Electric Product Detailed Technical Assumptions												
Measure Description		High Efficiency Product Assumptions			Baseline Product Assumptions			Economic Assumptions				
Electric Measure Group	Electric Measure Description	Efficient Product Description / Rating	Efficient Product Consumption (watts)	Efficient Hours of Operation (hrs/yr)	Baseline Product Description / Rating	Baseline Product Consumption (watts)	Baseline Hours of Operation (hrs/yr)	Measure Lifetime (years)	Rebate Amount ($)	Average Baseline Product Cost ($)	Incremental Cost of Efficient Product ($)	Assumed Energy Cost ($/kWh)
TOTAL												
Refrigerator Replacement	**Refrigerator Replacements**	Energy Star standard refrigerator	66	5,592	Existing unit vintage from 7-18 years old	103	5,592	18.00	$630	$0	$630	0.12075
LI SFW Wall Insulation	**Wall Insulation Heating Effects from R-0 to R11 in Electric Heated Home**	R-11 insulation in wall cavity with average area 807 sq. ft.	2,251	1,159	Assume No Insulation in Wall Cavity	6,682	1,159	20.00	$850	$0	$803	0.12075
LI SFW - Ceiling	**Attic insulation in Electrically Heated Home**	Add R-41 to make R 54 total in attic	568	1,159	Estimated existing level = R 11	2,368	1,159	20.00	$850	$0	$1,232	0.12075
LI SFW Air Sealing & Weather-stripping	**Air Sealing & Weather-stripping T2 In Electric Heated Home**	Average Home with Proposed CFM50 = 1474	3,813	1,159	Average Home with Baseline CFM50 = 2022	5,243	1,159	10.00	$300	$0	$686	0.12075
LI SFW Crawlspace Wall Insulation	**Crawl Space wall insulation R-0 to R-19**	R-19 insulation in crawl space wall cavity with average area 218 sq. ft.	662	1,159	No Insulation in crawl space wall	3,055	1,159	20.00	$500	$0	$400	0.12075
Storm Windows	**Storm Windows added to single pane windows in electrically heated home**	Addition of Storm windows	10,771	1,023	Single Pane Windows	15,260	1,023	20.00	$900	$0	$900	0.12075
Showerhead	**Provide new 1.5 gpm showerhead to replace existing 2.5 gpm showerhead in electric DHW heater**	1.5 GPM Showerhead	81	8,760	2.5 GPM Showerhead	136	8,760	10.00	$10	$0	$3	0.12075
Aerators - Kitchen	**Provide Energy Efficient Kitchen Aerator - 1.5 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater**	1.5 GPM Kitchen Faucet Aerator	14	8,760	2.2 GPM Kitchen Faucet Aerator	21	8,760	10.00	$5	$0	$2	0.12075
Aerators - Bathroom Primary	**Provide Energy Efficient Bath Faucet Aerator - 1.0 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater**	1.0 GPM Bathroom Faucet Aerator	6	8,760	2.2 GPM Bathroom Faucet Aerator	13	8,760	10.00	$4	$0	$1	0.12075
EC Motor Furnace Fan	**EC Fan Motor on new Residential Furnace no AC**	ECM Furnace Fan	364	3,356	Non-ECM Fan	569	3,356	18.00	$200	$0	$235	0.12075
A-Style LEDs	**LED A-Style Lamps - 2019**	High efficiency LED A19 lamp	9.8	986	Average EISA Standard halogen A-Style Bulb	45	986	5.00	$5	$0	$1.74	0.12075
BR-Style LEDs	**LED BR-Style Lamps - 2019**	LED Bulb Purchase - Specialty	10.9	986	Incandescent Equivalent (Exempt/Post-EISA)	77	986	13.93	$8	$0	$1.89	0.12075
~~**A-Style LEDs**~~	~~**LED A-Style Lamps - 2020**~~	~~LED Bulb Purchase - A-Line~~	~~9.8~~	~~986~~	~~Incandescent Equivalent (Post-EISA)~~	~~45~~	~~986~~	~~5.00~~	~~$2~~	~~$1~~	~~$2~~	~~0.12075~~
~~**BR-Style LEDs**~~	~~**LED BR-Style Lamps - 2020**~~	~~LED Bulb Purchase - Specialty~~	~~10.9~~	~~986~~	~~Incandescent Equivalent (Exempt/Post-EISA)~~	~~77~~	~~986~~	~~13.93~~	~~$2~~	~~$0~~	~~$2~~	~~0.12075~~
A-Style LEDs	**LED A-Style Lamps (Self-Install)**	LED Bulb Self-Install - A-Line	9.0	986	Incandescent Equivalent	53	986	20.00	$1.74	$0.93	$1.74	0.12075
A-Style LEDs	**LED A-Style Lamps**	LED Bulb Purchase - A-Line	9.0	986	Incandescent Equivalent	53	986	20.00	$5.00	$0.93	$1.74	0.12075
Specialty LEDs	**LED Specialty Lamps**	LED Bulb Purchase - Specialty	13.0	986	Incandescent Equivalent	70	986	4.56	$8.00	$2.33	$1.89	0.12075
A-Style LEDs	**LED A-Style Lamps - CFL Baseline**	LED Bulb Purchase - A-Line	9.0	986	Compact Fluorescent Lamp	15	986	9.81	$5.00	$1.99	$0.68	0.12075
Specialty LEDs	**LED Specialty Lamps - CFL Baseline**	LED Bulb Purchase - Specialty	13.0	986	Compact Fluorescent Lamp	17	986	9.81	$8.00	$3.57	$1.51	0.12075
Water Heater Blanket	**Water Heater Blanket - Electric Water Heater**	Add commercial Insulation wrap R8 around Water Heater Tank	40	8,760	No External Insulation on water heater	69	8,760	6.50	$75	$0	$12	0.12075
Evap Cooling (Denver/Front Range)	**Standard evaporative cooler - replacement**	3 Ton Evaporative Cooler	380	549	3T SEER 13 EER 11.18 w/o Quality Installation	3,300	549	15.00	$950	$3,811	-$2,943	0.12075
Evap Cooling (Grand Junction/Western Slope)	**Standard evaporative cooler - replacement**	3 Ton Evaporative Cooler	380	578	3T SEER 13 EER 11.18 w/o Quality Installation	3,300	578	15.00	$950	$3,811	-$2,943	0.12075
Evap Cooling (Alamosa/Mountain Areas)	**Standard evaporative cooler - replacement**	3 Ton Evaporative Cooler	380	389	3T SEER 13 EER 11.18 w/o Quality Installation	3,300	389	15.00	$950	$3,811	-$2,943	0.12075
Energy Star Smart Thermostat	**Install Energy Star certified smart thermostat - ELECTRIC ONLY**	Average Single Family House with EnergyStar Smart Thermostat	2,621	573	Average Single Family House with Standard Thermostat	2,912	573	10.00	$100	$0	$100	0.12075

	Stipulated Output								Economic Assumptions		Technical Assumption
Electric Measure Description	Rebate as a % of Incremental Cost (%)	Incremt'l Cost Payback Period w/o Rebate (yrs)	Incremt'l Cost Payback Period w/ Rebate (yrs)	Annual Customer kWh Savings (kWh/yr)	Rebated Cost / Cust kWh Saved ($/kWh)	Rebated Lifetime cost /Cust KWh Saved ($/kWh)	Customer kW Savings (kW)	Generator Peak kW Savings (kW)	Non-Energy O&M Savings ($)	Energy O&M Savings ($)	Coincidence Factor (%)
TOTAL											
Refrigerator Replacements	100%	25.63	0	204	$3.095	$0.172	0.04	0.03	$0.00	$0.00	64%
Wall Insulation Heating Effects from R-0 to R11 in Electric Heated Home	106%	1.30	(0.08)	5,135	$0.166	$0.008	4.43	0.00	$0.00	$0.00	0%
Attic insulation in Electrically Heated Home	69%	4.89	1.52	2,087	$0.407	$0.020	1.80	0.00	$0.00	$0.00	0%
Air Sealing & Weather-stripping T2 In Electric Heated Home	44%	3.43	1.93	1,658	$0.181	$0.018	1.43	0.00	$0.00	$0.00	0%
Crawl Space wall insulation R-0 to R-19	125%	1.19	(0.30)	2,773	$0.180	$0.009	2.39	0.00	$0.00	$0.00	0%
Storm Windows added to single pane windows in electrically heated home	100%	1.62	-	4,590	$0.196	$0.010	4.49	0.00	$0.00	$0.00	0%
Provide new 1.5 gpm showerhead to replace existing 2.5 gpm showerhead in electric DHW heater	299%	0.04	(0.08)	475	$0.021	$0.002	0.05	0.04	$25.52	$0.00	64%
Provide Energy Efficient Kitchen Aerator - 1.5 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater	296%	0.17	(0.33)	59	$0.085	$0.008	0.01	0.01	$2.89	$0.00	124%
Provide Energy Efficient Bath Faucet Aerator - 1.0 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater	741%	0.05	(0.33)	61	$0.066	$0.007	0.01	0.01	$3.27	$0.00	124%
EC Fan Motor on new Residential Furnace no AC	85%	3.30	0.49	688	$0.291	$0.016	0.21	0.07	-$11.76	$0.00	30%
LED A-Style Lamps - 2019	288%	0.41	(0.77)	35	$0.143	$0.029	0.04	0.00	$0.00	$0.00	13%
LED BR-Style Lamps - 2019	422%	0.24	(0.78)	65	$0.123	$0.009	0.07	0.01	$0.00	$0.00	13%
~~LED A-Style Lamps - 2020~~	~~100%~~	~~0.41~~	~~-~~	~~35~~	~~$0.050~~	~~$0.010~~	~~0.04~~	~~0.00~~	~~$0.00~~	~~$0.00~~	~~13%~~
~~LED BR-Style Lamps - 2020~~	~~100%~~	~~0.24~~	~~-~~	~~65~~	~~$0.029~~	~~$0.002~~	~~0.07~~	~~0.01~~	~~$0.00~~	~~$0.00~~	~~13%~~
LED A-Style Lamps (Self-Install)	100%	0.33	-	43	$0.040	$0.002	0.04	0.01	$0.00	$0.00	13%
LED A-Style Lamps	288%	0.33	(0.62)	43	$0.115	$0.006	0.04	0.01	$0.00	$0.00	13%
LED Specialty Lamps	422%	0.28	(0.90)	56	$0.142	$0.031	0.06	0.01	$0.00	$0.00	13%
LED A-Style Lamps - CFL Baseline	735%	1.03	(6.55)	5	$0.915	$0.093	0.01	0.00	$0.00	$0.00	13%
LED Specialty Lamps - CFL Baseline	532%	3.08	(13.28)	4	$1.975	$0.201	0.00	0.00	$0.00	$0.00	13%
Water Heater Blanket - Electric Water Heater	626%	0.39	(2.05)	254	$0.295	$0.045	0.03	0.03	$0.00	$0.00	100%
Standard evaporative cooler - replacement (Denver/Front Range)	-32%	(16.94)	(22.40)	1,603	$0.593	$0.040	2.92	2.25	-$19.80	$0.00	70%
Standard evaporative cooler - replacement (Grand Junction/Western Slope)	-32%	(16.00)	(21.16)	1,688	$0.563	$0.038	2.92	2.25	-$19.80	$0.00	70%
Standard evaporative cooler - replacement (Alamosa/Mountain Areas)	-32%	(25.10)	(33.20)	1,135	$0.837	$0.056	2.92	2.25	-$19.80	$0.00	70%
Install Energy Star certified smart thermostat - ELECTRIC ONLY	100%	4.96	-	167	$0.599	$0.060	0.29	0.24	$0.00	$0.00	76%

	Program Forecast Inputs				Stipulated Forecast Inputs			Program Forecast Outputs								
	2019		2020					2019				2020				
Electric Measure Description	2019 Participants (-)	2019 Units (-)	2020 Participants (-)	2020 Units (-)	NTG (%)	Installation Rate (%)	Realization Rate (%)	2019 NET Gen kW (kW)	2019 NET Gen kWh (kWh)	2019 Rebate Budget ($)	2019 Incremental Costs ($)	2020 NET Gen kW (kW)	2020 NET Gen kWh (kWh)	2020 Rebate Budget ($)	2020 Incremental Costs ($)	Measure Load Shape
TOTAL								226	1,778,297	$995,320	$859,715	263	2,060,045	$978,452	$856,043	
Refrigerator Replacements	55	1,200	53	1,200	100%	100%	100%	31	260,948	$756,000	$756,000	31	260,948	$756,000	$756,000	CO-RES-SFRF1
Wall Insulation Heating Effects from R-0 to R11 in Electric Heated Home	0	2	0	2	100%	100%	100%	0	10,970	$1,700	$1,606	0	10,970	$1,700	$1,606	CO-Res_Heating_Elec
Attic insulation in Electrically Heated Home	1	21	1	28	100%	100%	100%	0	46,813	$17,850	$25,872	0	62,418	$23,800	$34,496	CO-Res_Heating_Elec
Air Sealing & Weather-stripping T2 In Electric Heated Home	2	46	2	46	100%	100%	100%	0	81,465	$13,800	$31,556	0	81,465	$13,800	$31,556	CO-Res_Heating_Elec
Crawl Space wall insulation R-0 to R-19	0	9	0	9	100%	100%	100%	0	26,660	$4,500	$3,600	0	26,660	$4,500	$3,600	CO-Res_Cooling_DX
Storm Windows added to single pane windows in electrically heated home	0	6	0	6	100%	100%	100%	0	29,419	$5,400	$5,400	0	29,419	$5,400	$5,400	CO-RES-FLAT
Provide new 1.5 gpm showerhead to replace existing 2.5 gpm showerhead in electric DHW heater	1	26	1	26	100%	100%	100%	1	13,191	$260	$87	1	13,191	$260	$87	CO-RES-SFWHT
Provide Energy Efficient Kitchen Aerator - 1.5 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater	1	25	1	25	100%	100%	100%	0	1,571	$125	$42	0	1,571	$125	$42	CO-RES-SFWHT
Provide Energy Efficient Bath Faucet Aerator - 1.0 GPM to replace existing 2.2 gpm aerator in home with electric DHW heater	1	20	1	20	100%	100%	100%	0	1,300	$80	$11	0	1,300	$80	$11	CO-RES-SFWHT
EC Fan Motor on new Residential Furnace no AC	3	60	0	0	116%	100%	100%	5	51,148	$12,000	$14,100	0	0	$0	$0	CO-RES-SFRF1
LED A-Style Lamps - 2019	1,412	31,000	0	0	100%	100%	100%	153	1,161,459	$155,000	$53,841	0	0	$0	$0	CO-RES-SFLIT
LED BR-Style Lamps - 2019	11	250	0	0	100%	100%	100%	2	17,377	$2,000	$473	0	0	$0	$0	CO-RES-SFLIT
~~LED A-Style Lamps - 2020~~	~~0~~	~~1~~	~~0~~	~~1~~	~~100%~~	~~100%~~	~~100%~~	~~0~~	~~0~~	~~$0~~	~~$0~~	~~0~~	~~0~~	~~$0~~	~~$0~~	~~CO-RES-SFLIT~~
~~LED BR-Style Lamps - 2020~~	~~1~~	~~25~~	~~1~~	~~25~~	~~100%~~	~~100%~~	~~100%~~	~~0~~	~~0~~	~~$0~~	~~$0~~	~~0~~	~~0~~	~~$0~~	~~$0~~	~~CO-RES-SFLIT~~
LED A-Style Lamps (Self-Install)	0	0	221	5,000	100%	99%	100%	0	0	$0	$0	30	229,385	$8,684	$8,684	CO-RES-SFLIT
LED A-Style Lamps	0	1	1,192	27,000	100%	100%	100%	0	46	$5	$2	165	1,251,188	$135,000	$46,894	CO-RES-SFLIT
LED Specialty Lamps	1	25	12	275	100%	100%	100%	0	1,502	$200	$47	2	16,521	$2,200	$521	CO-RES-SFLIT
LED A-Style Lamps - CFL Baseline	0	0	4	99	100%	100%	100%	0	0	$0	$0	0	578	$495	$67	CO-RES-SFLIT
LED Specialty Lamps - CFL Baseline	0	0	0	1	100%	100%	100%	0	0	$0	$0	0	4	$8	$2	CO-RES-SFLIT
Water Heater Blanket - Electric Water Heater	9	200	9	200	100%	100%	100%	6	54,289	$15,000	$2,396	6	54,289	$15,000	$2,396	CO-RES-SFWHT
Standard evaporative cooler - replacement (Denver/Front Range)	0	10	0	10	100%	100%	100%	22	17,123	$9,500	-$29,433	22	17,123	$9,500	-$29,433	CO-Res_Cooling_DX
Standard evaporative cooler - replacement (Grand Junction/Western Slope)	0	1	0	1	100%	100%	100%	2	1,803	$950	-$2,943	2	1,803	$950	-$2,943	CO-Res_Cooling_DX
Standard evaporative cooler - replacement (Alamosa/Mountain Areas)	0	1	0	1	100%	100%	100%	2	1,213	$950	-$2,943	2	1,213	$950	-$2,943	CO-Res_Cooling_DX
Install Energy Star certified smart thermostat - ELECTRIC ONLY	0	0	0	0	100%	100%	100%	0	0	$0	$0	0	0	$0	$0	CO-Res_Cooling_DX