Appendix D: Program Level Savings, Costs and Cost-Effectiveness

Cumulative MWh Savings Forecast, ENO

		Reference Case					Low	Case		High Case				
		Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	
Program Name	Sector	2019	2024	2029	2034	2019	2024	2029	2034	2019	2024	2029	2034	
Residential Lighting & Appliances	Residential	35,459	43,647	38,440	39,395	20,367	28,173	23,773	24,386	60,310	62,718	55,266	56,340	
Residential Home Audit & Retrofit	Residential	2,164	5,564	8,478	11,134	1,243	3,437	5,151	6,610	6,160	17,023	27,067	36,487	
ENERGY STAR Air Conditioning	Residential	7,408	18,818	27,343	29,953	5,200	14,914	22,904	26,016	9,663	23,226	33,034	35,683	
Home Energy Use Benchmarking	Residential	2,200	2,250	2,301	2,353	1,100	1,125	1,150	1,176	4,401	4,500	4,602	4,706	
Low-Income Weatherization	Residential	1,385	2,802	3,976	4,065	1,385	2,802	3,976	4,065	1,385	2,802	3,976	4,065	
Efficient New Homes	Residential	556	1,002	1,152	1,453	239	440	512	654	672	1,213	1,394	1,758	
Multifamily	Residential	2,725	2,556	667	682	2,319	2,364	739	614	2,869	2,691	702	718	
Water Heating	Residential	1,052	2,691	4,145	4,404	395	1,141	1,847	2,053	1,612	3,907	5,856	6,154	
Pool Pump	Residential	1,326	3,391	4,190	4,298	524	1,513	2,033	2,113	1,676	4,061	4,835	4,954	
Direct Load Control	Residential	0	0	0	0	0	0	0	0	0	0	0	0	
Dynamic Pricing	Residential	0	0	0	0	0	0	0	0	0	0	0	0	
Solar Hot Water	Residential	18	30	41	53	18	30	41	53	36	59	83	107	
Commercial Prescriptive & Custom	Commercial	48,828	130,994	178,705	188,648	28,475	83,899	119,879	128,909	100,609	243,648	319,241	339,420	
Small Business Solutions	Commercial	3,952	10,904	17,663	20,737	1,085	3,298	5,503	6,622	4,971	12,098	18,861	21,101	
Non-Residential Dynamic Pricing	Commercial	0	0	0	0	0	0	0	0	0	0	0	0	
RetroCommissioning	Commercial	12,006	12,322	8,017	8,017	5,403	5,545	3,608	3,608	18,596	19,086	12,418	12,418	
Commercial New Construction	Commercial	2,292	9,118	15,944	20,478	1,784	4,487	7,190	8,109	6,803	15,312	23,822	25,529	
Data Center	Commercial	5,093	10,186	12,224	12,224	4,584	9,168	11,001	11,001	8,404	16,808	20,169	20,169	
Machine Drive	Industrial	809	1,936	2,913	3,161	607	1,452	2,185	2,371	827	1,952	2,926	3,160	
Process Heating	Industrial	756	2,029	2,955	3,498	567	1,522	2,217	2,623	862	2,124	3,023	3,513	
Process Cooling and Refrigeration	Industrial	603	1,725	2,539	2,708	413	1,173	1,716	1,815	739	1,935	2,750	2,836	
Facility HVAC	Industrial	2,771	7,373	10,163	10,465	1,779	4,760	6,466	6,682	3,201	8,126	11,070	11,236	
Facility Lighting	Industrial	2,467	6,663	9,236	9,305	1,555	4,349	6,095	6,246	2,738	7,062	9,533	9,413	
Other Process/Non-Process Use	Industrial	129	458	747	976	97	343	560	732	156	496	777	999	
Total DSM Portfolio	·	134,000	276,461	351,840	378,007	79,139	175,935	228,547	246,459	236,690	450,846	561,405	600,766	

Long-Term Demand Side Management Potential in the Entergy Louisiana and Entergy New Orleans Service Area, Final Report, June 2015

Cumulative MW Savings Forecast, ENO

			Referen	ce Case			Low	Case		High Case				
		Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	
Program Name	Sector	2019	2024	2029	2034	2019	2024	2029	2034	2019	2024	2029	2034	
Residential Lighting & Appliances	Residential	7.6	9.4	8.2	8.4	4.4	6.0	5.0	5.1	13.1	13.7	12.1	12.3	
Residential Home Audit & Retrofit	Residential	0.7	1.7	2.7	3.5	0.4	1.0	1.5	2.0	2.0	5.5	8.8	11.9	
ENERGY STAR Air Conditioning	Residential	2.1	5.4	7.7	8.4	1.5	4.3	6.5	7.3	2.8	6.7	9.3	9.9	
Home Energy Use Benchmarking	Residential	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	1.0	1.0	1.1	1.1	
Low-Income Weatherization	Residential	0.4	0.8	1.1	1.1	0.4	0.8	1.1	1.1	0.4	0.8	1.1	1.1	
Efficient New Homes	Residential	0.1	0.2	0.3	0.4	0.0	0.1	0.1	0.2	0.1	0.3	0.4	0.5	
Multifamily	Residential	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.1	0.0	0.0	
Water Heating	Residential	0.1	0.2	0.4	0.4	0.0	0.1	0.2	0.2	0.1	0.3	0.5	0.5	
Pool Pump	Residential	0.3	0.7	0.9	0.9	0.1	0.3	0.4	0.5	0.4	0.9	1.1	1.1	
Direct Load Control	Residential	18.7	23.8	24.3	24.9	9.3	11.9	12.2	12.4	18.7	23.8	24.3	24.9	
Dynamic Pricing	Residential	1.5	3.8	4.5	4.7	0.8	1.9	2.3	2.3	1.5	3.8	4.5	4.7	
Solar Hot Water	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Commercial Prescriptive & Custom	Commercial	11.5	30.8	41.3	42.7	6.7	19.6	27.6	29.1	24.7	59.9	77.9	82.3	
Small Business Solutions	Commercial	0.9	2.3	3.3	3.8	0.2	0.7	1.0	1.2	1.1	2.5	3.5	3.9	
Non-Residential Dynamic Pricing	Commercial	2.1	4.4	4.5	4.7	1.1	2.2	2.3	2.3	2.1	4.4	4.5	4.7	
RetroCommissioning	Commercial	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.2	
Commercial New Construction	Commercial	0.2	0.9	1.6	2.1	0.2	0.5	0.7	0.8	0.7	1.5	2.4	2.6	
Data Center	Commercial	0.6	1.2	1.4	1.4	0.5	1.0	1.3	1.3	1.0	1.9	2.3	2.3	
Machine Drive	Industrial	0.1	0.2	0.3	0.4	0.1	0.2	0.2	0.3	0.1	0.2	0.3	0.4	
Process Heating	Industrial	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.3	0.1	0.2	0.3	0.4	
Process Cooling and Refrigeration	Industrial	0.1	0.2	0.3	0.3	0.0	0.1	0.2	0.2	0.1	0.2	0.3	0.3	
Facility HVAC	Industrial	0.3	0.8	1.2	1.2	0.2	0.5	0.7	0.8	0.4	0.9	1.3	1.3	
Facility Lighting	Industrial	0.3	0.8	1.1	1.1	0.2	0.5	0.7	0.8	0.3	0.9	1.2	1.2	
Other Process/Non-Process Use	Industrial	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	
Total DSM Portfolio		48.6	88.8	106.4	111.6	26.7	52.4	64.8	68.6	71.3	129.9	157.6	167.6	

Cumulative Gas Savings Forecast, ENO, 1000s Therms

		Reference Case Low Case							High Case				
		Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20
Program Name	Sector	2019	2024	2029	2034	2019	2024	2029	2034	2019	2024	2029	2034
Residential Lighting & Appliances	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residential Home Audit & Retrofit	Residential	66.9	173.5	258.1	327.4	43.1	120.5	177.0	215.5	175.3	485.8	762.8	1006.9
ENERGY STAR Air Conditioning	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Home Energy Use Benchmarking	Residential	17.2	17.6	18.0	18.4	8.6	8.8	9.0	9.2	34.4	35.2	36.0	36.8
Low-Income Weatherization	Residential	17.7	35.9	50.9	52.0	17.7	35.9	50.9	52.0	17.7	35.9	50.9	52.0
Efficient New Homes	Residential	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	2.1	2.1	2.1	2.1
Multifamily	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Heating	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pool Pump	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Direct Load Control	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Pricing	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar Hot Water	Residential	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Prescriptive & Custom	Commercial	0.1	0.3	0.5	0.7	0.0	0.1	0.2	0.3	0.7	1.7	2.8	3.2
Small Business Solutions	Commercial	9.3	26.6	35.1	35.7	5.3	16.6	23.3	24.1	11.6	29.4	35.6	35.7
Non-Residential Dynamic Pricing	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RetroCommissioning	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial New Construction	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Data Center	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machine Drive	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Process Heating	Industrial	28.4	70.2	107.9	136.5	27.7	68.1	104.3	131.7	31.8	78.4	121.0	152.5
Process Cooling and Refrigeration	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Facility HVAC (Electric)	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Facility Lighting	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Process/Non-Process Use	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Boilers	Industrial	4.7	11.8	17.1	20.5	4.2	9.9	13.5	15.7	8.7	20.6	28.8	32.8
HVAC (Gas)	Industrial	0.7	1.8	2.5	2.8	0.7	1.8	2.3	2.4	1.2	3.1	4.3	4.7
All End Uses	Industrial	11.1	30.4	40.4	38.5	2.4	6.9	9.8	10.3	3.0	8.7	12.5	13.4
Total DSM Portfolio		157.9	369.9	532.3	634.2	110.5	269.3	391.1	462.0	286.5	700.8	1056.7	1340.0

Long-Term Demand Side Management Potential in the Entergy Louisiana and Entergy New Orleans Service Area, Final Report, June 2015

Annual Program Cost Forecast (2014 \$Millions), ENO

			Referen	ice Case			Low	Case		High Case				
		Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	Year 5	Year 10	Year 15	Year 20	
Program Name	Sector	2019	2024	2029	2034	2019	2024	2029	2034	2019	2024	2029	2034	
Residential Lighting & Appliances	Residential	\$1.85	\$0.62	\$0.35	\$0.39	\$1.00	\$0.42	\$0.29	\$0.33	\$5.91	\$1.53	\$1.41	\$1.59	
Residential Home Audit & Retrofit	Residential	\$0.81	\$0.91	\$1.03	\$1.16	\$0.46	\$0.52	\$0.59	\$0.67	\$3.57	\$4.04	\$4.56	\$5.14	
ENERGY STAR Air Conditioning	Residential	\$0.78	\$0.93	\$1.06	\$1.19	\$0.49	\$0.66	\$0.75	\$0.85	\$1.89	\$2.21	\$2.50	\$2.82	
Home Energy Use Benchmarking	Residential	\$0.12	\$0.13	\$0.15	\$0.17	\$0.06	\$0.07	\$0.07	\$0.08	\$0.28	\$0.31	\$0.35	\$0.40	
Low-Income Weatherization	Residential	\$0.44	\$0.50	\$0.57	\$0.64	\$0.44	\$0.50	\$0.57	\$0.64	\$0.44	\$0.50	\$0.57	\$0.64	
Efficient New Homes	Residential	\$0.07	\$0.08	\$0.09	\$0.10	\$0.02	\$0.02	\$0.03	\$0.03	\$0.13	\$0.15	\$0.17	\$0.19	
Multifamily	Residential	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.03	\$0.03	\$0.02	\$0.02	\$0.02	\$0.03	
Water Heating	Residential	\$0.14	\$0.16	\$0.18	\$0.21	\$0.04	\$0.05	\$0.06	\$0.07	\$0.30	\$0.35	\$0.40	\$0.45	
Pool Pump	Residential	\$0.16	\$0.19	\$0.22	\$0.25	\$0.05	\$0.07	\$0.08	\$0.09	\$0.22	\$0.26	\$0.30	\$0.34	
Direct Load Control	Residential	\$0.65	\$0.74	\$0.83	\$0.94	\$0.31	\$0.35	\$0.40	\$0.45	\$0.65	\$0.74	\$0.83	\$0.94	
Dynamic Pricing	Residential	\$0.25	\$0.25	\$0.25	\$0.25	\$0.20	\$0.20	\$0.20	\$0.20	\$0.25	\$0.25	\$0.25	\$0.25	
Solar Hot Water	Residential	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.02	\$0.02	\$0.02	
Commercial Prescriptive & Custom	Commercial	\$5.61	\$7.35	\$8.16	\$9.01	\$3.07	\$4.23	\$4.71	\$5.20	\$17.24	\$19.87	\$21.95	\$24.24	
Small Business Solutions	Commercial	\$0.87	\$1.15	\$1.28	\$1.41	\$0.17	\$0.24	\$0.27	\$0.30	\$0.99	\$1.17	\$1.29	\$1.42	
Non-Residential Dynamic Pricing	Commercial	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	
RetroCommissioning	Commercial	\$0.61	\$0.31	\$0.34	\$0.37	\$0.39	\$0.13	\$0.13	\$0.14	\$0.85	\$0.43	\$0.47	\$0.52	
Commercial New Construction	Commercial	\$0.19	\$0.32	\$0.35	\$0.39	\$0.11	\$0.10	\$0.11	\$0.12	\$0.67	\$0.79	\$0.87	\$0.96	
Data Center	Commercial	\$0.32	\$0.35	\$0.39	\$0.43	\$0.16	\$0.34	\$0.35	\$0.36	\$0.62	\$0.68	\$0.74	\$0.81	
Machine Drive	Industrial	\$0.07	\$0.08	\$0.08	\$0.08	\$0.04	\$0.04	\$0.04	\$0.04	\$0.08	\$0.10	\$0.10	\$0.10	
Process Heating	Industrial	\$0.10	\$0.13	\$0.12	\$0.11	\$0.05	\$0.07	\$0.06	\$0.06	\$0.15	\$0.17	\$0.16	\$0.16	
Process Cooling and Refrigeration	Industrial	\$0.06	\$0.08	\$0.07	\$0.07	\$0.03	\$0.04	\$0.04	\$0.03	\$0.09	\$0.10	\$0.09	\$0.09	
Facility HVAC (Electric)	Industrial	\$0.23	\$0.26	\$0.25	\$0.23	\$0.10	\$0.12	\$0.12	\$0.11	\$0.32	\$0.35	\$0.32	\$0.30	
Facility Lighting	Industrial	\$0.20	\$0.23	\$0.20	\$0.18	\$0.09	\$0.11	\$0.10	\$0.09	\$0.27	\$0.29	\$0.25	\$0.23	
Other Process/Non-Process Use	Industrial	\$0.01	\$0.02	\$0.02	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.02	\$0.02	\$0.02	\$0.02	
Boilers	Industrial	\$0.00	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.01	\$0.01	\$0.01	
HVAC (Gas)	Industrial	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
All End Uses	Industrial	\$0.01	\$0.01	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.01	\$0.01	
Total DSM Portfolio		\$13.80	\$15.06	\$16.24	\$17.86	\$7.56	\$8.59	\$9.25	\$10.14	\$35.24	\$34.57	\$37.89	\$41.89	

DSM Benefit-Cost Ratios - ENO

		Reference Case					Low	Case		High Case				
Program Name	Sector	TRC	PAC	RIM	PCT	TRC	PAC	RIM	PCT	TRC	PAC	RIM	PCT	
Residential Lighting & Appliances	Residential	2.1	3.4	0.6	5.8	2.0	3.8	0.6	5.8	1.5	1.6	0.5	5.9	
Residential Home Audit & Retrofit	Residential	0.9	1.2	0.5	2.2	0.7	1.3	0.5	1.7	0.9	0.9	0.4	3.0	
ENERGY STAR Air Conditioning	Residential	1.3	2.7	0.6	2.3	1.2	3.4	0.6	2.2	1.1	1.4	0.5	2.6	
Home Energy Use Benchmarking	Residential	1.7	1.7	0.5	3.7	1.6	1.6	0.5	3.7	1.4	1.4	0.4	3.7	
Low-Income Weatherization	Residential	0.7	0.7	0.4	2.8	0.7	0.7	0.4	2.8	0.7	0.7	0.4	2.8	
Efficient New Homes	Residential	0.8	1.6	0.5	1.8	0.9	2.3	0.6	1.7	0.7	1.0	0.4	2.0	
Multifamily	Residential	1.6	1.8	0.4	5.6	1.2	1.4	0.4	5.6	1.5	1.8	0.4	5.6	
Water Heating	Residential	1.3	1.7	0.4	3.8	1.3	2.4	0.5	3.4	1.1	1.1	0.4	4.0	
Pool Pump	Residential	1.4	1.8	0.5	3.3	1.3	2.5	0.6	2.9	1.3	1.5	0.5	3.3	
Direct Load Control	Residential	4.1	4.1	3.8	1.0	4.3	4.3	4.0	1.0	4.1	4.1	3.8	1.0	
Dynamic Pricing	Residential	1.9	1.9	1.8	0.0	1.2	1.2	1.1	0.0	1.9	1.9	1.8	0.0	
Solar Hot Water	Residential	0.5	1.3	0.4	1.2	0.5	1.3	0.4	1.2	0.4	0.4	0.2	1.9	
Commercial Prescriptive & Custom	Commercial	1.5	2.1	0.6	3.4	1.5	2.4	0.6	3.7	1.3	1.5	0.5	2.9	
Small Business Solutions	Commercial	1.2	1.3	0.5	3.3	1.3	2.0	0.5	3.2	1.3	1.3	0.5	3.4	
Non-Residential Dynamic Pricing	Commercial	2.0	2.0	1.8	0.0	1.0	1.0	0.9	0.0	2.0	2.0	1.8	0.0	
RetroCommissioning	Commercial	1.3	1.6	0.4	7.8	1.1	1.3	0.4	7.6	1.6	1.8	0.4	8.0	
Commercial New Construction	Commercial	2.0	4.1	0.6	4.2	2.0	4.6	0.6	4.1	1.7	2.1	0.5	4.6	
Data Center	Commercial	1.6	2.3	0.5	4.8	1.6	2.8	0.5	4.6	1.6	2.0	0.5	5.0	
Machine Drive	Industrial	3.9	2.7	0.7	83.1	4.8	3.8	0.7	79.3	3.2	2.2	0.6	85.1	
Process Heating	Industrial	0.0	3.0	0.7	0.0	0.0	4.2	0.8	0.0	0.0	2.4	0.7	0.0	
Process Cooling and Refrigeration	Industrial	3.0	2.5	0.7	20.1	3.6	3.4	0.7	22.3	2.5	2.0	0.6	19.2	
Facility HVAC (Electric)	Industrial	2.9	2.9	0.7	11.3	3.5	4.0	0.7	12.4	2.5	2.3	0.7	10.7	
Facility Lighting	Industrial	3.5	3.0	0.7	19.0	4.3	4.3	0.8	20.4	2.9	2.4	0.7	18.7	
Other Process/Non-Process Use	Industrial	5.9	4.2	0.8	92.7	7.2	5.9	0.8	90.0	4.8	3.3	0.7	94.1	
Boilers	Industrial	2.3	2.1	1.0	6.8	3.8	3.8	1.2	7.9	1.6	1.4	0.8	6.0	
HVAC (Gas)	Industrial	2.6	2.0	1.0	10.7	5.0	3.9	1.2	21.0	1.8	1.4	0.8	8.3	
All End Uses	Industrial	2.2	1.8	0.9	8.9	3.9	3.5	1.2	10.0	1.6	1.2	0.7	9.7	
Total DSM Portfolio		1.5	2.1	0.6	3.3	1.5	2.3	0.6	3.3	1.3	1.5	0.5	3.1	