58,448	0.86	0.86	0.86
May	2013	67,036	2,543	69,579	57,635	2,187	59,822	0.86	0.86	0.86
June	2013	68,075	2,558	70,633	58,528	2,199	60,728	0.86	0.86	0.86
July	2013	68,928	2,532	71,460	59,261	2,177	61,438	0.86	0.86	0.86
August	2013	69,405	2,710	72,114	59,671	2,330	62,001	0.86	0.86	0.86
September	2013	70,340	3,053	73,393	60,475	2,330	62,805	0.86	0.76	0.86
October	2013	71,997	3,401	75,398	61,900	2,924	64,824	0.86	0.86	0.86
November	2013	74,182	3,397	77,578	63,778	2,920	66,699	0.86	0.86	0.86
December	2013	75,738	3,394	79,132	65,117	2,918	68,035	0.86	0.86	0.86
January	2014	77,588	3,376	80,964	61,004	2,654	63,658	0.79	0.79	0.79
February	2014	79,424	3,366	82,790	61,713	2,615	64,328	0.78	0.78	0.78
March	2014	81,294	3,359	84,653	61,661	2,548	64,209	0.76	0.76	0.76
April	2014	83,265	3,347	86,612	63,157	2,539	65,695	0.76	0.76	0.76
May	2014	83,721	3,286	87,008	61,954	2,432	64,386	0.74	0.74	0.74
June	2014	84,578	3,339	87,917	61,806	2,440	64,246	0.73	0.73	0.73
July	2014	84,055	3,553	87,608	59,868	2,531	62,399	0.71	0.71	0.71
August	2014	84,446	3,737	88,183	58,584	2,593	61,177	0.69	0.69	0.69
September	2014	85,480	3,930	89,410	57,720	2,654	60,374	0.68	0.68	0.68
October	2014	86,869	3,902	90,771	57,855	2,598	60,453	0.67	0.67	0.67
November	2014	87,540	4,005	91,546	57,492	2,630	60,123	0.66	0.66	0.66
December	2014	88,243	4,010	92,253	57,137	2,597	59,734	0.65	0.65	0.65

Appendix D.8 Residential Air Conditioner Cycling Program 2010-2018

Table 1						Peak Capacity Savings				Peak Capacity Savings / Participant		
		Program Participants (Net)[1]				Net KW				Net kW/Participant		
Month	Year	VA	NC	System		VA	NC	System		VA	NC	System
January	2015	94,241	4,213	98,454		66,911	2,991	69,903		0.71	0.71	0.71
February	2015	95,140	4,195	99,336		67,550	2,979	70,528		0.71	0.71	0.71
March	2015	96,549	4,233	100,782		68,550	3,006	71,555		0.71	0.71	0.71
April	2015	98,027	4,222	102,249		69,599	2,998	72,597		0.71	0.71	0.71
May	2015	99,574	4,215	103,790		70,698	2,993	73,691		0.71	0.71	0.71
June	2015	100,034	4,184	104,218		71,024	2,971	73,995		0.71	0.71	0.71
July	2015	97,475	3,994	101,470		69,207	2,836	72,043		0.71	0.71	0.71
August	2015	97,406	3,939	101,346		69,158	2,797	71,955		0.71	0.71	0.71
September	2015	98,545	3,908	102,454		69,967	2,775	72,742		0.71	0.71	0.71
October	2015	100,082	3,907	103,989		71,058	2,774	73,832		0.71	0.71	0.71
November	2015	101,422	3,914	105,336		72,009	2,779	74,789		0.71	0.71	0.71
December	2015	103,160	3,916	107,077		73,244	2,781	76,024		0.71	0.71	0.71
January	2016	103,679	3,897	107,576		100,207	3,780	103,987		0.97	0.97	0.97
February	2016	103,673	3,884	107,557		100,201	3,767	103,968		0.97	0.97	0.97
March	2016	103,872	3,882	107,754		100,393	3,766	104,159		0.97	0.97	0.97
April	2016	104,165	3,910	108,075		100,676	3,793	104,469		0.97	0.97	0.97
May	2016	104,189	3,899	108,088		100,700	3,782	104,481		0.97	0.97	0.97
June	2016	104,492	3,908	108,400		100,992	3,791	104,783		0.97	0.97	0.97
July	2016	103,807	3,876	107,683		100,330	3,760	104,090		0.97	0.97	0.97
August	2016	101,205	3,761	104,966		97,815	3,649	101,464		0.97	0.97	0.97
September	2016	99,596	3,712	103,308		96,260	3,600	99,861		0.97	0.97	0.97
October	2016	99,274	3,694	102,968		95,949	3,583	99,532		0.97	0.97	0.97
November	2016	98,676	3,728	102,404		95,371	3,616	98,987		0.97	0.97	0.97
December	2016	98,088	3,707	101,795		94,803	3,595	98,398		0.97	0.97	0.97
January	2017	97,959	3,716	101,675		66,589	2,527	69,116		0.68	0.68	0.68
February	2017	97,911	3,713	101,624		66,557	2,525	69,082		0.68	0.68	0.68
March	2017	97,881	3,713	101,594		66,536	2,525	69,061		0.68	0.68	0.68
April	2017	96,947	3,708	100,655		65,902	2,521	68,423		0.68	0.68	0.68
May	2017	95,476	3,697	99,173		64,902	2,514	67,415		0.68	0.68	0.68
June	2017	94,598	3,685	98,283		64,305	2,506	66,810		0.68	0.68	0.68
July	2017	93,399	3,667	97,066		63,490	2,493	65,983		0.68	0.68	0.68
August	2017	92,100	3,605	95,705		62,607	2,451	65,058		0.68	0.68	0.68
September	2017	91,120	3,596	94,716		61,941	2,445	64,386		0.68	0.68	0.68
October	2017	90,505	3,594	94,099		61,522	2,444	63,966		0.68	0.68	0.68
November	2017	89,586	3,593	93,179		60,898	2,443	63,341		0.68	0.68	0.68
December	2017	89,282	3,605	92,887		60,691	2,451	63,142		0.68	0.68	0.68
January	2018	88,935	3,612	92,547		55,778	2,267	58,045		0.63	0.63	0.63
February	2018	88,626	3,613	92,239		55,584	2,267	57,851		0.63	0.63	0.63
March	2018	88,319	3,606	91,925		55,392	2,263	57,655		0.63	0.63	0.63
April	2018	87,121	3,319	90,440		54,640	2,083	56,723		0.63	0.63	0.63
May	2018	86,796	3,316	90,112		54,436	2,081	56,517		0.63	0.63	0.63
June	2018	85,222	3,231	88,453		53,449	2,028	55,477		0.63	0.63	0.63
July	2018	83,955	3,187	87,142		52,655	2,000	54,655		0.63	0.63	0.63
August	2018	83,020	3,162	86,182		52,068	1,984	54,053		0.63	0.63	0.63
September	2018	82,011	3,133	85,144		51,435	1,966	53,402		0.63	0.63	0.63
October	2018	81,469	3,122	84,591		51,095	1,959	53,055		0.63	0.63	0.63
November	2018	80,982	3,082	84,064		50,790	1,934	52,724		0.63	0.63	0.63
December	2018	80,627	3,067	83,694		50,567	1,925	52,492		0.63	0.63	0.63

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Appendix D.8 Residential Air Conditioner Cycling Program 2010-2018

Table 2. EM&V Data by Vintage Year	Program Participants (Net)[1]			[redacted]	Annual Peak Savings Net KW			[redacted]	Annual Peak Savings / Participant Net kW/Participant		
	VA	NC	System	[redacted]	VA	NC	System	[redacted]	VA	NC	System
2010	10,276	-	10,276	[redacted]	10,880	-	10,880	[redacted]	1.06	-	1.06
2011	32,168	953	33,121	[redacted]	39,420	1,164	40,584	[redacted]	1.23	1.22	1.23
2012	58,901	2,478	61,379	[redacted]	64,403	2,721	67,124	[redacted]	1.09	1.10	1.09
2013	75,738	3,394	79,132	[redacted]	65,117	2,918	68,035	[redacted]	0.86	0.86	0.86
2014	88,243	4,010	92,253	[redacted]	57,137	2,597	59,734	[redacted]	0.65	0.65	0.65
2015	103,160	3,916	107,077	[redacted]	73,244	2,781	76,024	[redacted]	0.71	0.71	0.71
2016	98,088	3,707	101,795	[redacted]	94,803	3,595	98,398	[redacted]	0.97	0.97	0.97
2017	89,282	3,605	92,887	[redacted]	60,691	2,451	63,142	[redacted]	0.68	0.68	0.68
2018	80,627	3,067	83,694	[redacted]	50,567	1,925	52,492	[redacted]	0.63	0.63	0.63

Table 3. EM&V Data Difference by Vintage Year	Program Participant Difference			[redacted]	Net KW Difference			[redacted]	Net kW Difference / Participant		
	VA	NC	System	[redacted]	VA	NC	System	[redacted]	VA	NC	System
2010	10,276	0	10,276	[redacted]	10,880	0	10,880	[redacted]	1.06	-	1.06
2011	21,893	953	22,845	[redacted]	28,540	1,164	29,704	[redacted]	1.30	1.22	1.30
2012	26,733	1,525	28,258	[redacted]	24,983	1,557	26,540	[redacted]	0.93	1.02	0.94
2013	16,837	916	17,753	[redacted]	714	197	911	[redacted]	0.04	0.22	0.05
2014	12,504	616	13,121	[redacted]	-7,980	-321	-8,301	[redacted]	-0.64	-0.52	-0.63
2015	14,917	-94	14,824	[redacted]	16,106	184	16,291	[redacted]	1.08	-1.97	1.10
2016	-5,072	-210	-5,282	[redacted]	21,559	815	22,374	[redacted]	-4.25	-3.88	-4.24
2017	-8,806	-102	-8,908	[redacted]	-34,112	-1,144	-35,256	[redacted]	3.87	11.24	3.96
2018	-8,655	-538	-9,193	[redacted]	-10,124	-526	-10,650	[redacted]	1.17	0.98	1.16

Table 4. EM&V Data Acccumulated through Vintage Year (for PPI)	Program Participants			[redacted]	Net kW			[redacted]	PPI Capacity Savings/Participant Net kW/Participant		
	VA	NC	System	[redacted]	VA	NC	System	[redacted]	VA	NC	System
2010	10,276	-	10,276	[redacted]	10,880	-	10,880	[redacted]	1.06	-	1.06
2011	32,168	953	43,397	[redacted]	50,300	1,164	51,463	[redacted]	1.56	1.22	1.19
2012	58,901	2,478	61,379	[redacted]	64,403	2,721	67,124	[redacted]	1.09	1.10	1.09
2013	65,463	3,394	68,857	[redacted]	54,237	2,918	57,155	[redacted]	0.83	0.86	0.83
2014	56,074	3,057	59,132	[redacted]	17,717	1,433	19,150	[redacted]	0.32	0.47	0.32
2015	44,259	1,438	45,697	[redacted]	8,841	60	8,901	[redacted]	0.20	0.04	0.19
2016	22,350	313	22,662	[redacted]	29,686	677	30,363	[redacted]	1.33	2.17	1.34
2017	1,039	-405	634	[redacted]	3,554	-145	3,409	[redacted]	3.42	0.36	5.38
2018	-22,533	-850	-23,383	[redacted]	-22,676	-856	-23,532	[redacted]	1.01	1.01	1.01

Table 5. EM&V Data Acccumulated through Vintage Year (for IRP)	Program Participants			[redacted]	Net kW			[redacted]	IRP Capacity Savings/Participant Net kW/Participant		
	VA	NC	System	[redacted]	VA	NC	System	[redacted]	VA	NC	System
2010	10,276	-	10,276	[redacted]	10,880	-	10,880	[redacted]	1.06	-	1.06
2011	32,168	953	33,121	[redacted]	39,420	1,164	40,584	[redacted]	1.23	1.22	1.23
2012	58,901	2,478	61,379	[redacted]	64,403	2,721	67,124	[redacted]	1.09	1.10	1.09
2013	75,738	3,394	79,132	[redacted]	65,117	2,918	68,035	[redacted]	0.86	0.86	0.86
2014	88,243	4,010	92,253	[redacted]	57,137	2,597	59,734	[redacted]	0.65	0.65	0.65
2015	103,160	3,916	107,077	[redacted]	73,244	2,781	76,024	[redacted]	0.71	0.71	0.71
2016	98,088	3,707	101,795	[redacted]	94,803	3,595	98,398	[redacted]	0.97	0.97	0.97
2017	89,282	3,605	92,887	[redacted]	60,691	2,451	63,142	[redacted]	0.68	0.68	0.68
2018	80,627	3,067	83,694	[redacted]	50,567	1,925	52,492	[redacted]	0.63	0.63	0.63

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Appendix D.9 Non-residential Distributed Generation Program 2012-2018

PROGRAM: Non-Residential Distributed Generation
DSM Phase II Program
Type: Peak Shaving
Program Measure Life: N/A

Table 1		Participation			Net Capacity Savings			Net Capacity Savings / Participant		
		Program Participants			Net kW			Net kW/participant		
Month	Year	VA	NC	System	VA	NC	System	VA	NC	System
June	2012	19		19	15,857		15,857	843		843
July	2012	19		19	16,051		16,051	843		843
August	2012	19		19	16,051		16,051	843		843
September	2012	19		19	16,051		16,051	843		843
October	2012	19		19	16,051		16,051	843		843
November	2012	19		19	16,051		16,051	843		843
December	2012	19		19	16,051		16,051	843		843
January	2013	19		19	13,478		13,478	698		698
February	2013	19		19	13,478		13,478	698		698
March	2013	19		19	13,478		13,478	698		698
April	2013	19		19	13,478		13,478	698		698
May	2013	19		19	13,478		13,478	698		698
June	2013	19		19	13,691		13,691	709		709
July	2013	19		19	14,713		14,713	758		758
August	2013	19		19	14,785		14,785	779		779
September	2013	19		19	15,770		15,770	830		830
October	2013	19		19	16,110		16,110	830		830
November	2013	19		19	16,110		16,110	830		830
December	2013	19		19	16,110		16,110	830		830
January	2014	19		19	10,346		10,346	550		550
February	2014	19		19	10,346		10,346	550		550
March	2014	19		19	8,653		8,653	460		460
April	2014	19		19	8,653		8,653	460		460
May	2014	19		19	8,653		8,653	460		460
June	2014	18		18	13,904		13,904	790		790
July	2014	19		19	14,860		14,860	790		790
August	2014	17		17	13,819		13,819	810		810
September	2014	19		19	14,121		14,121	760		760
October	2014	19		19	14,121		14,121	760		760
November	2014	19		19	14,121		14,121	760		760
December	2014	19		19	14,121		14,121	760		760
January	2015	6		6	4,259		4,259	698		698
February	2015	6		6	4,721		4,721	774		774
March	2015	6		6	5,457		5,457	895		895
April	2015	6		6	5,457		5,457	895		895
May	2015	6		6	5,457		5,457	895		895
June	2015	6		6	6,015		6,015	986		986
July	2015	6		6	6,048		6,048	991		991
August	2015	6		6	5,714		5,714	937		937
September	2015	6		6	5,530		5,530	907		907
October	2015	6		6	5,457		5,457	895		895
November	2015	6		6	5,457		5,457	895		895
December	2015	6		6	5,457		5,457	895		895
January	2016	6		6	4,597		4,597	742		742
February	2016	6		6	3,864		3,864	623		623
March	2016	0		0	0		0	-		-
April	2016	0		0	0		0	-		-
May	2016	0		0	0		0	-		-
June	2016	7		7	5,385		5,385	828		828
July	2016	7		7	4,446		4,446	684		684
August	2016	7		7	7,057		7,057	1,086		1,086
September	2016	7		7	7,653		7,653	1,177		1,177
October	2016	0		0	0		0	-		-
November	2016	0		0	0		0	-		-
December	2016	7		7	4,348		4,348	669		669
January	2017	6		6	5,149		5,149	844		844
February	2017	0		0	0		0	-		-
March	2017	0		0	0		0	-		-
April	2017	0		0	0		0	-		-
May	2017	6		6	5,487		5,487	900		900
June	2017	6		6	6,182		6,182	1,048		1,048
July	2017	6		6	6,054		6,054	1,026		1,026
August	2017	6		6	6,409		6,409	1,165		1,165
September	2017	6		6	5,674		5,674	1,013		1,013
October	2017	0		0	0		0	-		-
November	2017	0		0	0		0	-		-
December	2017	6		6	5,272		5,272	864		864

Appendix D.9 Non-residential Distributed Generation Program 2012-2018

Table 1		Participation			Net Capacity Savings			Net Capacity Savings / Participant		
		Program Participants			Net kW			Net kW/participant		
Month	Year	VA	NC	System	VA	NC	System	VA	NC	System
January	2018	6		6	5,946		5,946	970		970
February	2018	6		6	5,946		5,946	970		970
March	2018	6		6	5,946		5,946	970		970
April	2018	6		6	5,946		5,946	970		970
May	2018	6		6	5,946		5,946	970		970
June	2018	6		6	5,946		5,946	970		970
July	2018	6		6	5,946		5,946	970		970
August	2018	6		6	5,946		5,946	970		970
September	2018	6		6	5,946		5,946	970		970
October	2018	6		6	5,946		5,946	970		970
November	2018	6		6	5,946		5,946	970		970
December	2018	6		6	5,946		5,946	970		970

Table 2. EM&V Data by Vintage Year				Annual Peak Shaving Potential			Annual Peak Shaving Potential/Participant		
	Program Participants			Net kW			Net kW/Participant		
	VA	NC	System	VA	NC	System	VA	NC	System
2012	19		19	16,051		16,051	843		843
2013	19		19	16,110		16,110	830		830
2014	19		19	14,121		14,121	760		760
2015	6		6	5,457		5,457	895		895
2016	7		7	4,348		4,348	669		669
2017	6		6	5,272		5,272	864		864
2018	6		6	5,946		5,946	970		970

Appendix D.10 Residential Lighting Program 2010-2018

PROGRAM: Residential Lighting
DSM Plan: I Program
Type: Energy Efficiency
Measure Life: 5.4 years (5 years, 5 months)

Table 1		Participation							Energy Savings						
		Program Participants							Net kWh						
		VA			NC			System	VA			NC			System
Month	Year	VA Monthly Cum. Σ[A]	VA Monthly Cum. Retired Σ[-A retired]	VA Cum. for IRP (New + Retired) [E] = Σ[A] + Σ[-A retired]	NC Monthly Cum. Σ[C]	NC Monthly Cum. Retired Σ[-C retired]	NC Cum. for IRP (New + Retired) [G] = Σ[C] + Σ[-C retired]	System Cum. for IRP [I]=[E]+[G]	VA Monthly Cum.	VA Monthly Cum. Retired	VA Cum. for IRP (New + Retired)	NC Monthly Cum.	NC Monthly Cum. Retired	NC Cum. for IRP (New + Retired)	System Cum. for IRP
May	2010	79,585		79,585	-		-	79,585	188,360		188,360	-		-	188,360
June	2010	150,903		150,903	-		-	150,903	357,525		357,525	-		-	357,525
July	2010	310,255		310,255	-		-	310,255	722,782		722,782	-		-	722,782
August	2010	766,242		766,242	-		-	766,242	1,750,793		1,750,793	-		-	1,750,793
September	2010	1,063,193		1,063,193	-		-	1,063,193	2,426,792		2,426,792	-		-	2,426,792
October	2010	1,375,118		1,375,118	-		-	1,375,118	3,135,716		3,135,716	-		-	3,135,716
November	2010	1,727,724		1,727,724	-		-	1,727,724	3,955,858		3,955,858	-		-	3,955,858
December	2010	2,016,479		2,016,479	-		-	2,016,479	4,624,846		4,624,846	-		-	4,624,846
January	2011	2,432,611		2,432,611	-		-	2,432,611	5,589,074		5,589,074	-		-	5,589,074
February	2011	2,671,657		2,671,657	-		-	2,671,657	6,152,434		6,152,434	-		-	6,152,434
March	2011	2,939,176		2,939,176	-		-	2,939,176	6,799,833		6,799,833	-		-	6,799,833
April	2011	3,127,457		3,127,457	-		-	3,127,457	7,257,765		7,257,765	-		-	7,257,765
May	2011	3,289,065		3,289,065	-		-	3,289,065	7,650,796		7,650,796	-		-	7,650,796
June	2011	3,414,467		3,414,467	276		276	3,414,743	7,957,250		7,957,250	615		615	7,957,865
July	2011	3,587,463		3,587,463	4,242		4,242	3,591,725	8,375,196		8,375,196	9,762		9,762	8,384,958
August	2011	3,745,746		3,745,746	8,737		8,737	3,754,483	8,782,509		8,782,509	20,475		20,475	8,782,984
September	2011	3,857,197		3,857,197	14,764		14,764	3,871,961	9,063,621		9,063,621	34,629		34,629	9,098,250
October	2011	3,979,570		3,979,570	20,183		20,183	3,999,753	9,345,498		9,345,498	47,156		47,156	9,392,653
November	2011	4,124,490		4,124,490	29,498		29,498	4,153,988	9,704,393		9,704,393	68,925		68,925	9,773,318
December	2011	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2012	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2013	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2014	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2015	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2016	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2017	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
January	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
February	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
March	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
April	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
May	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
June	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
July	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
August	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
September	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
October	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
November	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564
December	2018	4,222,509		4,222,509	37,120		37,120	4,259,629	9,935,895		9,935,895	85,669		85,669	10,021,564

Appendix D.10 Residential Lighting Program 2010-2018

Capacity Savings Net kW							Energy Savings / Participant Net kWh/Participant for IRP			Capacity Savings / Participant Net kW/Participant for IRP		
VA			NC			System						
VA Monthly Cum.	VA Monthly Cum. Retired	VA Cum. for IRP (New + Retired)	NC Monthly Cum.	NC Monthly Cum. Retired	NC Cum. for IRP (New + Retired)	System Cum. for IRP	VA	NC	System	VA	NC	System
246		246	-		-	246	2.37	-	2.37	0.003	-	0.003
466		466	-		-	466	2.37	-	2.37	0.003	-	0.003
943		943	-		-	943	2.33	-	2.33	0.003	-	0.003
2,285		2,285	-		-	2,285	2.28	-	2.28	0.003	-	0.003
3,167		3,167	-		-	3,167	2.28	-	2.28	0.003	-	0.003
4,093		4,093	-		-	4,093	2.28	-	2.28	0.003	-	0.003
5,164		5,164	-		-	5,164	2.29	-	2.29	0.003	-	0.003
6,037		6,037	-		-	6,037	2.29	-	2.29	0.003	-	0.003
7,296		7,296	-		-	7,296	2.30	-	2.30	0.003	-	0.003
8,031		8,031	-		-	8,031	2.30	-	2.30	0.003	-	0.003
8,876		8,876	-		-	8,876	2.31	-	2.31	0.003	-	0.003
9,474		9,474	-		-	9,474	2.32	-	2.32	0.003	-	0.003
9,987		9,987	-		-	9,987	2.33	-	2.33	0.003	-	0.003
10,386		10,386	1		1	10,386	2.33	2.23	2.33	0.003	0.003	0.003
10,933		10,933	13		13	10,946	2.33	2.30	2.33	0.003	0.003	0.003
11,439		11,439	27		27	11,466	2.34	2.34	2.34	0.003	0.003	0.003
11,832		11,832	45		45	11,877	2.34	2.35	2.34	0.003	0.003	0.003
12,200		12,200	62		62	12,261	2.35	2.34	2.35	0.003	0.003	0.003
12,668		12,668	90		90	12,758	2.35	2.34	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.003
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001
12,971		12,971	112		112	13,083	2.35	2.31	2.35	0.003	0.003	0.001

Appendix D.10 Residential Lighting Program 2010-2018

Table 2. EM&V Data Incremental by Vintage Year	Program Participants (Gross)						Energy Savings (Incremental) Net kWh					
			VA			NC	System			VA			NC	System
2010			2,016,479			-	2,016,479			17,162,471			-	17,162,471
2011			2,206,030			37,120	2,243,150			41,098,506			267,232	41,365,739
2012			0			0	0			0			0	0
2013			0			0	0			0			0	0
2014			0			0	0			0			0	0
2015			0			0	0			0			0	0
2016			0			0	0			0			0	0
2017			0			0	0			0			0	0
2018			0			0	0			0			0	0

Table 3. EM&V Data Annualized by Vintage Year	Program Participants (Gross)						Energy Savings (Annualized) Net kWh					
			VA			NC	System			VA			NC	System
2010			2,016,479			-	2,016,479			55,495,758			-	55,495,758
2011			2,206,030			37,120	2,243,150			63,734,988			1,028,025	64,763,013
2012			0			0	0			0			0	0
2013			0			0	0			0			0	0
2014			0			0	0			0			0	0
2015			0			0	0			0			0	0
2016			0			0	0			0			0	0
2017			0			0	0			0			0	0
2018			0			0	0			0			0	0

Table 4. EM&V Data Accumulated through Vintage Year (for PPI)	Program Participants (Gross)						Energy Savings for Program Performance Incentives (PPI) Net kWh					
			VA			NC	System			VA			NC	System
2010			2,016,479			-	2,016,479			17,162,471			-	17,162,471
2011			4,222,509			37,120	4,259,629			98,594,263			267,232	98,861,495
2012			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2013			2,206,030			37,120	2,243,150			63,734,988			1,028,025	64,763,013
2014			0			0	0			0			0	0
2015			0			0	0			0			0	0
2016			0			0	0			0			0	0
2017			N/A			N/A	0			N/A			N/A	N/A

Table 5. EM&V Data Accumulated through Vintage Year (for IRP)	Program Participants (Gross)						Energy Savings for Integrated Resource Planning (IRP) Net kWh					
			VA			NC	System			VA			NC	System
2010			2,016,479			-	2,016,479			17,162,471			-	17,162,471
2011			4,222,509			37,120	4,259,629			98,594,263			267,232	98,861,495
2012			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2013			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2014			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2015			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2016			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2017			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2018			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768

Table 6. EM&V Data Accumulated through Vintage Year (for NC Lost Revenue)	Program Participants (Gross)						Energy Savings for NC Lost Revenue Net kWh					
			VA			NC	System			VA			NC	System
2010			2,016,479			-	2,016,479			17,162,471			-	17,162,471
2011			4,222,509			37,120	4,259,629			98,594,263			267,232	98,861,495
2012			4,222,509			37,120	4,259,629			119,230,743			1,028,025	120,258,768
2013			4,222,509			37,120	4,259,629			106,692,919			1,028,025	107,720,943
2014			2,206,030			37,120	2,243,150			27,947,729			846,462	28,794,191
2015			0			0	0			0			0	0
2016			0			0	0			0			0	0
2017			N/A			N/A	N/A			N/A			N/A	N/A