



PACIFICORP DEMAND-SIDE RESOURCE POTENTIAL ASSESSMENT FOR 2017-2036

*VOLUME 4:
CLASS 2 DSM ANALYSIS
APPENDIX*

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PacifiCorp

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Applied Energy Group, Inc.
500 Ygnacio Valley Road, Suite 250
Walnut Creek, CA 94596
510.982.3525

AppliedEnergyGroup.com

This work was performed by

Applied Energy Group, Inc.
500 Ygnacio Valley Blvd., Suite 250
Walnut Creek, CA 94596

Project Director: I. Rohmund

Project Manager: K. Kolnowski

Project Team: D. Costenaro

K. Walter

S. Yoshida

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MARKET CHARACTERIZATION AND ENERGY MARKET PROFILES

In this section, we describe how customers in the PacifiCorp service territory use electricity in the base year of the study, 2014. It begins with a high-level summary of energy use by state and sector and then provides more detail on each sector.

BASE-YEAR ENERGY USE SUMMARY

Total electricity use for the residential, commercial, industrial, irrigation, and street lighting sectors for PacifiCorp in 2014, excluding sales to special contract customers from the industrial sectors, is 40,955 GWh. A tabular breakdown of consumption among state territories and sectors is given below in Table A-1. This comprises the energy use control totals to which all modeling activities are calibrated in the base year. PacifiCorp's Oregon service territory is not considered in this study, as the statewide energy efficiency planning is conducted by the Energy Trust of Oregon.

Table A-1 *PacifiCorp State and Sector Control Totals in Base Year 2014 (MWh)*

State	Residential	Commercial	Industrial	Irrigation	Street Lighting	Total
California	413,378	265,367	61,244	116,314	2,586	858,889
Washington	1,777,720	1,652,953	868,675	182,029	11,659	4,493,035
Idaho	771,366	506,690	316,885	694,937	2,987	2,292,865
Utah	7,394,843	9,021,509	6,324,947	263,314	84,210	23,088,823
Wyoming	1,156,838	1,642,203	7,384,011	24,685	13,628	10,221,365
Total	11,514,144	13,088,721	14,955,762	1,281,280	115,069	40,954,976

MARKET PROFILE FRAMEWORK

As described in the Analysis Approach in Volume 2, Chapter 2, the market for each state, sector, and market segment is characterized by a market profile that allocates energy consumption to the available end-use and technology categories. These market profiles are calibrated to PacifiCorp equipment saturation surveys, technology and measure databases, and finally to the energy control totals listed above. A list of the end uses and technologies for each sector is provided below, and each detailed market profile is available in the section that follows.

RESIDENTIAL SECTOR

A list of the end uses and technologies assessed in the residential sector is given in Table A-2. The unique market profile for each market segment in each state is available in the section that follows.

Table A-2 End Uses and Technologies in Market Profile for the Residential Sector

End Use	Technology
Cooling	Central AC
Cooling	Room AC
Cooling	Evaporative AC
Cooling	Air-Source Heat Pump
Cooling	Geothermal Heat Pump
Heating	Electric Furnace
Heating	Electric Room Heat
Heating	Air-Source Heat Pump
Heating	Geothermal Heat Pump
Water Heating	Water Heater (<= 55 Gal)
Water Heating	Water Heater (> 55 Gal)
Interior Lighting	General Service Screw-In
Interior Lighting	Linear Lighting
Interior Lighting	Exempted Screw-In
Exterior Lighting	Screw-in
Appliances	Refrigerator
Appliances	Second Refrigerator
Appliances	Freezer
Appliances	Clothes Washer
Appliances	Clothes Dryer
Appliances	Dishwasher
Appliances	Stove/Oven
Appliances	Microwave
Electronics	Personal Computers
Electronics	Monitor
Electronics	Laptops
Electronics	Printer/Fax/Copier
Electronics	TVs
Electronics	Set-top Boxes/DVRs
Electronics	Devices and Gadgets
Miscellaneous	Electric Vehicles
Miscellaneous	Pool Heater
Miscellaneous	Pool Pump
Miscellaneous	Hot Tub/Spa
Miscellaneous	Furnace Fan
Miscellaneous	Well Pump
Miscellaneous	Miscellaneous

COMMERCIAL SECTOR

A list of the end uses and technologies for the commercial sector analysis is given in Table A-3. The unique market profile for each market segment in each state is available in the section that follows.

Table A-3 *End Uses and Technologies in Market Profile for the Commercial Sector*

End Use	Technology
Cooling	Air-Cooled Chiller
Cooling	Water-Cooled Chiller
Cooling	RTU
Cooling	Room AC
Cooling	Evaporative AC
Cooling	Air-Source Heat Pump
Cooling	Geothermal Heat Pump
Heating	Electric Furnace
Heating	Electric Room Heat
Heating	Air-Source Heat Pump
Heating	Geothermal Heat Pump
Ventilation	Ventilation
Water Heating	Water Heater
Interior Lighting	Screw-in
Interior Lighting	Linear Lighting
Interior Lighting	High-Bay Fixtures
Exterior Lighting	Screw-in
Exterior Lighting	Linear Lighting
Exterior Lighting	Area Lighting
Refrigeration	Walk-in Refrigerator/Freezer
Refrigeration	Reach-in Refrigerator/Freezer
Refrigeration	Glass Door Display
Refrigeration	Open Display Case
Refrigeration	Icemaker
Refrigeration	Vending Machine
Food Preparation	Oven
Food Preparation	Fryer
Food Preparation	Dishwasher
Food Preparation	Hot Food Container
Food Preparation	Steamer
Office Equipment	Desktop Computer
Office Equipment	Laptop
Office Equipment	Monitor
Office Equipment	Server
Office Equipment	Printer/Copier/Fax
Office Equipment	POS Terminal
Miscellaneous	Non-HVAC Motors
Miscellaneous	Pool Pump
Miscellaneous	Pool Heater
Miscellaneous	Miscellaneous

INDUSTRIAL SECTOR

A list of the end uses and technologies for the industrial sector analysis is given in Table A-4. The unique market profile for each market segment in each state is available in the section that follows.

Table A-4 End Uses and Technologies in Market Profile for the Industrial Sector

End Use	Technology
Cooling	Air-Cooled Chiller
Cooling	Water-Cooled Chiller
Cooling	RTU
Cooling	Air-Source Heat Pump
Cooling	Geothermal Heat Pump
Heating	Electric Furnace
Heating	Electric Room Heat
Heating	Air-Source Heat Pump
Heating	Geothermal Heat Pump
Ventilation	Ventilation
Interior Lighting	Screw-in
Interior Lighting	High-Bay Fixtures
Interior Lighting	Linear Lighting
Exterior Lighting	Screw-in
Exterior Lighting	Area Lighting
Exterior Lighting	Linear Lighting
Motors	Pumps
Motors	Fans & Blowers
Motors	Compressed Air
Motors	Material Handling
Motors	Other Motors
Process	Process Heating
Process	Process Cooling
Process	Process Refrigeration
Process	Process Electrochemical
Process	Process Other
Miscellaneous	Miscellaneous

IRRIGATION SECTOR

A list of the end uses and technologies for the irrigation sector analysis is given in Table A-5. The unique market profile for each market segment in each state is available in the section that follows.

Table A-5 End Uses and Technologies in Market Profile for the Irrigation Sector

End Use	Technology
Motors	Pumps (< 100 HP)
Motors	Pumps (100 HP+)
Motors	Other Motors

STREET LIGHTING SECTOR

A list of the end uses and technologies for the industrial sector analysis is given in Table A-6. The unique market profile for each market segment in each state is available in the section that follows.

Table A-6 End Uses and Technologies in Market Profile for the Street Lighting Sector

End Use	Technology
Street Lighting	100 Watt Fixture
Street Lighting	150 Watt Fixture
Street Lighting	250 Watt Fixture
Street Lighting	400 Watt Fixture
Street Lighting	1000 Watt Fixture

DETAILED MARKET PROFILES BY SECTOR, STATE, AND SEGMENT

Market profiles describe estimated electricity use by sector, segment, end use and technology in the base year of the study (2014). A market profile includes the following elements:

- **Market size** is a representation of the number of customers in the segment. For the residential sector, it is number of households. In the commercial sector, it is floor space measured in square feet. For the industrial sector, it is number of employees. For irrigation, it is number of service points. For street lighting, it is number of fixtures.
- **Saturations** define the fraction of buildings with the various technologies. (e.g., homes with electric space heating)
- **UEC (unit energy consumption) or EUI (energy-use index)** describes the average energy consumed in 2014 by a specific technology in buildings that have the technology. UECs are expressed in kWh/household for the residential sector, and EUIs are expressed in kWh/square foot or kWh/employee for the commercial and industrial sectors, respectively.
- **Intensity** for the residential sector represents the average energy use for the technology across all homes in 2014 and is computed as the product of the saturation and the UEC. For the commercial and industrial sectors, intensity, computed as the product of the saturation and the EUI, represents the average use for the technology per square foot or per employees in 2014.
- **Usage** is the estimated 2014 energy use by a technology/end use in the segment. It is the product of the market size and intensity and is quantified in MWh for electricity.

The tables below present the following market profiles for each state:

- Residential market profiles
- Commercial market profiles
- Industrial market profiles
- Irrigation market profiles
- Street Lighting market profiles

These market profiles are given in the base year for average, existing customers as well as new construction customers that will be built in years beyond the base year. This means there is not yet any usage or consumption associated with new construction market profiles shown below. Please note that this information is provided at the meter level in order for UEC and consumption values to be more easily comparable. To assess measure potential, data was converted to usage at the generator using the line loss factors in Table 3-7 of Volume 2 of this report.

RESIDENTIAL MARKET PROFILES

Table A-7 California Single Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	8.9%	1,686	151	3,823
Cooling	Room AC	16.8%	538	91	2,301
Cooling	Air-Source Heat Pump	14.5%	1,737	252	6,400
Cooling	Geothermal Heat Pump	0.4%	1,529	6	140
Cooling	Evaporative AC	7.3%	647	48	1,207
Space Heating	Electric Room Heat	12.2%	7,131	870	22,084
Space Heating	Electric Furnace	5.9%	8,041	477	12,119
Space Heating	Air-Source Heat Pump	14.5%	3,601	523	13,272
Space Heating	Geothermal Heat Pump	0.4%	2,331	8	214
Water Heating	Water Heater <= 55 Gal	72.2%	3,042	2,197	55,794
Water Heating	Water Heater > 55 Gal	9.6%	3,216	308	7,816
Interior Lighting	General Service Screw-in	100.0%	640	640	16,245
Interior Lighting	Linear Lighting	100.0%	182	182	4,626
Interior Lighting	Exempted Screw-In	100.0%	244	244	6,184
Exterior Lighting	Screw-in	100.0%	341	341	8,661
Appliances	Clothes Washer	96.1%	86	83	2,104
Appliances	Clothes Dryer	91.0%	760	692	17,561
Appliances	Dishwasher	73.9%	120	89	2,256
Appliances	Refrigerator	100.0%	599	599	15,216
Appliances	Freezer	44.9%	511	230	5,833
Appliances	Second Refrigerator	26.5%	840	223	5,649
Appliances	Stove/Oven	82.5%	443	365	9,275
Appliances	Microwave	93.0%	129	120	3,040
Electronics	Personal Computers	79.8%	184	147	3,726
Electronics	Monitor	96.0%	78	75	1,892
Electronics	Laptops	120.1%	49	59	1,486
Electronics	TVs	236.2%	220	519	13,190
Electronics	Printer/Fax/Copier	117.2%	59	69	1,755
Electronics	Set-top Boxes/DVRs	266.3%	112	299	7,599
Electronics	Devices and Gadgets	100.0%	108	108	2,735
Miscellaneous	Electric Vehicles	0.0%	4,324	1	29
Miscellaneous	Pool Pump	3.6%	1,500	54	1,383
Miscellaneous	Pool Heater	0.1%	4,981	7	168
Miscellaneous	Hot Tub / Spa	8.5%	950	81	2,058
Miscellaneous	Furnace Fan	13.8%	184	25	645
Miscellaneous	Well Pump	34.1%	561	191	4,862
Miscellaneous	Miscellaneous	100.0%	404	404	10,246
Total				10,776	273,594

Table A-8 California Single Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	12.5%	1,683.80	210.2
Cooling	Room AC	3.8%	471.76	18.1
Cooling	Air-Source Heat Pump	16.8%	1,735.15	291.6
Cooling	Geothermal Heat Pump	0.3%	1,528.50	4.0
Cooling	Evaporative AC	0.0%	647.00	-
Heating	Electric Room Heat	2.6%	7,130.50	187.7
Heating	Electric Furnace	7.6%	8,041.10	607.3
Heating	Air-Source Heat Pump	16.8%	3,598.40	604.5
Heating	Geothermal Heat Pump	0.3%	2,304.96	6.3
Water Heating	Water Heater (<= 55 Gal)	43.6%	3,028.30	1,321.7
Water Heating	Water Heater (> 55 Gal)	8.4%	3,216.05	269.1
Interior Lighting	General Service Screw-In	100.0%	875.03	875.0
Interior Lighting	Linear Lighting	100.0%	217.17	217.2
Interior Lighting	Exempted Screw-In	100.0%	423.58	423.6
Exterior Lighting	Screw-in	100.0%	493.24	493.2
Appliances	Clothes Washer	97.1%	77.65	75.4
Appliances	Clothes Dryer	89.8%	721.87	648.1
Appliances	Dishwasher	88.7%	114.19	101.3
Appliances	Refrigerator	100.0%	539.36	539.4
Appliances	Freezer	34.8%	460.17	160.3
Appliances	Second Refrigerator	20.0%	756.00	150.9
Appliances	Stove/Oven	68.5%	420.71	288.4
Appliances	Microwave	93.0%	122.32	113.7
Electronics	Personal Computers	65.2%	183.95	120.0
Electronics	Monitor	77.6%	77.67	60.3
Electronics	Laptops	198.8%	48.71	96.8
Electronics	TVs	295.2%	219.96	649.4
Electronics	Printer/Fax/Copier	172.6%	58.97	101.8
Electronics	Set-top Boxes/DVRs	332.9%	112.37	374.1
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.1
Miscellaneous	Pool Pump	3.6%	1,425.00	51.7
Miscellaneous	Pool Heater	0.1%	4,731.95	6.3
Miscellaneous	Hot Tub/Spa	8.7%	902.50	78.3
Miscellaneous	Furnace Fan	13.8%	165.85	22.9
Miscellaneous	Well Pump	54.4%	561.00	305.2
Miscellaneous	Miscellaneous	100.0%	403.55	403.5
Total				9,986

Table A-9 California Multi Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	7.1%	957	68	321
Cooling	Room AC	21.0%	781	164	774
Cooling	Air-Source Heat Pump	3.2%	957	31	146
Cooling	Geothermal Heat Pump	0.0%	842	0	0
Cooling	Evaporative AC	0.0%	267	0	0
Space Heating	Electric Room Heat	54.3%	1,743	946	4,461
Space Heating	Electric Furnace	16.4%	1,966	322	1,520
Space Heating	Air-Source Heat Pump	3.2%	1,007	33	153
Space Heating	Geothermal Heat Pump	0.0%	652	0	0
Water Heating	Water Heater <= 55 Gal	74.4%	2,534	1,884	8,884
Water Heating	Water Heater > 55 Gal	5.8%	2,679	156	737
Interior Lighting	General Service Screw-in	100.0%	398	398	1,878
Interior Lighting	Linear Lighting	100.0%	68	68	320
Interior Lighting	Exempted Screw-In	100.0%	23	23	109
Exterior Lighting	Screw-in	100.0%	124	124	582
Appliances	Clothes Washer	40.5%	85	34	162
Appliances	Clothes Dryer	44.4%	601	267	1,260
Appliances	Dishwasher	78.4%	120	94	444
Appliances	Refrigerator	100.0%	599	599	2,826
Appliances	Freezer	16.1%	511	82	387
Appliances	Second Refrigerator	7.5%	840	63	299
Appliances	Stove/Oven	87.8%	357	313	1,477
Appliances	Microwave	90.5%	129	117	550
Electronics	Personal Computers	45.5%	184	84	395
Electronics	Monitor	54.8%	78	43	201
Electronics	Laptops	65.8%	49	32	151
Electronics	TVs	167.3%	269	450	2,121
Electronics	Printer/Fax/Copier	60.6%	59	36	169
Electronics	Set-top Boxes/DVRs	182.4%	112	205	966
Electronics	Devices and Gadgets	100.0%	108	108	508
Miscellaneous	Electric Vehicles	0.0%	4,324	0	0
Miscellaneous	Pool Pump	0.0%	1,500	0	0
Miscellaneous	Pool Heater	0.0%	4,981	0	0
Miscellaneous	Hot Tub / Spa	0.0%	950	0	0
Miscellaneous	Furnace Fan	17.5%	65	11	54
Miscellaneous	Well Pump	0.0%	556	0	0
Miscellaneous	Miscellaneous	100.0%	561	561	2,644
Total				7,317	34,500

Table A-10 California Multi Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	19.8%	953.44	189.1
Cooling	Room AC	18.5%	684.34	126.6
Cooling	Air-Source Heat Pump	0.4%	954.51	3.5
Cooling	Geothermal Heat Pump	0.0%	842.30	-
Cooling	Evaporative AC	0.0%	267.00	-
Heating	Electric Room Heat	52.2%	1,743.42	909.2
Heating	Electric Furnace	46.9%	1,966.06	922.6
Heating	Air-Source Heat Pump	0.0%	1,005.35	-
Heating	Geothermal Heat Pump	0.0%	644.38	-
Water Heating	Water Heater (<= 55 Gal)	44.1%	2,524.25	1,112.7
Water Heating	Water Heater (> 55 Gal)	5.8%	2,678.54	156.4
Interior Lighting	General Service Screw-In	100.0%	672.02	672.0
Interior Lighting	Linear Lighting	100.0%	51.41	51.4
Interior Lighting	Exempted Screw-In	100.0%	53.89	53.9
Exterior Lighting	Screw-in	100.0%	212.89	212.9
Appliances	Clothes Washer	40.5%	76.47	30.9
Appliances	Clothes Dryer	71.3%	571.10	407.3
Appliances	Dishwasher	94.1%	114.19	107.5
Appliances	Refrigerator	100.0%	539.36	539.4
Appliances	Freezer	2.1%	460.16	9.5
Appliances	Second Refrigerator	22.6%	756.00	171.0
Appliances	Stove/Oven	76.9%	338.85	260.6
Appliances	Microwave	90.5%	122.32	110.8
Electronics	Personal Computers	60.0%	183.95	110.5
Electronics	Monitor	78.2%	77.67	60.8
Electronics	Laptops	95.3%	48.71	46.4
Electronics	TVs	209.1%	268.95	562.3
Electronics	Printer/Fax/Copier	80.0%	58.97	47.2
Electronics	Set-top Boxes/DVRs	228.0%	112.37	256.2
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-
Miscellaneous	Pool Pump	0.0%	1,425.00	-
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	0.0%	902.50	-
Miscellaneous	Furnace Fan	17.5%	58.76	10.3
Miscellaneous	Well Pump	0.0%	556.00	-
Miscellaneous	Miscellaneous	100.0%	560.77	560.8
Total			7,809	

Table A-11 California Manufactured Home Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	5.3%	1,586	85	499
Cooling	Room AC	16.2%	360	58	344
Cooling	Air-Source Heat Pump	10.1%	1,586	161	946
Cooling	Geothermal Heat Pump	0.0%	1,397	0	0
Cooling	Evaporative AC	11.7%	554	65	383
Space Heating	Electric Room Heat	14.3%	5,395	770	4,535
Space Heating	Electric Furnace	34.6%	6,083	2,103	12,386
Space Heating	Air-Source Heat Pump	10.1%	3,708	376	2,212
Space Heating	Geothermal Heat Pump	0.0%	2,081	0	0
Water Heating	Water Heater <= 55 Gal	87.3%	2,525	2,203	12,974
Water Heating	Water Heater > 55 Gal	1.3%	2,669	34	202
Interior Lighting	General Service Screw-in	100.0%	454	454	2,674
Interior Lighting	Linear Lighting	100.0%	81	81	474
Interior Lighting	Exempted Screw-In	100.0%	86	86	506
Exterior Lighting	Screw-in	100.0%	128	128	756
Appliances	Clothes Washer	91.5%	86	79	464
Appliances	Clothes Dryer	86.8%	638	554	3,262
Appliances	Dishwasher	68.5%	120	82	485
Appliances	Refrigerator	100.0%	599	599	3,530
Appliances	Freezer	54.1%	511	277	1,631
Appliances	Second Refrigerator	16.2%	840	136	800
Appliances	Stove/Oven	85.2%	537	458	2,696
Appliances	Microwave	96.8%	129	125	734
Electronics	Personal Computers	51.1%	184	94	553
Electronics	Monitor	61.4%	78	48	281
Electronics	Laptops	67.6%	49	33	194
Electronics	TVs	202.8%	202	411	2,418
Electronics	Printer/Fax/Copier	75.0%	59	44	261
Electronics	Set-top Boxes/DVRs	214.6%	112	241	1,421
Electronics	Devices and Gadgets	100.0%	108	108	634
Miscellaneous	Electric Vehicles	0.0%	4,324	1	6
Miscellaneous	Pool Pump	1.4%	1,500	21	121
Miscellaneous	Pool Heater	0.0%	4,981	0	0
Miscellaneous	Hot Tub / Spa	7.4%	950	71	415
Miscellaneous	Furnace Fan	35.6%	139	49	291
Miscellaneous	Well Pump	30.5%	451	138	811
Miscellaneous	Miscellaneous	100.0%	506	506	2,983
Total				10,676	62,881

Table A-12 California Manufactured Home New Construction Market Profile

End Use	Saturation	UEC (kWh)	Intensity	
			(kWh/HH)	
Cooling	Central AC	5.6%	1,405.55	78.3
Cooling	Room AC	12.3%	320.43	39.3
Cooling	Air-Source Heat Pump	10.3%	1,586.00	162.9
Cooling	Geothermal Heat Pump	0.0%	1,396.50	-
Cooling	Evaporative AC	11.1%	554.00	61.5
Heating	Electric Room Heat	12.4%	5,394.50	668.5
Heating	Electric Furnace	36.6%	6,083.40	2,225.0
Heating	Air-Source Heat Pump	10.3%	3,707.50	380.8
Heating	Geothermal Heat Pump	0.0%	2,049.53	-
Water Heating	Water Heater (<= 55 Gal)	94.0%	2,512.92	2,361.4
Water Heating	Water Heater (> 55 Gal)	1.3%	2,668.94	34.2
Interior Lighting	General Service Screw-In	100.0%	764.62	764.6
Interior Lighting	Linear Lighting	100.0%	42.02	42.0
Interior Lighting	Exempted Screw-In	100.0%	194.91	194.9
Exterior Lighting	Screw-in	100.0%	190.50	190.5
Appliances	Clothes Washer	91.1%	77.53	70.6
Appliances	Clothes Dryer	94.2%	606.13	570.9
Appliances	Dishwasher	82.2%	114.19	93.9
Appliances	Refrigerator	100.0%	539.37	539.4
Appliances	Freezer	84.9%	460.12	390.7
Appliances	Second Refrigerator	25.0%	756.01	189.0
Appliances	Stove/Oven	87.1%	510.08	444.3
Appliances	Microwave	96.8%	122.32	118.4
Electronics	Personal Computers	56.3%	183.95	103.5
Electronics	Monitor	66.4%	77.67	51.6
Electronics	Laptops	97.5%	48.71	47.5
Electronics	TVs	255.8%	202.42	517.9
Electronics	Printer/Fax/Copier	82.7%	58.97	48.8
Electronics	Set-top Boxes/DVRs	270.8%	112.37	304.2
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.0
Miscellaneous	Pool Pump	1.4%	1,425.00	19.5
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	11.1%	902.50	100.5
Miscellaneous	Furnace Fan	35.6%	124.81	44.4
Miscellaneous	Well Pump	45.0%	451.00	203.0
Miscellaneous	Miscellaneous	100.0%	506.42	506.4
Total			11,677	

Table A-13 Idaho Single Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	33.1%	1,567	518	23,636
Cooling	Room AC	14.4%	724	104	4,765
Cooling	Air-Source Heat Pump	4.5%	1,634	74	3,364
Cooling	Geothermal Heat Pump	0.5%	1,439	7	330
Cooling	Evaporative AC	4.3%	647	28	1,276
Space Heating	Electric Room Heat	16.7%	15,687	2,613	119,217
Space Heating	Electric Furnace	2.4%	17,690	428	19,530
Space Heating	Air-Source Heat Pump	4.5%	12,772	576	26,293
Space Heating	Geothermal Heat Pump	0.5%	5,135	26	1,179
Water Heating	Water Heater <= 55 Gal	34.8%	3,238	1,127	51,427
Water Heating	Water Heater > 55 Gal	4.6%	3,423	158	7,204
Interior Lighting	General Service Screw-in	100.0%	964	964	43,979
Interior Lighting	Linear Lighting	100.0%	92	92	4,194
Interior Lighting	Exempted Screw-In	100.0%	269	269	12,273
Exterior Lighting	Screw-in	100.0%	403	403	18,409
Appliances	Clothes Washer	98.6%	86	85	3,889
Appliances	Clothes Dryer	83.0%	745	618	28,202
Appliances	Dishwasher	75.6%	120	91	4,147
Appliances	Refrigerator	100.0%	602	602	27,449
Appliances	Freezer	77.2%	515	397	18,127
Appliances	Second Refrigerator	38.0%	840	319	14,576
Appliances	Stove/Oven	74.1%	438	325	14,808
Appliances	Microwave	98.7%	129	127	5,806
Electronics	Personal Computers	74.7%	184	138	6,282
Electronics	Monitor	89.9%	78	70	3,190
Electronics	Laptops	113.6%	49	55	2,529
Electronics	TVs	234.7%	229	536	24,471
Electronics	Printer/Fax/Copier	100.2%	59	59	2,696
Electronics	Set-top Boxes/DVRs	191.3%	113	215	9,824
Electronics	Devices and Gadgets	100.0%	108	108	4,922
Miscellaneous	Electric Vehicles	0.1%	4,324	3	154
Miscellaneous	Pool Pump	1.7%	1,500	26	1,189
Miscellaneous	Pool Heater	0.2%	4,981	9	396
Miscellaneous	Hot Tub / Spa	7.7%	950	73	3,326
Miscellaneous	Furnace Fan	67.0%	569	381	17,394
Miscellaneous	Well Pump	42.4%	561	238	10,843
Miscellaneous	Miscellaneous	100.0%	445	445	20,315
Total				12,309	561,612

Table A-14 Idaho Single Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	46.2%	1,394.75	644.4
Cooling	Room AC	3.3%	911.55	29.9
Cooling	Air-Source Heat Pump	5.2%	1,431.25	74.8
Cooling	Geothermal Heat Pump	0.4%	1,354.81	4.9
Cooling	Evaporative AC	0.0%	647.00	-
Heating	Electric Room Heat	3.6%	11,626.81	417.9
Heating	Electric Furnace	3.1%	13,111.61	403.7
Heating	Air-Source Heat Pump	5.2%	7,695.29	401.8
Heating	Geothermal Heat Pump	0.4%	3,879.13	14.7
Water Heating	Water Heater (<= 55 Gal)	21.0%	3,225.16	678.4
Water Heating	Water Heater (> 55 Gal)	4.0%	3,423.00	138.0
Interior Lighting	General Service Screw-In	100.0%	1,323.22	1,323.2
Interior Lighting	Linear Lighting	100.0%	109.58	109.6
Interior Lighting	Exempted Screw-In	100.0%	468.13	468.1
Exterior Lighting	Screw-in	100.0%	585.60	585.6
Appliances	Clothes Washer	99.7%	77.79	77.6
Appliances	Clothes Dryer	81.8%	707.91	579.2
Appliances	Dishwasher	90.7%	114.19	103.6
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	59.8%	463.30	277.3
Appliances	Second Refrigerator	28.7%	756.00	216.6
Appliances	Stove/Oven	61.6%	416.25	256.2
Appliances	Microwave	98.7%	122.48	120.9
Electronics	Personal Computers	61.1%	184.27	112.6
Electronics	Monitor	72.7%	77.80	56.5
Electronics	Laptops	188.0%	48.79	91.7
Electronics	TVs	293.4%	228.52	670.4
Electronics	Printer/Fax/Copier	147.5%	58.97	87.0
Electronics	Set-top Boxes/DVRs	239.1%	112.56	269.2
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.1%	4,324.00	3.4
Miscellaneous	Pool Pump	1.7%	1,425.00	24.8
Miscellaneous	Pool Heater	0.2%	4,731.95	8.2
Miscellaneous	Hot Tub/Spa	7.8%	902.50	70.4
Miscellaneous	Furnace Fan	67.0%	512.37	343.1
Miscellaneous	Well Pump	67.5%	561.00	378.7
Miscellaneous	Miscellaneous	100.0%	445.26	445.3
Total			10,137	

Table A-15 Idaho Multi Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	25.9%	469	121	1,073
Cooling	Room AC	20.3%	375	76	674
Cooling	Air-Source Heat Pump	4.3%	469	20	177
Cooling	Geothermal Heat Pump	0.0%	413	0	0
Cooling	Evaporative AC	2.2%	267	6	52
Space Heating	Electric Room Heat	37.8%	2,362	893	7,894
Space Heating	Electric Furnace	20.4%	2,663	544	4,811
Space Heating	Air-Source Heat Pump	4.3%	1,743	74	657
Space Heating	Geothermal Heat Pump	0.0%	701	0	0
Water Heating	Water Heater <= 55 Gal	47.1%	2,198	1,036	9,158
Water Heating	Water Heater > 55 Gal	3.7%	2,324	86	760
Interior Lighting	General Service Screw-in	100.0%	421	421	3,720
Interior Lighting	Linear Lighting	100.0%	54	54	477
Interior Lighting	Exempted Screw-In	100.0%	24	24	216
Exterior Lighting	Screw-in	100.0%	149	149	1,313
Appliances	Clothes Washer	62.8%	82	52	456
Appliances	Clothes Dryer	62.2%	798	497	4,388
Appliances	Dishwasher	45.8%	120	55	487
Appliances	Refrigerator	100.0%	602	602	5,316
Appliances	Freezer	13.9%	515	72	634
Appliances	Second Refrigerator	5.0%	840	42	371
Appliances	Stove/Oven	96.3%	317	305	2,693
Appliances	Microwave	97.4%	129	126	1,109
Electronics	Personal Computers	28.0%	184	52	456
Electronics	Monitor	33.7%	78	26	232
Electronics	Laptops	73.0%	49	36	315
Electronics	TVs	154.4%	223	345	3,046
Electronics	Printer/Fax/Copier	40.1%	59	24	209
Electronics	Set-top Boxes/DVRs	137.3%	113	155	1,366
Electronics	Devices and Gadgets	100.0%	108	108	953
Miscellaneous	Electric Vehicles	0.0%	4,324	0	0
Miscellaneous	Pool Pump	0.0%	1,500	0	0
Miscellaneous	Pool Heater	0.0%	4,981	0	0
Miscellaneous	Hot Tub / Spa	0.0%	950	0	0
Miscellaneous	Furnace Fan	39.2%	205	80	710
Miscellaneous	Well Pump	0.0%	556	0	0
Miscellaneous	Miscellaneous	100.0%	75	75	663
Total				6,155	54,388

Table A-16 Idaho Multi Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	72.2%	327.73	236.5
Cooling	Room AC	17.9%	374.09	67.0
Cooling	Air-Source Heat Pump	0.5%	331.12	1.6
Cooling	Geothermal Heat Pump	0.0%	388.59	-
Cooling	Evaporative AC	2.2%	267.00	5.9
Heating	Electric Room Heat	36.4%	1,351.38	491.3
Heating	Electric Furnace	58.5%	1,523.96	891.9
Heating	Air-Source Heat Pump	0.0%	1,029.11	-
Heating	Geothermal Heat Pump	0.0%	529.46	-
Water Heating	Water Heater (<= 55 Gal)	27.9%	2,190.87	612.2
Water Heating	Water Heater (> 55 Gal)	3.7%	2,324.16	86.0
Interior Lighting	General Service Screw-In	100.0%	712.92	712.9
Interior Lighting	Linear Lighting	100.0%	32.56	32.6
Interior Lighting	Exempted Screw-In	100.0%	56.97	57.0
Exterior Lighting	Screw-in	100.0%	257.19	257.2
Appliances	Clothes Washer	62.8%	73.89	46.4
Appliances	Clothes Dryer	99.9%	758.06	757.0
Appliances	Dishwasher	55.0%	114.19	62.8
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	1.8%	463.27	8.3
Appliances	Second Refrigerator	15.0%	756.00	113.5
Appliances	Stove/Oven	84.3%	300.70	253.5
Appliances	Microwave	97.4%	122.48	119.3
Electronics	Personal Computers	37.0%	184.27	68.1
Electronics	Monitor	48.2%	77.80	37.5
Electronics	Laptops	105.7%	48.79	51.6
Electronics	TVs	193.0%	223.19	430.9
Electronics	Printer/Fax/Copier	52.9%	58.97	31.2
Electronics	Set-top Boxes/DVRs	171.6%	112.56	193.2
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-
Miscellaneous	Pool Pump	0.0%	1,425.00	-
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	0.0%	902.50	-
Miscellaneous	Furnace Fan	39.2%	184.36	72.3
Miscellaneous	Well Pump	0.0%	556.00	-
Miscellaneous	Miscellaneous	100.0%	75.06	75.1
Total				6,422

Table A-17 Idaho Manufactured Home Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	12.8%	1,493	191	1,195
Cooling	Room AC	31.6%	690	218	1,364
Cooling	Air-Source Heat Pump	1.7%	1,493	25	157
Cooling	Geothermal Heat Pump	0.0%	1,315	0	0
Cooling	Evaporative AC	12.8%	554	71	444
Space Heating	Electric Room Heat	21.0%	9,669	2,030	12,689
Space Heating	Electric Furnace	27.4%	10,904	2,987	18,676
Space Heating	Air-Source Heat Pump	1.7%	10,811	182	1,139
Space Heating	Geothermal Heat Pump	0.0%	3,820	0	0
Water Heating	Water Heater <= 55 Gal	56.6%	3,299	1,869	11,682
Water Heating	Water Heater > 55 Gal	0.8%	3,488	29	181
Interior Lighting	General Service Screw-in	100.0%	475	475	2,972
Interior Lighting	Linear Lighting	100.0%	66	66	411
Interior Lighting	Exempted Screw-In	100.0%	102	102	639
Exterior Lighting	Screw-in	100.0%	130	130	810
Appliances	Clothes Washer	92.9%	86	80	501
Appliances	Clothes Dryer	88.2%	663	584	3,653
Appliances	Dishwasher	74.2%	120	89	557
Appliances	Refrigerator	100.0%	602	602	3,761
Appliances	Freezer	63.3%	515	326	2,036
Appliances	Second Refrigerator	21.9%	840	184	1,151
Appliances	Stove/Oven	74.2%	312	231	1,447
Appliances	Microwave	98.1%	129	127	791
Electronics	Personal Computers	42.9%	184	79	495
Electronics	Monitor	51.7%	78	40	251
Electronics	Laptops	49.4%	49	24	151
Electronics	TVs	223.5%	210	470	2,939
Electronics	Printer/Fax/Copier	57.6%	59	34	212
Electronics	Set-top Boxes/DVRs	204.5%	113	230	1,439
Electronics	Devices and Gadgets	100.0%	108	108	674
Miscellaneous	Electric Vehicles	0.1%	4,324	3	18
Miscellaneous	Pool Pump	1.5%	1,500	23	144
Miscellaneous	Pool Heater	0.0%	4,981	0	0
Miscellaneous	Hot Tub / Spa	2.8%	950	27	166
Miscellaneous	Furnace Fan	62.3%	323	201	1,258
Miscellaneous	Well Pump	48.3%	451	218	1,362
Miscellaneous	Miscellaneous	100.0%	101	101	629
Total				12,155	75,993

Table A-18 Idaho Manufactured Home New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	13.3%	1,130.17	150.7
Cooling	Room AC	23.9%	751.05	179.6
Cooling	Air-Source Heat Pump	1.7%	1,112.42	19.0
Cooling	Geothermal Heat Pump	0.0%	1,082.59	-
Cooling	Evaporative AC	12.1%	554.00	67.2
Heating	Electric Room Heat	18.2%	6,953.28	1,267.3
Heating	Electric Furnace	29.0%	7,841.24	2,273.0
Heating	Air-Source Heat Pump	1.7%	6,135.25	104.8
Heating	Geothermal Heat Pump	0.0%	2,666.96	-
Water Heating	Water Heater (<= 55 Gal)	61.0%	3,285.92	2,004.4
Water Heating	Water Heater (> 55 Gal)	0.8%	3,487.75	29.0
Interior Lighting	General Service Screw-In	100.0%	803.59	803.6
Interior Lighting	Linear Lighting	100.0%	28.03	28.0
Interior Lighting	Exempted Screw-In	100.0%	231.82	231.8
Exterior Lighting	Screw-in	100.0%	193.01	193.0
Appliances	Clothes Washer	92.5%	77.66	71.8
Appliances	Clothes Dryer	95.7%	629.47	602.2
Appliances	Dishwasher	89.0%	114.19	101.6
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	99.2%	463.25	459.5
Appliances	Second Refrigerator	33.9%	756.00	256.1
Appliances	Stove/Oven	75.8%	296.25	224.7
Appliances	Microwave	98.1%	122.48	120.2
Electronics	Personal Computers	47.3%	184.27	87.2
Electronics	Monitor	55.9%	77.80	43.5
Electronics	Laptops	71.3%	48.79	34.8
Electronics	TVs	282.0%	210.29	593.0
Electronics	Printer/Fax/Copier	63.5%	58.97	37.4
Electronics	Set-top Boxes/DVRs	257.9%	112.56	290.3
Electronics	Devices and Gadgets	100.0%	107.88	107.9
Miscellaneous	Electric Vehicles	0.1%	4,324.00	2.8
Miscellaneous	Pool Pump	1.5%	1,425.00	21.9
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	4.2%	902.50	37.8
Miscellaneous	Furnace Fan	62.3%	290.72	181.0
Miscellaneous	Well Pump	71.2%	451.00	321.3
Miscellaneous	Miscellaneous	100.0%	100.57	100.6
Total			11,588	

Table A-19 Utah Single Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	74.1%	2,835	2,100	1,175,963
Cooling	Room AC	3.3%	437	14	8,099
Cooling	Air-Source Heat Pump	2.3%	2,934	69	38,550
Cooling	Geothermal Heat Pump	0.2%	2,583	5	2,791
Cooling	Evaporative AC	14.0%	647	91	50,769
Space Heating	Electric Room Heat	4.8%	12,495	594	332,732
Space Heating	Electric Furnace	4.3%	14,091	602	337,041
Space Heating	Air-Source Heat Pump	2.3%	7,297	171	95,877
Space Heating	Geothermal Heat Pump	0.2%	4,142	8	4,476
Water Heating	Water Heater <= 55 Gal	8.4%	3,238	273	152,976
Water Heating	Water Heater > 55 Gal	1.1%	3,423	38	21,430
Interior Lighting	General Service Screw-in	100.0%	761	761	426,076
Interior Lighting	Linear Lighting	100.0%	81	81	45,339
Interior Lighting	Exempted Screw-In	100.0%	213	213	119,402
Exterior Lighting	Screw-in	100.0%	389	389	217,838
Appliances	Clothes Washer	98.4%	86	85	47,621
Appliances	Clothes Dryer	75.1%	745	560	313,495
Appliances	Dishwasher	91.8%	120	110	61,806
Appliances	Refrigerator	100.0%	602	602	336,954
Appliances	Freezer	53.3%	515	274	153,528
Appliances	Second Refrigerator	35.4%	840	298	166,634
Appliances	Stove/Oven	61.5%	438	269	150,943
Appliances	Microwave	98.5%	129	127	71,110
Electronics	Personal Computers	97.0%	184	179	100,086
Electronics	Monitor	115.9%	78	90	50,503
Electronics	Laptops	141.4%	49	69	38,627
Electronics	TVs	246.9%	229	564	315,947
Electronics	Printer/Fax/Copier	130.1%	59	77	42,955
Electronics	Set-top Boxes/DVRs	70.5%	113	79	44,452
Electronics	Devices and Gadgets	100.0%	108	108	60,426
Miscellaneous	Electric Vehicles	0.2%	4,324	7	4,150
Miscellaneous	Pool Pump	2.2%	1,500	33	18,507
Miscellaneous	Pool Heater	0.9%	4,981	46	25,611
Miscellaneous	Hot Tub / Spa	5.8%	950	55	30,646
Miscellaneous	Furnace Fan	89.7%	569	510	285,857
Miscellaneous	Well Pump	4.8%	561	27	15,106
Miscellaneous	Miscellaneous	100.0%	540	540	302,462
Total				10,118	5,666,785

Table A-20 Utah Single Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	74.1%	2,831.54	2,097.1
Cooling	Room AC	3.3%	382.73	12.7
Cooling	Air-Source Heat Pump	2.3%	2,930.64	68.8
Cooling	Geothermal Heat Pump	0.2%	2,583.00	5.0
Cooling	Evaporative AC	0.0%	647.00	-
Heating	Electric Room Heat	4.8%	12,495.00	594.1
Heating	Electric Furnace	4.3%	14,090.67	601.8
Heating	Air-Source Heat Pump	2.3%	7,288.28	171.0
Heating	Geothermal Heat Pump	0.2%	4,118.62	7.9
Water Heating	Water Heater (<= 55 Gal)	5.1%	3,225.16	164.4
Water Heating	Water Heater (> 55 Gal)	1.0%	3,423.00	33.4
Interior Lighting	General Service Screw-In	100.0%	1,071.14	1,071.1
Interior Lighting	Linear Lighting	100.0%	96.49	96.5
Interior Lighting	Exempted Screw-In	100.0%	388.50	388.5
Exterior Lighting	Screw-in	100.0%	491.61	491.6
Appliances	Clothes Washer	99.5%	77.79	77.4
Appliances	Clothes Dryer	74.1%	707.91	524.5
Appliances	Dishwasher	110.2%	114.19	125.8
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	41.3%	463.30	191.3
Appliances	Second Refrigerator	26.7%	756.00	201.8
Appliances	Stove/Oven	51.1%	416.25	212.8
Appliances	Microwave	98.5%	122.48	120.6
Electronics	Personal Computers	79.3%	184.27	146.2
Electronics	Monitor	93.7%	77.80	72.9
Electronics	Laptops	233.9%	48.79	114.1
Electronics	TVs	308.6%	228.52	705.1
Electronics	Printer/Fax/Copier	191.5%	58.97	112.9
Electronics	Set-top Boxes/DVRs	88.1%	112.56	99.2
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.2%	4,324.00	7.4
Miscellaneous	Pool Pump	2.2%	1,425.00	31.4
Miscellaneous	Pool Heater	0.9%	4,731.95	43.4
Miscellaneous	Hot Tub/Spa	5.9%	902.50	52.8
Miscellaneous	Furnace Fan	89.7%	512.37	459.3
Miscellaneous	Well Pump	7.7%	561.00	43.0
Miscellaneous	Miscellaneous	100.0%	540.03	540.0
Total			10,335	

Table A-21 Utah Multi Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	57.4%	967	555	94,556
Cooling	Room AC	16.3%	621	101	17,285
Cooling	Air-Source Heat Pump	4.7%	968	45	7,708
Cooling	Geothermal Heat Pump	0.2%	852	1	240
Cooling	Evaporative AC	9.5%	267	25	4,341
Space Heating	Electric Room Heat	18.2%	2,158	392	66,822
Space Heating	Electric Furnace	13.9%	2,279	316	53,907
Space Heating	Air-Source Heat Pump	4.7%	1,427	67	11,365
Space Heating	Geothermal Heat Pump	0.2%	810	1	228
Water Heating	Water Heater <= 55 Gal	25.4%	2,007	510	86,858
Water Heating	Water Heater > 55 Gal	2.0%	2,122	42	7,208
Interior Lighting	General Service Screw-in	100.0%	471	471	80,294
Interior Lighting	Linear Lighting	100.0%	50	50	8,507
Interior Lighting	Exempted Screw-In	100.0%	28	28	4,696
Exterior Lighting	Screw-in	100.0%	197	197	33,639
Appliances	Clothes Washer	69.7%	82	57	9,746
Appliances	Clothes Dryer	68.0%	601	409	69,683
Appliances	Dishwasher	92.4%	120	111	18,922
Appliances	Refrigerator	100.0%	592	592	100,848
Appliances	Freezer	11.1%	506	56	9,555
Appliances	Second Refrigerator	6.1%	840	51	8,664
Appliances	Stove/Oven	84.8%	317	269	45,741
Appliances	Microwave	94.2%	129	121	20,682
Electronics	Personal Computers	63.8%	184	117	20,014
Electronics	Monitor	76.2%	78	59	10,099
Electronics	Laptops	121.3%	49	59	10,080
Electronics	TVs	190.2%	229	435	74,041
Electronics	Printer/Fax/Copier	91.3%	59	54	9,170
Electronics	Set-top Boxes/DVRs	47.2%	113	53	9,058
Electronics	Devices and Gadgets	100.0%	108	108	18,378
Miscellaneous	Electric Vehicles	0.0%	4,324	0	0
Miscellaneous	Pool Pump	0.2%	1,500	3	462
Miscellaneous	Pool Heater	0.1%	4,981	5	899
Miscellaneous	Hot Tub / Spa	0.7%	950	7	1,125
Miscellaneous	Furnace Fan	66.7%	205	137	23,288
Miscellaneous	Well Pump	0.0%	556	0	0
Miscellaneous	Miscellaneous	100.0%	46	46	7,867
Total				5,553	945,978

Table A-22 Utah Multi Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	57.4%	928.07	532.7
Cooling	Room AC	16.3%	553.43	90.4
Cooling	Air-Source Heat Pump	4.7%	915.84	42.8
Cooling	Geothermal Heat Pump	0.2%	851.90	1.4
Cooling	Evaporative AC	9.5%	267.00	25.5
Heating	Electric Room Heat	18.2%	2,158.08	392.3
Heating	Electric Furnace	13.9%	2,278.99	316.5
Heating	Air-Source Heat Pump	4.7%	1,394.25	65.2
Heating	Geothermal Heat Pump	0.2%	805.37	1.3
Water Heating	Water Heater (<= 55 Gal)	15.1%	2,000.20	301.2
Water Heating	Water Heater (> 55 Gal)	2.0%	2,121.90	42.3
Interior Lighting	General Service Screw-In	100.0%	785.58	785.6
Interior Lighting	Linear Lighting	100.0%	48.81	48.8
Interior Lighting	Exempted Screw-In	100.0%	62.45	62.5
Exterior Lighting	Screw-in	100.0%	309.75	309.7
Appliances	Clothes Washer	69.7%	73.89	51.5
Appliances	Clothes Dryer	109.2%	571.10	623.6
Appliances	Dishwasher	110.9%	114.19	126.6
Appliances	Refrigerator	100.0%	532.83	532.8
Appliances	Freezer	1.4%	454.95	6.5
Appliances	Second Refrigerator	18.2%	756.00	137.3
Appliances	Stove/Oven	74.3%	300.70	223.4
Appliances	Microwave	94.2%	122.48	115.3
Electronics	Personal Computers	84.1%	184.27	155.0
Electronics	Monitor	108.9%	77.80	84.7
Electronics	Laptops	175.6%	48.79	85.7
Electronics	TVs	237.8%	228.52	543.3
Electronics	Printer/Fax/Copier	120.4%	58.97	71.0
Electronics	Set-top Boxes/DVRs	59.1%	112.56	66.5
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-
Miscellaneous	Pool Pump	0.2%	1,425.00	2.6
Miscellaneous	Pool Heater	0.1%	4,731.95	5.0
Miscellaneous	Hot Tub/Spa	0.7%	902.50	6.3
Miscellaneous	Furnace Fan	66.7%	184.36	123.0
Miscellaneous	Well Pump	0.0%	556.00	-
Miscellaneous	Miscellaneous	100.0%	46.19	46.2
Total			6,132	

Table A-23 Utah Manufactured Home Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	35.7%	2,114	754	14,956
Cooling	Room AC	11.2%	1,439	161	3,185
Cooling	Air-Source Heat Pump	3.4%	2,114	71	1,409
Cooling	Geothermal Heat Pump	0.2%	1,861	3	59
Cooling	Evaporative AC	41.2%	554	228	4,524
Space Heating	Electric Room Heat	4.8%	8,946	433	8,582
Space Heating	Electric Furnace	7.9%	9,911	778	15,434
Space Heating	Air-Source Heat Pump	3.4%	6,209	209	4,138
Space Heating	Geothermal Heat Pump	0.2%	3,031	5	96
Water Heating	Water Heater <= 55 Gal	18.5%	2,529	467	9,270
Water Heating	Water Heater > 55 Gal	0.3%	2,674	7	144
Interior Lighting	General Service Screw-in	100.0%	358	358	7,107
Interior Lighting	Linear Lighting	100.0%	51	51	1,017
Interior Lighting	Exempted Screw-In	100.0%	78	78	1,537
Exterior Lighting	Screw-in	100.0%	174	174	3,458
Appliances	Clothes Washer	95.4%	86	82	1,633
Appliances	Clothes Dryer	80.7%	843	680	13,476
Appliances	Dishwasher	79.5%	120	96	1,895
Appliances	Refrigerator	100.0%	602	602	11,931
Appliances	Freezer	47.7%	515	245	4,868
Appliances	Second Refrigerator	19.6%	840	164	3,258
Appliances	Stove/Oven	33.5%	312	104	2,069
Appliances	Microwave	95.6%	129	123	2,445
Electronics	Personal Computers	80.2%	184	148	2,929
Electronics	Monitor	95.8%	78	75	1,478
Electronics	Laptops	106.1%	49	52	1,027
Electronics	TVs	216.9%	314	681	13,511
Electronics	Printer/Fax/Copier	107.5%	59	63	1,257
Electronics	Set-top Boxes/DVRs	60.3%	113	68	1,346
Electronics	Devices and Gadgets	100.0%	108	108	2,139
Miscellaneous	Electric Vehicles	0.1%	4,324	6	113
Miscellaneous	Pool Pump	2.8%	1,500	41	821
Miscellaneous	Pool Heater	1.9%	4,981	92	1,834
Miscellaneous	Hot Tub / Spa	3.9%	950	37	735
Miscellaneous	Furnace Fan	69.2%	323	224	4,434
Miscellaneous	Well Pump	12.5%	451	56	1,118
Miscellaneous	Miscellaneous	100.0%	121	121	2,406
Total				7,647	151,639

Table A-24 Utah Manufactured Home New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	35.7%	2,089.54	745.4
Cooling	Room AC	11.2%	1,257.87	140.4
Cooling	Air-Source Heat Pump	3.4%	2,042.75	68.7
Cooling	Geothermal Heat Pump	0.2%	1,861.00	3.0
Cooling	Evaporative AC	39.0%	554.00	215.9
Heating	Electric Room Heat	4.8%	8,945.50	432.8
Heating	Electric Furnace	7.9%	9,910.91	778.3
Heating	Air-Source Heat Pump	3.4%	5,977.91	200.9
Heating	Geothermal Heat Pump	0.2%	3,056.22	4.9
Water Heating	Water Heater (<= 55 Gal)	19.9%	2,519.36	501.4
Water Heating	Water Heater (> 55 Gal)	0.3%	2,674.11	7.3
Interior Lighting	General Service Screw-In	100.0%	515.47	515.5
Interior Lighting	Linear Lighting	100.0%	44.34	44.3
Interior Lighting	Exempted Screw-In	100.0%	155.31	155.3
Exterior Lighting	Screw-in	100.0%	275.74	275.7
Appliances	Clothes Washer	95.0%	77.66	73.8
Appliances	Clothes Dryer	87.5%	800.41	700.5
Appliances	Dishwasher	95.4%	114.19	108.9
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	74.8%	463.25	346.4
Appliances	Second Refrigerator	30.2%	756.00	228.6
Appliances	Stove/Oven	34.2%	296.25	101.3
Appliances	Microwave	95.6%	122.48	117.1
Electronics	Personal Computers	88.4%	184.27	162.8
Electronics	Monitor	103.6%	77.80	80.6
Electronics	Laptops	153.1%	48.79	74.7
Electronics	TVs	273.6%	314.13	859.5
Electronics	Printer/Fax/Copier	118.5%	58.97	69.9
Electronics	Set-top Boxes/DVRs	76.1%	112.56	85.6
Electronics	Devices and Gadgets	100.0%	107.88	107.9
Miscellaneous	Electric Vehicles	0.1%	4,324.00	5.7
Miscellaneous	Pool Pump	2.8%	1,425.00	39.3
Miscellaneous	Pool Heater	1.9%	4,731.95	87.9
Miscellaneous	Hot Tub/Spa	5.9%	902.50	52.9
Miscellaneous	Furnace Fan	69.2%	290.72	201.2
Miscellaneous	Well Pump	18.4%	451.00	83.1
Miscellaneous	Miscellaneous	100.0%	121.31	121.3
Total			8,340	

Table A-25 Washington Single Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	40.1%	1,517	607	45,266
Cooling	Room AC	22.8%	538	122	9,125
Cooling	Air-Source Heat Pump	28.0%	1,585	443	33,039
Cooling	Geothermal Heat Pump	0.4%	1,395	6	436
Cooling	Evaporative AC	1.4%	647	9	681
Space Heating	Electric Room Heat	13.0%	10,012	1,306	97,318
Space Heating	Electric Furnace	14.6%	11,291	1,650	122,928
Space Heating	Air-Source Heat Pump	28.0%	7,630	2,135	159,086
Space Heating	Geothermal Heat Pump	0.4%	3,624	15	1,134
Water Heating	Water Heater <= 55 Gal	62.4%	3,238	2,021	150,611
Water Heating	Water Heater > 55 Gal	5.1%	3,423	174	12,957
Interior Lighting	General Service Screw-in	100.0%	935	935	69,677
Interior Lighting	Linear Lighting	100.0%	81	81	6,039
Interior Lighting	Exempted Screw-In	100.0%	352	352	26,263
Exterior Lighting	Screw-in	100.0%	322	322	23,976
Appliances	Clothes Washer	97.4%	86	84	6,264
Appliances	Clothes Dryer	91.7%	760	697	51,941
Appliances	Dishwasher	75.9%	120	91	6,801
Appliances	Refrigerator	100.0%	599	599	44,640
Appliances	Freezer	60.7%	539	327	24,401
Appliances	Second Refrigerator	37.7%	840	317	23,611
Appliances	Stove/Oven	83.2%	443	368	27,445
Appliances	Microwave	98.1%	129	126	9,410
Electronics	Personal Computers	79.8%	184	147	10,936
Electronics	Monitor	96.0%	78	75	5,554
Electronics	Laptops	201.0%	49	98	7,297
Electronics	TVs	271.6%	202	548	40,806
Electronics	Printer/Fax/Copier	117.2%	59	69	5,151
Electronics	Set-top Boxes/DVRs	306.3%	112	344	25,648
Electronics	Devices and Gadgets	100.0%	108	108	8,027
Miscellaneous	Electric Vehicles	0.1%	4,324	3	222
Miscellaneous	Pool Pump	7.2%	1,500	108	8,029
Miscellaneous	Pool Heater	1.8%	4,981	88	6,542
Miscellaneous	Hot Tub / Spa	8.2%	950	78	5,803
Miscellaneous	Furnace Fan	54.0%	184	99	7,411
Miscellaneous	Well Pump	28.6%	561	161	11,977
Miscellaneous	Miscellaneous	100.0%	1,322	1,322	98,508
Total				16,035	1,194,961

Table A-26 Washington Single Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	56.0%	1,514.97	848.0
Cooling	Room AC	5.2%	471.76	24.4
Cooling	Air-Source Heat Pump	32.4%	1,583.26	512.9
Cooling	Geothermal Heat Pump	0.3%	1,395.00	4.2
Cooling	Evaporative AC	0.0%	647.00	-
Heating	Electric Room Heat	2.8%	10,012.00	281.7
Heating	Electric Furnace	18.6%	11,290.58	2,098.8
Heating	Air-Source Heat Pump	32.4%	7,623.98	2,468.6
Heating	Geothermal Heat Pump	0.3%	3,583.51	11.4
Water Heating	Water Heater (<= 55 Gal)	37.7%	3,223.16	1,215.5
Water Heating	Water Heater (> 55 Gal)	4.4%	3,423.00	152.0
Interior Lighting	General Service Screw-In	100.0%	958.66	958.7
Interior Lighting	Linear Lighting	100.0%	91.84	91.8
Interior Lighting	Exempted Screw-In	100.0%	361.34	361.3
Exterior Lighting	Screw-in	100.0%	329.87	329.9
Appliances	Clothes Washer	98.5%	77.65	76.5
Appliances	Clothes Dryer	90.5%	721.87	653.1
Appliances	Dishwasher	91.1%	114.19	104.0
Appliances	Refrigerator	100.0%	539.10	539.1
Appliances	Freezer	47.1%	485.10	228.5
Appliances	Second Refrigerator	28.4%	756.00	214.8
Appliances	Stove/Oven	69.1%	420.71	290.7
Appliances	Microwave	98.1%	122.32	120.0
Electronics	Personal Computers	65.2%	183.95	120.0
Electronics	Monitor	77.6%	77.67	60.3
Electronics	Laptops	332.6%	48.71	162.0
Electronics	TVs	339.5%	201.62	684.5
Electronics	Printer/Fax/Copier	172.6%	58.97	101.8
Electronics	Set-top Boxes/DVRs	382.9%	112.37	430.2
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.1%	4,324.00	3.0
Miscellaneous	Pool Pump	7.2%	1,425.00	102.4
Miscellaneous	Pool Heater	1.8%	4,731.95	83.4
Miscellaneous	Hot Tub/Spa	8.3%	902.50	75.2
Miscellaneous	Furnace Fan	54.0%	165.85	89.5
Miscellaneous	Well Pump	45.7%	561.00	256.1
Miscellaneous	Miscellaneous	100.0%	1,321.83	1,321.8
Total			15,184	

Table A-27 Washington Multi Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	15.9%	869	138	2,789
Cooling	Room AC	64.1%	394	252	5,100
Cooling	Air-Source Heat Pump	7.4%	380	28	570
Cooling	Geothermal Heat Pump	0.0%	335	0	0
Cooling	Evaporative AC	0.4%	267	1	23
Space Heating	Electric Room Heat	66.3%	2,818	1,867	37,739
Space Heating	Electric Furnace	14.5%	3,177	461	9,315
Space Heating	Air-Source Heat Pump	7.4%	2,304	171	3,449
Space Heating	Geothermal Heat Pump	0.0%	1,094	0	0
Water Heating	Water Heater <= 55 Gal	76.8%	2,658	2,042	41,274
Water Heating	Water Heater > 55 Gal	6.0%	2,810	169	3,425
Interior Lighting	General Service Screw-in	100.0%	575	575	11,621
Interior Lighting	Linear Lighting	100.0%	88	88	1,771
Interior Lighting	Exempted Screw-In	100.0%	34	34	681
Exterior Lighting	Screw-in	100.0%	117	117	2,356
Appliances	Clothes Washer	50.3%	85	43	863
Appliances	Clothes Dryer	55.8%	601	336	6,781
Appliances	Dishwasher	78.4%	120	94	1,905
Appliances	Refrigerator	100.0%	599	599	12,106
Appliances	Freezer	20.0%	539	108	2,177
Appliances	Second Refrigerator	4.9%	840	41	832
Appliances	Stove/Oven	94.7%	357	338	6,830
Appliances	Microwave	94.6%	129	122	2,463
Electronics	Personal Computers	45.5%	184	84	1,693
Electronics	Monitor	54.8%	78	43	860
Electronics	Laptops	164.2%	49	80	1,617
Electronics	TVs	181.4%	269	488	9,862
Electronics	Printer/Fax/Copier	60.6%	59	36	723
Electronics	Set-top Boxes/DVRs	197.8%	112	222	4,493
Electronics	Devices and Gadgets	100.0%	108	108	2,177
Miscellaneous	Electric Vehicles	0.0%	4,324	0	0
Miscellaneous	Pool Pump	0.0%	1,500	0	0
Miscellaneous	Pool Heater	0.0%	4,981	0	0
Miscellaneous	Hot Tub / Spa	0.3%	950	3	62
Miscellaneous	Furnace Fan	20.5%	65	13	270
Miscellaneous	Well Pump	0.0%	556	0	0
Miscellaneous	Miscellaneous	100.0%	914	914	18,479
Total				9,614	194,305

Table A-28 Washington Multi Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	44.2%	865.58	383.0
Cooling	Room AC	56.4%	344.83	194.6
Cooling	Air-Source Heat Pump	0.8%	379.50	3.2
Cooling	Geothermal Heat Pump	0.0%	334.96	-
Cooling	Evaporative AC	0.4%	267.00	1.1
Heating	Electric Room Heat	63.7%	2,817.54	1,794.3
Heating	Electric Furnace	41.5%	3,177.36	1,319.4
Heating	Air-Source Heat Pump	0.0%	2,300.40	-
Heating	Geothermal Heat Pump	0.0%	1,081.93	-
Water Heating	Water Heater (<= 55 Gal)	45.5%	2,647.92	1,206.0
Water Heating	Water Heater (> 55 Gal)	6.0%	2,809.77	169.5
Interior Lighting	General Service Screw-In	100.0%	663.12	663.1
Interior Lighting	Linear Lighting	100.0%	81.40	81.4
Interior Lighting	Exempted Screw-In	100.0%	38.85	38.8
Exterior Lighting	Screw-in	100.0%	134.41	134.4
Appliances	Clothes Washer	50.3%	76.47	38.4
Appliances	Clothes Dryer	89.6%	571.10	511.5
Appliances	Dishwasher	94.1%	114.19	107.5
Appliances	Refrigerator	100.0%	539.10	539.1
Appliances	Freezer	2.6%	485.09	12.5
Appliances	Second Refrigerator	14.7%	756.00	111.2
Appliances	Stove/Oven	83.0%	338.85	281.2
Appliances	Microwave	94.6%	122.32	115.8
Electronics	Personal Computers	60.0%	183.95	110.5
Electronics	Monitor	78.2%	77.67	60.8
Electronics	Laptops	237.8%	48.71	115.8
Electronics	TVs	226.8%	268.95	610.0
Electronics	Printer/Fax/Copier	80.0%	58.97	47.2
Electronics	Set-top Boxes/DVRs	247.3%	112.37	277.9
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-
Miscellaneous	Pool Pump	0.0%	1,425.00	-
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	0.3%	902.50	2.9
Miscellaneous	Furnace Fan	20.5%	58.76	12.0
Miscellaneous	Well Pump	0.0%	556.00	-
Miscellaneous	Miscellaneous	100.0%	914.33	914.3
Total				9,965

Table A-29 Washington Manufactured Home Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	33.9%	1,764	598	7,790
Cooling	Room AC	21.4%	529	113	1,474
Cooling	Air-Source Heat Pump	25.4%	1,764	449	5,840
Cooling	Geothermal Heat Pump	0.0%	1,553	0	0
Cooling	Evaporative AC	4.4%	554	24	317
Space Heating	Electric Room Heat	11.4%	8,338	951	12,384
Space Heating	Electric Furnace	56.4%	9,402	5,299	68,967
Space Heating	Air-Source Heat Pump	25.4%	7,134	1,815	23,624
Space Heating	Geothermal Heat Pump	0.0%	3,495	0	0
Water Heating	Water Heater <= 55 Gal	94.2%	2,649	2,496	32,482
Water Heating	Water Heater > 55 Gal	1.4%	2,800	39	504
Interior Lighting	General Service Screw-in	100.0%	470	470	6,118
Interior Lighting	Linear Lighting	100.0%	133	133	1,736
Interior Lighting	Exempted Screw-In	100.0%	89	89	1,159
Exterior Lighting	Screw-in	100.0%	129	129	1,684
Appliances	Clothes Washer	94.5%	86	81	1,060
Appliances	Clothes Dryer	92.0%	948	872	11,347
Appliances	Dishwasher	77.4%	120	93	1,211
Appliances	Refrigerator	100.0%	599	599	7,797
Appliances	Freezer	55.2%	539	298	3,874
Appliances	Second Refrigerator	27.1%	840	227	2,960
Appliances	Stove/Oven	95.5%	537	513	6,673
Appliances	Microwave	97.9%	129	126	1,641
Electronics	Personal Computers	51.1%	184	94	1,223
Electronics	Monitor	61.4%	78	48	621
Electronics	Laptops	89.8%	49	44	569
Electronics	TVs	223.1%	287	641	8,339
Electronics	Printer/Fax/Copier	75.0%	59	44	576
Electronics	Set-top Boxes/DVRs	236.1%	112	265	3,454
Electronics	Devices and Gadgets	100.0%	108	108	1,402
Miscellaneous	Electric Vehicles	0.1%	4,324	2	31
Miscellaneous	Pool Pump	5.0%	1,500	75	971
Miscellaneous	Pool Heater	0.6%	4,981	30	396
Miscellaneous	Hot Tub / Spa	3.4%	950	32	422
Miscellaneous	Furnace Fan	58.4%	139	81	1,053
Miscellaneous	Well Pump	23.4%	451	106	1,376
Miscellaneous	Miscellaneous	100.0%	817	817	10,632
Total				17,802	231,705

Table A-30 Washington Manufactured Home New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	35.3%	1,562.85	552.4
Cooling	Room AC	16.2%	471.04	76.3
Cooling	Air-Source Heat Pump	25.8%	1,763.50	454.9
Cooling	Geothermal Heat Pump	0.0%	1,552.50	-
Cooling	Evaporative AC	4.2%	554.00	23.1
Heating	Electric Room Heat	9.9%	8,337.50	826.1
Heating	Electric Furnace	59.6%	9,402.24	5,606.3
Heating	Air-Source Heat Pump	25.8%	7,134.00	1,840.3
Heating	Geothermal Heat Pump	0.0%	3,441.65	-
Water Heating	Water Heater (<= 55 Gal)	101.5%	2,636.35	2,675.2
Water Heating	Water Heater (> 55 Gal)	1.4%	2,800.04	38.8
Interior Lighting	General Service Screw-In	100.0%	479.57	479.6
Interior Lighting	Linear Lighting	100.0%	109.62	109.6
Interior Lighting	Exempted Screw-In	100.0%	90.82	90.8
Exterior Lighting	Screw-in	100.0%	132.03	132.0
Appliances	Clothes Washer	94.1%	77.53	73.0
Appliances	Clothes Dryer	99.8%	900.18	898.6
Appliances	Dishwasher	92.9%	114.19	106.1
Appliances	Refrigerator	100.0%	539.11	539.1
Appliances	Freezer	86.6%	485.05	420.0
Appliances	Second Refrigerator	41.9%	756.01	316.5
Appliances	Stove/Oven	97.6%	510.08	497.7
Appliances	Microwave	97.9%	122.32	119.8
Electronics	Personal Computers	56.3%	183.95	103.5
Electronics	Monitor	66.4%	77.67	51.6
Electronics	Laptops	129.6%	48.71	63.1
Electronics	TVs	281.5%	287.14	808.2
Electronics	Printer/Fax/Copier	82.7%	58.97	48.8
Electronics	Set-top Boxes/DVRs	297.9%	112.37	334.7
Electronics	Devices and Gadgets	100.0%	107.71	107.7
Miscellaneous	Electric Vehicles	0.1%	4,324.00	2.3
Miscellaneous	Pool Pump	5.0%	1,425.00	70.8
Miscellaneous	Pool Heater	0.6%	4,731.95	28.9
Miscellaneous	Hot Tub/Spa	5.1%	902.50	46.2
Miscellaneous	Furnace Fan	58.4%	124.81	72.8
Miscellaneous	Well Pump	34.6%	451.00	155.9
Miscellaneous	Miscellaneous	100.0%	816.86	816.9
Total				18,587

Table A-31 Wyoming Single Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	31.7%	1,215.50	385.3	30,772
Cooling	Room AC	12.6%	724.30	91.6	7,315
Cooling	Air-Source Heat Pump	1.9%	1,268.50	23.8	1,900
Cooling	Geothermal Heat Pump	0.5%	1,116.50	5.2	419
Cooling	Evaporative AC	15.8%	647.00	102.2	8,163
Heating	Electric Room Heat	10.3%	13,237.50	1,363.7	108,928
Heating	Electric Furnace	4.3%	14,198.88	615.9	49,194
Heating	Air-Source Heat Pump	1.9%	11,620.50	217.9	17,403
Heating	Geothermal Heat Pump	0.5%	4,615.50	21.7	1,731
Water Heating	Water Heater (<= 55 Gal)	25.7%	3,237.75	833.4	66,567
Water Heating	Water Heater (> 55 Gal)	3.4%	3,423.00	116.7	9,325
Interior Lighting	General Service Screw-In	100.0%	924.85	924.9	73,872
Interior Lighting	Linear Lighting	100.0%	118.64	118.6	9,476
Interior Lighting	Exempted Screw-In	100.0%	258.92	258.9	20,681
Exterior Lighting	Screw-in	100.0%	401.86	401.9	32,098
Appliances	Clothes Washer	97.9%	86.44	84.6	6,757
Appliances	Clothes Dryer	91.1%	745.17	678.7	54,211
Appliances	Dishwasher	84.2%	120.20	101.3	8,088
Appliances	Refrigerator	100.0%	601.61	601.6	48,053
Appliances	Freezer	70.3%	514.77	361.7	28,890
Appliances	Second Refrigerator	35.5%	840.00	298.5	23,841
Appliances	Stove/Oven	74.9%	438.16	328.2	26,218
Appliances	Microwave	97.8%	128.92	126.1	10,072
Electronics	Personal Computers	95.4%	184.27	175.7	14,035
Electronics	Monitor	114.7%	77.80	89.2	7,128
Electronics	Laptops	149.6%	48.79	73.0	5,831
Electronics	TVs	234.7%	228.52	536.3	42,840
Electronics	Printer/Fax/Copier	127.9%	58.97	75.4	6,024
Electronics	Set-top Boxes/DVRs	191.3%	112.56	215.3	17,199
Electronics	Devices and Gadgets	100.0%	107.89	107.9	8,617
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.3	107
Miscellaneous	Pool Pump	1.2%	1,500.00	18.1	1,447
Miscellaneous	Pool Heater	0.2%	4,981.00	7.8	627
Miscellaneous	Hot Tub/Spa	6.5%	950.00	61.9	4,947
Miscellaneous	Furnace Fan	59.7%	569.30	340.0	27,159
Miscellaneous	Well Pump	21.4%	561.00	119.8	9,571
Miscellaneous	Miscellaneous	100.0%	119.97	120.0	9,583
Total				10,004	799,089

Table A-32 Wyoming Single Family New Construction Market Profile

End Use	Technology	Saturation	UEC (kWh)	Intensity (kWh/HH)
Cooling	Central AC	44.3%	1,213.89	537.7
Cooling	Room AC	2.9%	709.99	20.4
Cooling	Air-Source Heat Pump	2.2%	1,267.30	27.5
Cooling	Geothermal Heat Pump	0.3%	1,093.29	3.7
Cooling	Evaporative AC	0.0%	647.00	-
Heating	Electric Room Heat	2.2%	13,237.50	294.2
Heating	Electric Furnace	5.5%	14,198.88	783.7
Heating	Air-Source Heat Pump	2.2%	11,606.62	251.8
Heating	Geothermal Heat Pump	0.4%	4,647.82	16.5
Water Heating	Water Heater (<= 55 Gal)	15.6%	3,225.16	501.6
Water Heating	Water Heater (> 55 Gal)	3.0%	3,423.00	102.0
Interior Lighting	General Service Screw-In	100.0%	1,302.23	1,302.2
Interior Lighting	Linear Lighting	100.0%	141.42	141.4
Interior Lighting	Exempted Screw-In	100.0%	471.85	471.9
Exterior Lighting	Screw-in	100.0%	507.95	507.9
Appliances	Clothes Washer	99.0%	77.79	77.0
Appliances	Clothes Dryer	89.8%	707.91	635.9
Appliances	Dishwasher	101.1%	114.19	115.4
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	54.5%	463.30	252.4
Appliances	Second Refrigerator	26.8%	756.00	202.4
Appliances	Stove/Oven	62.3%	416.25	259.1
Appliances	Microwave	97.8%	122.48	119.8
Electronics	Personal Computers	78.0%	184.27	143.7
Electronics	Monitor	92.7%	77.80	72.2
Electronics	Laptops	247.5%	48.79	120.8
Electronics	TVs	293.4%	228.52	670.4
Electronics	Printer/Fax/Copier	188.3%	58.97	111.0
Electronics	Set-top Boxes/DVRs	239.1%	112.56	269.2
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.3
Miscellaneous	Pool Pump	1.2%	1,425.00	17.2
Miscellaneous	Pool Heater	0.2%	4,731.95	7.5
Miscellaneous	Hot Tub/Spa	6.6%	902.50	59.8
Miscellaneous	Furnace Fan	59.7%	512.37	306.0
Miscellaneous	Well Pump	34.0%	561.00	191.0
Miscellaneous	Miscellaneous	100.0%	119.97	120.0
Total			9,364	

Table A-33 Wyoming Multi Family Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	18.3%	408.92	74.8	1,454
Cooling	Room AC	24.9%	321.54	80.0	1,555
Cooling	Air-Source Heat Pump	0.7%	408.96	2.8	55
Cooling	Geothermal Heat Pump	0.0%	359.95	-	-
Cooling	Evaporative AC	1.8%	267.00	4.8	94
Heating	Electric Room Heat	50.7%	3,253.00	1,650.7	32,065
Heating	Electric Furnace	1.6%	3,489.25	56.9	1,104
Heating	Air-Source Heat Pump	0.7%	2,069.79	14.3	278
Heating	Geothermal Heat Pump	0.0%	822.09	-	-
Water Heating	Water Heater (<= 55 Gal)	39.2%	2,090.17	819.1	15,911
Water Heating	Water Heater (> 55 Gal)	3.1%	2,209.76	68.0	1,320
Interior Lighting	General Service Screw-In	100.0%	443.62	443.6	8,617
Interior Lighting	Linear Lighting	100.0%	50.72	50.7	985
Interior Lighting	Exempted Screw-In	100.0%	25.74	25.7	500
Exterior Lighting	Screw-in	100.0%	129.16	129.2	2,509
Appliances	Clothes Washer	63.6%	82.10	52.2	1,014
Appliances	Clothes Dryer	60.7%	797.96	484.5	9,411
Appliances	Dishwasher	67.6%	120.20	81.3	1,579
Appliances	Refrigerator	100.0%	601.61	601.6	11,686
Appliances	Freezer	26.3%	514.77	135.6	2,634
Appliances	Second Refrigerator	8.5%	840.00	71.2	1,383
Appliances	Stove/Oven	88.3%	316.53	279.5	5,430
Appliances	Microwave	96.6%	128.92	124.6	2,420
Electronics	Personal Computers	63.0%	184.27	116.1	2,256
Electronics	Monitor	75.8%	77.80	59.0	1,146
Electronics	Laptops	134.1%	48.79	65.4	1,271
Electronics	TVs	167.3%	223.19	373.5	7,255
Electronics	Printer/Fax/Copier	90.2%	58.97	53.2	1,033
Electronics	Set-top Boxes/DVRs	137.3%	112.56	154.5	3,002
Electronics	Devices and Gadgets	100.0%	107.89	107.9	2,096
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-	-
Miscellaneous	Pool Pump	0.0%	1,500.00	-	-
Miscellaneous	Pool Heater	0.0%	4,981.00	-	-
Miscellaneous	Hot Tub/Spa	0.0%	950.00	-	-
Miscellaneous	Furnace Fan	34.1%	204.84	69.9	1,359
Miscellaneous	Well Pump	0.0%	556.00	-	-
Miscellaneous	Miscellaneous	100.0%	102.06	102.1	1,983
Total				6,353	123,404

Table A-34 Wyoming Multi Family New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	51.0%	389.90	198.8
Cooling	Room AC	21.9%	321.54	70.5
Cooling	Air-Source Heat Pump	0.1%	394.16	0.3
Cooling	Geothermal Heat Pump	0.0%	352.47	-
Cooling	Evaporative AC	1.8%	267.00	4.8
Heating	Electric Room Heat	48.8%	3,253.00	1,586.2
Heating	Electric Furnace	4.7%	3,489.25	162.7
Heating	Air-Source Heat Pump	0.0%	2,022.46	-
Heating	Geothermal Heat Pump	0.0%	827.85	-
Water Heating	Water Heater (<= 55 Gal)	23.2%	2,083.03	483.8
Water Heating	Water Heater (> 55 Gal)	3.1%	2,209.76	68.0
Interior Lighting	General Service Screw-In	100.0%	739.35	739.4
Interior Lighting	Linear Lighting	100.0%	50.33	50.3
Interior Lighting	Exempted Screw-In	100.0%	58.31	58.3
Exterior Lighting	Screw-in	100.0%	202.59	202.6
Appliances	Clothes Washer	63.6%	73.89	47.0
Appliances	Clothes Dryer	97.4%	758.06	738.5
Appliances	Dishwasher	81.2%	114.19	92.7
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	3.4%	463.27	15.7
Appliances	Second Refrigerator	25.4%	756.00	192.2
Appliances	Stove/Oven	77.3%	300.70	232.6
Appliances	Microwave	96.6%	122.48	118.4
Electronics	Personal Computers	83.1%	184.27	153.2
Electronics	Monitor	108.3%	77.80	84.2
Electronics	Laptops	194.1%	48.79	94.7
Electronics	TVs	209.2%	223.19	466.9
Electronics	Printer/Fax/Copier	119.0%	58.97	70.2
Electronics	Set-top Boxes/DVRs	171.6%	112.56	193.2
Electronics	Devices and Gadgets	100.0%	107.89	107.9
Miscellaneous	Electric Vehicles	0.0%	4,324.00	-
Miscellaneous	Pool Pump	0.0%	1,425.00	-
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	0.0%	902.50	-
Miscellaneous	Furnace Fan	34.1%	184.36	62.9
Miscellaneous	Well Pump	0.0%	556.00	-
Total			6,939	

Table A-35 Wyoming Manufactured Home Existing Market Profile

End Use	Technology	Saturation	UEC	Intensity	Usage
			(kWh)	(kWh/HH)	(MWh)
Cooling	Central AC	24.4%	1,347.50	328.4	5,085
Cooling	Room AC	16.1%	1,021.00	164.5	2,548
Cooling	Air-Source Heat Pump	0.5%	1,347.50	6.4	99
Cooling	Geothermal Heat Pump	0.0%	1,186.00	-	-
Cooling	Evaporative AC	30.3%	554.00	167.6	2,596
Heating	Electric Room Heat	2.8%	11,087.00	314.3	4,868
Heating	Electric Furnace	11.0%	11,892.20	1,304.4	20,200
Heating	Air-Source Heat Pump	0.5%	12,812.50	60.7	941
Heating	Geothermal Heat Pump	0.0%	4,469.00	-	-
Water Heating	Water Heater (<= 55 Gal)	40.1%	3,346.00	1,340.9	20,765
Water Heating	Water Heater (> 55 Gal)	0.6%	3,537.44	20.8	322
Interior Lighting	General Service Screw-In	100.0%	532.52	532.5	8,247
Interior Lighting	Linear Lighting	100.0%	65.06	65.1	1,008
Interior Lighting	Exempted Screw-In	100.0%	113.82	113.8	1,763
Exterior Lighting	Screw-in	100.0%	134.15	134.1	2,077
Appliances	Clothes Washer	95.5%	86.29	82.4	1,276
Appliances	Clothes Dryer	91.7%	842.53	772.8	11,967
Appliances	Dishwasher	70.3%	120.20	84.5	1,308
Appliances	Refrigerator	100.0%	601.61	601.6	9,317
Appliances	Freezer	65.4%	514.77	336.9	5,217
Appliances	Second Refrigerator	23.4%	840.00	196.8	3,048
Appliances	Stove/Oven	39.4%	311.84	122.7	1,900
Appliances	Microwave	98.6%	128.92	127.2	1,969
Electronics	Personal Computers	76.5%	184.27	141.0	2,184
Electronics	Monitor	92.0%	77.80	71.6	1,109
Electronics	Laptops	61.1%	48.79	29.8	461
Electronics	TVs	223.5%	210.29	470.1	7,280
Electronics	Printer/Fax/Copier	102.6%	58.97	60.5	937
Electronics	Set-top Boxes/DVRs	204.5%	112.56	230.1	3,564
Electronics	Devices and Gadgets	100.0%	107.88	107.9	1,671
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.1	17
Miscellaneous	Pool Pump	0.0%	1,500.00	-	-
Miscellaneous	Pool Heater	0.0%	4,981.00	-	-
Miscellaneous	Hot Tub/Spa	3.1%	950.00	29.6	458
Miscellaneous	Furnace Fan	66.9%	323.02	216.1	3,346
Miscellaneous	Well Pump	20.1%	451.00	90.8	1,406
Miscellaneous	Miscellaneous	100.0%	318.47	318.5	4,932
Total				8,645	133,883

Table A-36 Wyoming Manufactured Home New Construction Market Profile

End Use	Technology	Saturation	UEC	Intensity
			(kWh)	(kWh/HH)
Cooling	Central AC	25.4%	1,330.02	337.6
Cooling	Room AC	12.2%	997.75	121.6
Cooling	Air-Source Heat Pump	0.5%	1,308.67	6.3
Cooling	Geothermal Heat Pump	0.0%	1,161.62	-
Cooling	Evaporative AC	28.6%	554.00	158.6
Heating	Electric Room Heat	2.5%	11,087.00	272.9
Heating	Electric Furnace	11.6%	11,892.20	1,380.1
Heating	Air-Source Heat Pump	0.5%	12,335.64	59.3
Heating	Geothermal Heat Pump	0.0%	4,514.67	-
Water Heating	Water Heater (<= 55 Gal)	43.2%	3,332.74	1,438.3
Water Heating	Water Heater (> 55 Gal)	0.6%	3,537.44	20.8
Interior Lighting	General Service Screw-In	100.0%	765.95	766.0
Interior Lighting	Linear Lighting	100.0%	71.37	71.4
Interior Lighting	Exempted Screw-In	100.0%	228.06	228.1
Exterior Lighting	Screw-in	100.0%	212.13	212.1
Appliances	Clothes Washer	95.1%	77.66	73.8
Appliances	Clothes Dryer	99.5%	800.41	796.5
Appliances	Dishwasher	84.3%	114.19	96.3
Appliances	Refrigerator	100.0%	541.45	541.5
Appliances	Freezer	102.6%	463.25	475.4
Appliances	Second Refrigerator	36.2%	756.00	273.9
Appliances	Stove/Oven	40.2%	296.25	119.1
Appliances	Microwave	98.6%	122.48	120.8
Electronics	Personal Computers	84.4%	184.27	155.4
Electronics	Monitor	99.5%	77.80	77.4
Electronics	Laptops	88.1%	48.79	43.0
Electronics	TVs	282.0%	210.29	593.0
Electronics	Printer/Fax/Copier	113.1%	58.97	66.7
Electronics	Set-top Boxes/DVRs	257.9%	112.56	290.3
Electronics	Devices and Gadgets	100.0%	107.88	107.9
Miscellaneous	Electric Vehicles	0.0%	4,324.00	1.1
Miscellaneous	Pool Pump	0.0%	1,425.00	-
Miscellaneous	Pool Heater	0.0%	4,731.95	-
Miscellaneous	Hot Tub/Spa	4.7%	902.50	42.1
Miscellaneous	Furnace Fan	66.9%	290.72	194.5
Miscellaneous	Well Pump	29.7%	451.00	133.9
Miscellaneous	Miscellaneous	100.0%	318.47	318.5
Total				9,594

COMMERCIAL MARKET PROFILES

The average size of the prototypical commercial building is assumed to be the same across all states, as shown in the table below.

Table A-37 Commercial Building Assumed Average Square Feet by Segment

Segment	Average Square Feet (all states)
Large Office	50,000
Small Office	10,000
Large Retail	100,000
Small Retail	15,000
Restaurant	5,500
Grocery	20,000
Health	30,000
College	30,000
School	30,000
Lodging	55,000
Warehouse	100,000
Warehouse, Controlled Atm.	100,000
Miscellaneous	15,000

Table A-38 California Large Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.5%	4.17	0.65	166.0
Cooling	Water-Cooled Chiller	9.5%	4.28	0.41	104.7
Cooling	RTU	50.2%	4.50	2.26	580.1
Cooling	Room AC	2.7%	4.80	0.13	32.7
Cooling	Evaporative AC	0.1%	1.80	0.00	0.2
Cooling	Air-Source Heat Pump	7.4%	4.50	0.33	85.5
Cooling	Geothermal Heat Pump	6.7%	2.74	0.18	47.3
Heating	Electric Furnace	2.1%	3.04	0.06	16.3
Heating	Electric Room Heat	40.1%	2.90	1.16	298.8
Heating	Air-Source Heat Pump	7.4%	2.71	0.20	51.5
Heating	Geothermal Heat Pump	6.7%	2.47	0.17	42.5
Ventilation	Ventilation	100.0%	2.54	2.54	653.3
Water Heating	Water Heater	55.5%	0.89	0.50	127.4
Interior Lighting	Screw-in	100.0%	0.35	0.35	90.3
Interior Lighting	High-Bay Fixtures	100.0%	1.01	1.01	259.3
Interior Lighting	Linear Lighting	100.0%	1.72	1.72	442.8
Exterior Lighting	Screw-in	100.0%	0.10	0.10	24.5
Exterior Lighting	Area Lighting	100.0%	1.28	1.28	328.1
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18	46.2
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.12	0.00	0.6
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00	1.0
Refrigeration	Glass Door Display	77.4%	0.03	0.02	5.6
Refrigeration	Open Display Case	77.4%	0.17	0.13	33.1
Refrigeration	Icemaker	44.9%	0.05	0.02	5.3
Refrigeration	Vending Machine	44.9%	0.04	0.02	5.0
Food Preparation	Oven	66.0%	0.08	0.05	12.9
Food Preparation	Fryer	76.4%	0.11	0.08	21.5
Food Preparation	Dishwasher	43.1%	0.15	0.07	16.7
Food Preparation	Hot Food Container	43.1%	0.02	0.01	2.3
Food Preparation	Steamer	43.1%	0.11	0.05	12.3
Office Equipment	Desktop Computer	100.0%	2.02	2.02	518.3
Office Equipment	Laptop	100.0%	0.31	0.31	80.0
Office Equipment	Server	100.0%	0.20	0.20	50.8
Office Equipment	Monitor	100.0%	0.36	0.36	91.5
Office Equipment	Printer/Copier/Fax	100.0%	0.18	0.18	47.3
Office Equipment	POS Terminal	40.0%	0.03	0.01	2.7
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23	60.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06	272.4
Total				18.06	4,637.1

Table A-39 California Large Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.5%	3.95	0.61
Cooling	Water-Cooled Chiller	9.5%	3.83	0.37
Cooling	RTU	50.2%	3.80	1.90
Cooling	Room AC	2.7%	3.81	0.10
Cooling	Evaporative AC	0.1%	1.80	0.00
Cooling	Air-Source Heat Pump	7.4%	3.75	0.28
Cooling	Geothermal Heat Pump	6.7%	2.36	0.16
Heating	Electric Furnace	2.1%	2.85	0.06
Heating	Electric Room Heat	40.1%	2.71	1.09
Heating	Air-Source Heat Pump	7.4%	2.47	0.18
Heating	Geothermal Heat Pump	6.7%	2.43	0.16
Ventilation	Ventilation	100.0%	1.98	1.98
Water Heating	Water Heater	55.5%	0.89	0.49
Interior Lighting	Screw-in	100.0%	0.36	0.36
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29
Interior Lighting	Linear Lighting	100.0%	1.76	1.76
Exterior Lighting	Screw-in	100.0%	0.09	0.09
Exterior Lighting	Area Lighting	100.0%	1.39	1.39
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.11	0.00
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.02	0.00
Refrigeration	Glass Door Display	77.4%	0.03	0.02
Refrigeration	Open Display Case	77.4%	0.15	0.12
Refrigeration	Icemaker	44.9%	0.04	0.02
Refrigeration	Vending Machine	44.9%	0.04	0.02
Food Preparation	Oven	66.0%	0.08	0.05
Food Preparation	Fryer	76.4%	0.10	0.08
Food Preparation	Dishwasher	43.1%	0.14	0.06
Food Preparation	Hot Food Container	43.1%	0.02	0.01
Food Preparation	Steamer	43.1%	0.10	0.04
Office Equipment	Desktop Computer	100.0%	2.02	2.02
Office Equipment	Laptop	100.0%	0.31	0.31
Office Equipment	Server	100.0%	0.20	0.20
Office Equipment	Monitor	100.0%	0.36	0.36
Office Equipment	Printer/Copier/Fax	100.0%	0.18	0.18
Office Equipment	POS Terminal	40.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06
Total			17.25	

Table A-40 California Small Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	4.58	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	4.82	0.00	0.0
Cooling	RTU	67.3%	5.28	3.55	13,903.9
Cooling	Room AC	2.4%	5.62	0.13	522.4
Cooling	Evaporative AC	0.0%	2.11	0.00	3.9
Cooling	Air-Source Heat Pump	11.2%	5.28	0.59	2,304.1
Cooling	Geothermal Heat Pump	9.6%	3.21	0.31	1,207.0
Heating	Electric Furnace	1.5%	4.01	0.06	234.1
Heating	Electric Room Heat	28.7%	3.82	1.10	4,295.7
Heating	Air-Source Heat Pump	11.2%	3.53	0.39	1,540.8
Heating	Geothermal Heat Pump	9.6%	3.06	0.29	1,147.2
Ventilation	Ventilation	100.0%	0.90	0.90	3,541.3
Water Heating	Water Heater	66.7%	0.72	0.48	1,880.8
Interior Lighting	Screw-in	100.0%	0.38	0.38	1,484.9
Interior Lighting	High-Bay Fixtures	100.0%	1.51	1.51	5,911.5
Interior Lighting	Linear Lighting	100.0%	1.54	1.54	6,036.1
Exterior Lighting	Screw-in	100.0%	0.16	0.16	636.0
Exterior Lighting	Area Lighting	100.0%	1.58	1.58	6,176.2
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07	284.7
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.26	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	14.9%	0.06	0.01	33.5
Refrigeration	Glass Door Display	2.1%	0.06	0.00	4.9
Refrigeration	Open Display Case	2.1%	0.35	0.01	29.1
Refrigeration	Icemaker	5.1%	0.10	0.00	19.3
Refrigeration	Vending Machine	5.1%	0.05	0.00	9.1
Food Preparation	Oven	3.6%	0.14	0.01	20.6
Food Preparation	Fryer	3.6%	0.21	0.01	29.7
Food Preparation	Dishwasher	3.6%	0.29	0.01	40.9
Food Preparation	Hot Food Container	3.6%	0.04	0.00	5.6
Food Preparation	Steamer	3.6%	0.21	0.01	30.0
Office Equipment	Desktop Computer	100.0%	0.96	0.96	3,741.4
Office Equipment	Laptop	100.0%	0.15	0.15	577.7
Office Equipment	Server	100.0%	0.28	0.28	1,100.4
Office Equipment	Monitor	100.0%	0.17	0.17	660.2
Office Equipment	Printer/Copier/Fax	100.0%	0.13	0.13	512.1
Office Equipment	POS Terminal	20.0%	0.08	0.02	58.8
Miscellaneous	Non-HVAC Motors	22.0%	0.24	0.05	208.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.04	1.04	4,065.7
Total				15.90	62,258.0

Table A-41 California Small Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	4.34	0.00
Cooling	Water-Cooled Chiller	0.0%	4.31	0.00
Cooling	RTU	67.3%	4.22	2.84
Cooling	Room AC	2.4%	4.47	0.11
Cooling	Evaporative AC	0.0%	2.11	0.00
Cooling	Air-Source Heat Pump	11.2%	4.39	0.49
Cooling	Geothermal Heat Pump	9.6%	2.63	0.25
Heating	Electric Furnace	1.5%	3.75	0.06
Heating	Electric Room Heat	28.7%	3.57	1.03
Heating	Air-Source Heat Pump	11.2%	3.20	0.36
Heating	Geothermal Heat Pump	9.6%	2.37	0.23
Ventilation	Ventilation	100.0%	0.65	0.65
Water Heating	Water Heater	66.7%	0.72	0.48
Interior Lighting	Screw-in	100.0%	0.41	0.41
Interior Lighting	High-Bay Fixtures	100.0%	1.96	1.96
Interior Lighting	Linear Lighting	100.0%	1.52	1.52
Exterior Lighting	Screw-in	100.0%	0.17	0.17
Exterior Lighting	Area Lighting	100.0%	1.66	1.66
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.23	0.00
Refrigeration	Reach-in Refrigerator/Freezer	14.9%	0.05	0.01
Refrigeration	Glass Door Display	2.1%	0.05	0.00
Refrigeration	Open Display Case	2.1%	0.31	0.01
Refrigeration	Icemaker	5.1%	0.08	0.00
Refrigeration	Vending Machine	5.1%	0.04	0.00
Food Preparation	Oven	3.6%	0.15	0.01
Food Preparation	Fryer	3.6%	0.19	0.01
Food Preparation	Dishwasher	3.6%	0.26	0.01
Food Preparation	Hot Food Container	3.6%	0.04	0.00
Food Preparation	Steamer	3.6%	0.19	0.01
Office Equipment	Desktop Computer	100.0%	0.96	0.96
Office Equipment	Laptop	100.0%	0.15	0.15
Office Equipment	Server	100.0%	0.28	0.28
Office Equipment	Monitor	100.0%	0.17	0.17
Office Equipment	Printer/Copier/Fax	100.0%	0.13	0.13
Office Equipment	POS Terminal	20.0%	0.08	0.02
Miscellaneous	Non-HVAC Motors	22.0%	0.24	0.05
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.04	1.04
Total				15.12

Table A-42 California Large Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.9%	4.28	0.04	16.2
Cooling	Water-Cooled Chiller	0.6%	4.50	0.03	10.5
Cooling	RTU	63.7%	4.93	3.14	1,308.0
Cooling	Room AC	2.8%	5.25	0.15	61.0
Cooling	Evaporative AC	3.3%	1.97	0.06	26.8
Cooling	Air-Source Heat Pump	2.4%	4.93	0.12	49.8
Cooling	Geothermal Heat Pump	2.0%	3.00	0.06	25.0
Heating	Electric Furnace	1.7%	3.59	0.06	25.7
Heating	Electric Room Heat	20.1%	3.42	0.69	285.9
Heating	Air-Source Heat Pump	2.4%	3.06	0.07	30.9
Heating	Geothermal Heat Pump	2.0%	2.61	0.05	21.7
Ventilation	Ventilation	100.0%	3.40	3.40	1,417.0
Water Heating	Water Heater	51.9%	1.20	0.62	258.2
Interior Lighting	Screw-in	100.0%	0.97	0.97	404.6
Interior Lighting	High-Bay Fixtures	100.0%	1.99	1.99	829.2
Interior Lighting	Linear Lighting	100.0%	3.00	3.00	1,251.0
Exterior Lighting	Screw-in	100.0%	0.24	0.24	99.1
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	351.7
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	33.3
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.40	0.01	3.3
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.09	0.01	5.2
Refrigeration	Glass Door Display	81.7%	0.09	0.07	31.0
Refrigeration	Open Display Case	81.7%	0.54	0.44	183.7
Refrigeration	Icemaker	52.4%	0.30	0.16	65.1
Refrigeration	Vending Machine	52.4%	0.14	0.07	30.6
Food Preparation	Oven	48.9%	0.19	0.09	37.9
Food Preparation	Fryer	45.2%	0.27	0.12	50.7
Food Preparation	Dishwasher	39.6%	0.37	0.15	61.1
Food Preparation	Hot Food Container	39.6%	0.05	0.02	8.4
Food Preparation	Steamer	39.6%	0.27	0.11	44.8
Office Equipment	Desktop Computer	100.0%	0.35	0.35	145.3
Office Equipment	Laptop	100.0%	0.05	0.05	22.4
Office Equipment	Server	82.0%	0.05	0.04	17.5
Office Equipment	Monitor	100.0%	0.06	0.06	25.6
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05	19.9
Office Equipment	POS Terminal	100.0%	0.01	0.01	3.4
Miscellaneous	Non-HVAC Motors	40.2%	0.29	0.12	48.7
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.20	1.20	500.5
Total				18.75	7,810.6

Table A-43 California Large Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.9%	3.57	0.03
Cooling	Water-Cooled Chiller	0.6%	3.66	0.02
Cooling	RTU	63.7%	4.67	2.98
Cooling	Room AC	2.8%	4.17	0.12
Cooling	Evaporative AC	3.3%	1.97	0.06
Cooling	Air-Source Heat Pump	2.4%	4.10	0.10
Cooling	Geothermal Heat Pump	2.0%	1.98	0.04
Heating	Electric Furnace	1.7%	3.36	0.06
Heating	Electric Room Heat	20.1%	3.20	0.64
Heating	Air-Source Heat Pump	2.4%	2.78	0.07
Heating	Geothermal Heat Pump	2.0%	1.19	0.02
Ventilation	Ventilation	100.0%	2.46	2.46
Water Heating	Water Heater	51.9%	1.16	0.60
Interior Lighting	Screw-in	100.0%	0.61	0.61
Interior Lighting	High-Bay Fixtures	100.0%	2.33	2.33
Interior Lighting	Linear Lighting	100.0%	3.04	3.04
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.36	0.01
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.08	0.01
Refrigeration	Glass Door Display	81.7%	0.08	0.07
Refrigeration	Open Display Case	81.7%	0.49	0.40
Refrigeration	Icemaker	52.4%	0.26	0.14
Refrigeration	Vending Machine	52.4%	0.13	0.07
Food Preparation	Oven	48.9%	0.15	0.07
Food Preparation	Fryer	45.2%	0.24	0.11
Food Preparation	Dishwasher	39.6%	0.33	0.13
Food Preparation	Hot Food Container	39.6%	0.05	0.02
Food Preparation	Steamer	39.6%	0.24	0.10
Office Equipment	Desktop Computer	100.0%	0.35	0.35
Office Equipment	Laptop	100.0%	0.05	0.05
Office Equipment	Server	82.0%	0.05	0.04
Office Equipment	Monitor	100.0%	0.06	0.06
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05
Office Equipment	POS Terminal	100.0%	0.01	0.01
Miscellaneous	Non-HVAC Motors	40.2%	0.29	0.12
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.20	1.20
Total			17.50	

Table A-44 California Small Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.75	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.95	0.00	0.0
Cooling	RTU	61.2%	4.32	2.65	3,626.5
Cooling	Room AC	2.0%	4.45	0.09	121.6
Cooling	Evaporative AC	0.0%	1.73	0.00	0.9
Cooling	Air-Source Heat Pump	6.6%	4.32	0.29	390.8
Cooling	Geothermal Heat Pump	4.6%	2.63	0.12	164.0
Heating	Electric Furnace	0.6%	4.03	0.02	34.2
Heating	Electric Room Heat	12.0%	3.84	0.46	628.3
Heating	Air-Source Heat Pump	6.6%	2.89	0.19	261.9
Heating	Geothermal Heat Pump	4.6%	2.20	0.10	137.0
Ventilation	Ventilation	100.0%	1.55	1.55	2,124.7
Water Heating	Water Heater	60.0%	1.24	0.74	1,015.6
Interior Lighting	Screw-in	100.0%	0.64	0.64	878.6
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31	1,800.6
Interior Lighting	Linear Lighting	100.0%	1.98	1.98	2,716.3
Exterior Lighting	Screw-in	100.0%	0.24	0.24	326.1
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	1,157.2
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	109.5
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.30	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	6.5%	0.07	0.00	6.0
Refrigeration	Glass Door Display	4.3%	0.07	0.00	4.1
Refrigeration	Open Display Case	4.3%	0.41	0.02	24.3
Refrigeration	Icemaker	5.1%	0.23	0.01	15.7
Refrigeration	Vending Machine	5.1%	0.11	0.01	7.4
Food Preparation	Oven	3.6%	0.25	0.01	12.3
Food Preparation	Fryer	3.6%	0.36	0.01	17.8
Food Preparation	Dishwasher	3.6%	0.49	0.02	24.6
Food Preparation	Hot Food Container	3.6%	0.07	0.00	3.4
Food Preparation	Steamer	3.6%	0.36	0.01	18.0
Office Equipment	Desktop Computer	100.0%	0.14	0.14	185.9
Office Equipment	Laptop	100.0%	0.02	0.02	28.7
Office Equipment	Server	100.0%	0.16	0.16	218.7
Office Equipment	Monitor	100.0%	0.02	0.02	32.8
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	20.4
Office Equipment	POS Terminal	100.0%	0.04	0.04	58.4
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04	60.0
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85	1,171.4
Total				12.70	17,403.7

Table A-45 California Small Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.13	0.00
Cooling	Water-Cooled Chiller	0.0%	3.21	0.00
Cooling	RTU	61.2%	4.14	2.54
Cooling	Room AC	2.0%	3.54	0.07
Cooling	Evaporative AC	0.0%	1.73	0.00
Cooling	Air-Source Heat Pump	6.6%	3.59	0.24
Cooling	Geothermal Heat Pump	4.6%	1.76	0.08
Heating	Electric Furnace	0.6%	3.77	0.02
Heating	Electric Room Heat	12.0%	3.59	0.43
Heating	Air-Source Heat Pump	6.6%	2.63	0.17
Heating	Geothermal Heat Pump	4.6%	1.15	0.05
Ventilation	Ventilation	100.0%	1.17	1.17
Water Heating	Water Heater	60.0%	1.20	0.72
Interior Lighting	Screw-in	100.0%	0.40	0.40
Interior Lighting	High-Bay Fixtures	100.0%	1.54	1.54
Interior Lighting	Linear Lighting	100.0%	2.00	2.00
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.27	0.00
Refrigeration	Reach-in Refrigerator/Freezer	6.5%	0.06	0.00
Refrigeration	Glass Door Display	4.3%	0.06	0.00
Refrigeration	Open Display Case	4.3%	0.37	0.02
Refrigeration	Icemaker	5.1%	0.20	0.01
Refrigeration	Vending Machine	5.1%	0.09	0.00
Food Preparation	Oven	3.6%	0.20	0.01
Food Preparation	Fryer	3.6%	0.32	0.01
Food Preparation	Dishwasher	3.6%	0.44	0.02
Food Preparation	Hot Food Container	3.6%	0.06	0.00
Food Preparation	Steamer	3.6%	0.32	0.01
Office Equipment	Desktop Computer	100.0%	0.14	0.14
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.16	0.16
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	100.0%	0.04	0.04
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85
Total			12.15	

Table A-46 California Restaurant Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	6.59	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	6.45	0.00	0.0
Cooling	RTU	71.7%	7.47	5.36	1,971.0
Cooling	Room AC	2.6%	7.96	0.21	76.8
Cooling	Evaporative AC	3.2%	2.99	0.10	35.6
Cooling	Air-Source Heat Pump	7.4%	7.47	0.55	203.3
Cooling	Geothermal Heat Pump	4.0%	4.55	0.18	67.0
Heating	Electric Furnace	2.5%	5.90	0.15	54.7
Heating	Electric Room Heat	0.2%	5.61	0.01	4.7
Heating	Air-Source Heat Pump	7.4%	3.96	0.29	107.7
Heating	Geothermal Heat Pump	4.0%	3.00	0.12	44.1
Ventilation	Ventilation	100.0%	2.25	2.25	829.1
Water Heating	Water Heater	56.3%	7.47	4.20	1,544.4
Interior Lighting	Screw-in	100.0%	2.28	2.28	838.1
Interior Lighting	High-Bay Fixtures	100.0%	2.92	2.92	1,073.3
Interior Lighting	Linear Lighting	100.0%	1.87	1.87	686.6
Exterior Lighting	Screw-in	100.0%	0.28	0.28	101.5
Exterior Lighting	Area Lighting	100.0%	2.14	2.14	787.2
Exterior Lighting	Linear Lighting	100.0%	0.40	0.40	148.4
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	6.35	4.70	1,727.8
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	2.85	0.20	73.4
Refrigeration	Glass Door Display	5.2%	1.46	0.08	28.0
Refrigeration	Open Display Case	5.2%	8.67	0.45	165.8
Refrigeration	Icemaker	97.3%	2.40	2.33	857.1
Refrigeration	Vending Machine	97.3%	1.13	1.09	402.5
Food Preparation	Oven	21.0%	3.80	0.80	293.7
Food Preparation	Fryer	82.0%	5.50	4.51	1,658.4
Food Preparation	Dishwasher	52.5%	3.79	1.99	730.8
Food Preparation	Hot Food Container	84.0%	0.52	0.44	160.0
Food Preparation	Steamer	16.0%	2.78	0.44	163.3
Office Equipment	Desktop Computer	100.0%	0.28	0.28	103.5
Office Equipment	Laptop	100.0%	0.03	0.03	12.8
Office Equipment	Server	50.0%	0.33	0.17	60.9
Office Equipment	Monitor	100.0%	0.05	0.05	18.3
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	22.7
Office Equipment	POS Terminal	100.0%	0.09	0.09	32.5
Miscellaneous	Non-HVAC Motors	20.0%	0.84	0.17	62.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	2.90	2.90	1,067.9
Total				44.10	16,214.9

Table A-47 California Restaurant New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	6.25	0.00
Cooling	Water-Cooled Chiller	0.0%	5.88	0.00
Cooling	RTU	71.7%	7.08	5.08
Cooling	Room AC	2.6%	6.33	0.17
Cooling	Evaporative AC	3.2%	2.99	0.10
Cooling	Air-Source Heat Pump	7.4%	6.99	0.52
Cooling	Geothermal Heat Pump	4.0%	4.42	0.18
Heating	Electric Furnace	2.5%	5.51	0.14
Heating	Electric Room Heat	0.2%	5.25	0.01
Heating	Air-Source Heat Pump	7.4%	3.32	0.25
Heating	Geothermal Heat Pump	4.0%	2.93	0.12
Ventilation	Ventilation	100.0%	1.77	1.77
Water Heating	Water Heater	56.3%	7.43	4.18
Interior Lighting	Screw-in	100.0%	1.46	1.46
Interior Lighting	High-Bay Fixtures	100.0%	3.38	3.38
Interior Lighting	Linear Lighting	100.0%	1.91	1.91
Exterior Lighting	Screw-in	100.0%	0.25	0.25
Exterior Lighting	Area Lighting	100.0%	2.49	2.49
Exterior Lighting	Linear Lighting	100.0%	0.41	0.41
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	5.72	4.23
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	2.57	0.18
Refrigeration	Glass Door Display	5.2%	1.32	0.07
Refrigeration	Open Display Case	5.2%	7.80	0.41
Refrigeration	Icemaker	97.3%	2.11	2.05
Refrigeration	Vending Machine	97.3%	1.01	0.98
Food Preparation	Oven	21.0%	3.13	0.66
Food Preparation	Fryer	82.0%	4.95	4.06
Food Preparation	Dishwasher	52.5%	3.41	1.79
Food Preparation	Hot Food Container	84.0%	0.47	0.39
Food Preparation	Steamer	16.0%	2.50	0.40
Office Equipment	Desktop Computer	100.0%	0.28	0.28
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	50.0%	0.33	0.17
Office Equipment	Monitor	100.0%	0.05	0.05
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06
Office Equipment	POS Terminal	100.0%	0.09	0.09
Miscellaneous	Non-HVAC Motors	20.0%	0.84	0.17
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	2.90	2.90
Total				41.37

Table A-48 California Grocery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.5%	7.11	0.04	13.6
Cooling	Water-Cooled Chiller	0.3%	7.48	0.02	8.8
Cooling	RTU	74.7%	8.19	6.12	2,166.3
Cooling	Room AC	2.2%	8.72	0.19	68.9
Cooling	Evaporative AC	1.2%	3.28	0.04	14.3
Cooling	Air-Source Heat Pump	4.3%	7.49	0.32	113.6
Cooling	Geothermal Heat Pump	0.0%	2.70	0.00	0.0
Heating	Electric Furnace	9.4%	4.96	0.47	164.8
Heating	Electric Room Heat	1.7%	4.72	0.08	28.9
Heating	Air-Source Heat Pump	4.3%	2.34	0.10	35.6
Heating	Geothermal Heat Pump	0.0%	1.65	0.00	0.0
Ventilation	Ventilation	100.0%	2.17	2.17	769.5
Water Heating	Water Heater	65.0%	2.47	1.61	569.0
Interior Lighting	Screw-in	100.0%	0.68	0.68	239.6
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02	715.1
Interior Lighting	Linear Lighting	100.0%	5.01	5.01	1,773.7
Exterior Lighting	Screw-in	100.0%	0.36	0.36	128.1
Exterior Lighting	Area Lighting	100.0%	1.78	1.78	631.3
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38	135.1
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	5.81	0.93	328.8
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.37	0.31	109.5
Refrigeration	Glass Door Display	94.9%	3.82	3.63	1,283.7
Refrigeration	Open Display Case	94.9%	22.65	21.49	7,608.8
Refrigeration	Icemaker	98.9%	0.31	0.31	109.6
Refrigeration	Vending Machine	98.9%	0.29	0.29	102.9
Food Preparation	Oven	11.0%	0.69	0.08	26.8
Food Preparation	Fryer	87.0%	0.99	0.87	306.2
Food Preparation	Dishwasher	54.9%	1.37	0.75	265.8
Food Preparation	Hot Food Container	73.0%	0.19	0.14	48.4
Food Preparation	Steamer	20.0%	1.00	0.20	71.0
Office Equipment	Desktop Computer	100.0%	0.17	0.17	61.1
Office Equipment	Laptop	64.0%	0.03	0.02	6.0
Office Equipment	Server	100.0%	0.10	0.10	36.0
Office Equipment	Monitor	100.0%	0.03	0.03	10.8
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	6.7
Office Equipment	POS Terminal	100.0%	0.07	0.07	24.0
Miscellaneous	Non-HVAC Motors	34.6%	0.81	0.28	99.5
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.52	3.52	1,245.7
Total				54.60	19,327.6

Table A-49 California Grocery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.5%	5.93	0.03
Cooling	Water-Cooled Chiller	0.3%	6.08	0.02
Cooling	RTU	74.7%	8.78	6.56
Cooling	Room AC	2.2%	6.93	0.15
Cooling	Evaporative AC	1.2%	3.28	0.04
Cooling	Air-Source Heat Pump	4.3%	6.24	0.27
Cooling	Geothermal Heat Pump	0.0%	1.79	0.00
Heating	Electric Furnace	9.4%	4.64	0.44
Heating	Electric Room Heat	1.7%	4.42	0.08
Heating	Air-Source Heat Pump	4.3%	2.13	0.09
Heating	Geothermal Heat Pump	0.0%	2.45	0.00
Ventilation	Ventilation	100.0%	1.37	1.37
Water Heating	Water Heater	65.0%	2.46	1.60
Interior Lighting	Screw-in	100.0%	0.51	0.51
Interior Lighting	High-Bay Fixtures	100.0%	2.28	2.28
Interior Lighting	Linear Lighting	100.0%	5.20	5.20
Exterior Lighting	Screw-in	100.0%	0.30	0.30
Exterior Lighting	Area Lighting	100.0%	1.98	1.98
Exterior Lighting	Linear Lighting	100.0%	0.39	0.39
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	5.23	0.84
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.34	0.28
Refrigeration	Glass Door Display	94.9%	3.44	3.26
Refrigeration	Open Display Case	94.9%	20.38	19.35
Refrigeration	Icemaker	98.9%	0.30	0.30
Refrigeration	Vending Machine	98.9%	0.27	0.27
Food Preparation	Oven	11.0%	0.47	0.05
Food Preparation	Fryer	87.0%	0.89	0.78
Food Preparation	Dishwasher	54.9%	1.23	0.68
Food Preparation	Hot Food Container	73.0%	0.17	0.12
Food Preparation	Steamer	20.0%	0.90	0.18
Office Equipment	Desktop Computer	100.0%	0.17	0.17
Office Equipment	Laptop	64.0%	0.03	0.02
Office Equipment	Server	100.0%	0.10	0.10
Office Equipment	Monitor	100.0%	0.03	0.03
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02
Office Equipment	POS Terminal	100.0%	0.07	0.07
Miscellaneous	Non-HVAC Motors	34.6%	0.81	0.28
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.52	3.52
Total			51.61	

Table A-50 California Health Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.5%	7.10	1.17	593.4
Cooling	Water-Cooled Chiller	66.0%	8.58	5.67	2,867.3
Cooling	RTU	10.9%	7.43	0.81	407.9
Cooling	Room AC	0.4%	7.91	0.03	15.2
Cooling	Evaporative AC	0.0%	2.97	0.00	0.0
Cooling	Air-Source Heat Pump	1.6%	7.41	0.12	59.1
Cooling	Geothermal Heat Pump	0.9%	4.51	0.04	19.8
Heating	Electric Furnace	2.7%	10.14	0.27	138.7
Heating	Electric Room Heat	0.1%	9.66	0.01	2.7
Heating	Air-Source Heat Pump	1.6%	6.03	0.10	48.2
Heating	Geothermal Heat Pump	0.9%	4.46	0.04	19.6
Ventilation	Ventilation	100.0%	2.87	2.87	1,454.3
Water Heating	Water Heater	25.2%	3.78	0.95	482.3
Interior Lighting	Screw-in	100.0%	0.78	0.78	393.3
Interior Lighting	High-Bay Fixtures	100.0%	2.59	2.59	1,312.7
Interior Lighting	Linear Lighting	100.0%	4.04	4.04	2,043.4
Exterior Lighting	Screw-in	100.0%	0.04	0.04	22.3
Exterior Lighting	Area Lighting	100.0%	0.66	0.66	336.2
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	41.5
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.23	0.08	38.1
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.05	0.03	13.0
Refrigeration	Glass Door Display	90.4%	0.05	0.05	24.0
Refrigeration	Open Display Case	90.4%	0.31	0.28	142.4
Refrigeration	Icemaker	90.4%	0.17	0.16	78.7
Refrigeration	Vending Machine	90.4%	0.08	0.07	37.0
Food Preparation	Oven	69.7%	0.53	0.37	187.6
Food Preparation	Fryer	80.7%	0.77	0.62	314.1
Food Preparation	Dishwasher	53.5%	1.06	0.57	286.4
Food Preparation	Hot Food Container	53.5%	0.14	0.08	39.2
Food Preparation	Steamer	53.5%	0.78	0.41	210.0
Office Equipment	Desktop Computer	100.0%	0.46	0.46	234.1
Office Equipment	Laptop	100.0%	0.03	0.03	14.5
Office Equipment	Server	100.0%	0.05	0.05	27.5
Office Equipment	Monitor	100.0%	0.08	0.08	41.3
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05	25.6
Office Equipment	POS Terminal	100.0%	0.04	0.04	18.4
Miscellaneous	Non-HVAC Motors	74.1%	0.49	0.37	185.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.64	3.64	1,844.2
Total				27.70	14,019.3

Table A-51 California Health New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.5%	5.18	0.85
Cooling	Water-Cooled Chiller	66.0%	6.05	3.99
Cooling	RTU	10.9%	8.03	0.87
Cooling	Room AC	0.4%	6.29	0.02
Cooling	Evaporative AC	0.0%	2.97	0.00
Cooling	Air-Source Heat Pump	1.6%	6.17	0.10
Cooling	Geothermal Heat Pump	0.9%	5.02	0.04
Heating	Electric Furnace	2.7%	9.49	0.26
Heating	Electric Room Heat	0.1%	9.03	0.01
Heating	Air-Source Heat Pump	1.6%	5.48	0.09
Heating	Geothermal Heat Pump	0.9%	2.55	0.02
Ventilation	Ventilation	100.0%	1.67	1.67
Water Heating	Water Heater	25.2%	3.76	0.95
Interior Lighting	Screw-in	100.0%	0.94	0.94
Interior Lighting	High-Bay Fixtures	100.0%	3.16	3.16
Interior Lighting	Linear Lighting	100.0%	4.11	4.11
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	0.71	0.71
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.21	0.07
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.05	0.02
Refrigeration	Glass Door Display	90.4%	0.05	0.04
Refrigeration	Open Display Case	90.4%	0.28	0.25
Refrigeration	Icemaker	90.4%	0.15	0.13
Refrigeration	Vending Machine	90.4%	0.07	0.07
Food Preparation	Oven	69.7%	0.57	0.40
Food Preparation	Fryer	80.7%	0.69	0.56
Food Preparation	Dishwasher	53.5%	0.95	0.51
Food Preparation	Hot Food Container	53.5%	0.13	0.07
Food Preparation	Steamer	53.5%	0.70	0.37
Office Equipment	Desktop Computer	100.0%	0.46	0.46
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	100.0%	0.05	0.05
Office Equipment	Monitor	100.0%	0.08	0.08
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05
Office Equipment	POS Terminal	100.0%	0.04	0.04
Miscellaneous	Non-HVAC Motors	74.1%	0.49	0.37
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.64	3.64
Total			25.16	

Table A-52 California College Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	30.2%	5.52	1.67	460.9
Cooling	Water-Cooled Chiller	0.0%	6.74	0.00	0.0
Cooling	RTU	49.5%	3.74	1.85	511.5
Cooling	Room AC	3.2%	3.98	0.13	35.4
Cooling	Evaporative AC	0.0%	1.49	0.00	0.0
Cooling	Air-Source Heat Pump	5.7%	3.73	0.21	58.5
Cooling	Geothermal Heat Pump	0.6%	2.27	0.01	3.5
Heating	Electric Furnace	0.0%	6.61	0.00	0.0
Heating	Electric Room Heat	29.6%	6.30	1.86	514.7
Heating	Air-Source Heat Pump	5.7%	4.10	0.23	64.3
Heating	Geothermal Heat Pump	0.6%	3.25	0.02	5.0
Ventilation	Ventilation	100.0%	1.55	1.55	428.7
Water Heating	Water Heater	58.2%	2.19	1.27	352.0
Interior Lighting	Screw-in	100.0%	0.13	0.13	37.3
Interior Lighting	High-Bay Fixtures	100.0%	1.42	1.42	393.7
Interior Lighting	Linear Lighting	100.0%	2.19	2.19	605.1
Exterior Lighting	Screw-in	100.0%	0.02	0.02	5.5
Exterior Lighting	Area Lighting	100.0%	0.29	0.29	79.5
Exterior Lighting	Linear Lighting	100.0%	0.75	0.75	207.3
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.17	0.01	3.6
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.08	0.01	2.8
Refrigeration	Glass Door Display	26.6%	0.04	0.01	2.9
Refrigeration	Open Display Case	26.6%	0.23	0.06	17.2
Refrigeration	Icemaker	26.6%	0.13	0.03	9.5
Refrigeration	Vending Machine	26.6%	0.06	0.02	4.5
Food Preparation	Oven	21.0%	0.25	0.05	14.5
Food Preparation	Fryer	21.0%	0.36	0.08	20.9
Food Preparation	Dishwasher	21.0%	0.49	0.10	28.8
Food Preparation	Hot Food Container	21.0%	0.07	0.01	3.9
Food Preparation	Steamer	21.0%	0.36	0.08	21.1
Office Equipment	Desktop Computer	100.0%	0.50	0.50	137.9
Office Equipment	Laptop	100.0%	0.02	0.02	6.4
Office Equipment	Server	100.0%	0.06	0.06	16.2
Office Equipment	Monitor	100.0%	0.09	0.09	24.3
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07	18.9
Office Equipment	POS Terminal	100.0%	0.02	0.02	5.4
Miscellaneous	Non-HVAC Motors	88.8%	0.13	0.12	32.9
Miscellaneous	Pool Pump	90.3%	0.04	0.04	10.1
Miscellaneous	Pool Heater	36.2%	0.05	0.02	5.3
Miscellaneous	Other Miscellaneous	100.0%	0.95	0.95	262.0
Total				15.95	4,412.2

Table A-53 California College New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	30.2%	5.23	1.58
Cooling	Water-Cooled Chiller	0.0%	6.04	0.00
Cooling	RTU	49.5%	3.33	1.65
Cooling	Room AC	3.2%	3.21	0.10
Cooling	Evaporative AC	0.0%	1.49	0.00
Cooling	Air-Source Heat Pump	5.7%	3.29	0.19
Cooling	Geothermal Heat Pump	0.6%	2.08	0.01
Heating	Electric Furnace	0.0%	6.18	0.00
Heating	Electric Room Heat	29.6%	5.89	1.74
Heating	Air-Source Heat Pump	5.7%	3.28	0.19
Heating	Geothermal Heat Pump	0.6%	3.03	0.02
Ventilation	Ventilation	100.0%	1.43	1.43
Water Heating	Water Heater	58.2%	2.18	1.27
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.62	1.62
Interior Lighting	Linear Lighting	100.0%	2.15	2.15
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.29	0.29
Exterior Lighting	Linear Lighting	100.0%	0.74	0.74
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.15	0.01
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.07	0.01
Refrigeration	Glass Door Display	26.6%	0.04	0.01
Refrigeration	Open Display Case	26.6%	0.21	0.06
Refrigeration	Icemaker	26.6%	0.11	0.03
Refrigeration	Vending Machine	26.6%	0.06	0.01
Food Preparation	Oven	21.0%	0.27	0.06
Food Preparation	Fryer	21.0%	0.32	0.07
Food Preparation	Dishwasher	21.0%	0.45	0.09
Food Preparation	Hot Food Container	21.0%	0.06	0.01
Food Preparation	Steamer	21.0%	0.33	0.07
Office Equipment	Desktop Computer	100.0%	0.50	0.50
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.09	0.09
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07
Office Equipment	POS Terminal	100.0%	0.02	0.02
Miscellaneous	Non-HVAC Motors	88.8%	0.13	0.12
Miscellaneous	Pool Pump	90.3%	0.04	0.04
Miscellaneous	Pool Heater	36.2%	0.05	0.02
Miscellaneous	Other Miscellaneous	100.0%	0.95	0.95
Total				15.45

Table A-54 California School Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	25.2%	3.35	0.85	1,158.1
Cooling	Water-Cooled Chiller	0.0%	4.09	0.00	0.0
Cooling	RTU	41.4%	2.27	0.94	1,285.3
Cooling	Room AC	2.7%	2.42	0.06	88.9
Cooling	Evaporative AC	0.0%	0.91	0.00	0.0
Cooling	Air-Source Heat Pump	7.0%	2.26	0.16	217.3
Cooling	Geothermal Heat Pump	5.1%	1.38	0.07	95.8
Heating	Electric Furnace	0.0%	4.90	0.00	0.0
Heating	Electric Room Heat	12.9%	4.67	0.60	824.2
Heating	Air-Source Heat Pump	7.0%	3.04	0.21	291.6
Heating	Geothermal Heat Pump	5.1%	2.41	0.12	167.1
Ventilation	Ventilation	100.0%	0.77	0.77	1,058.7
Water Heating	Water Heater	52.6%	1.06	0.56	763.2
Interior Lighting	Screw-in	100.0%	0.34	0.34	471.3
Interior Lighting	High-Bay Fixtures	100.0%	0.81	0.81	1,108.8
Interior Lighting	Linear Lighting	100.0%	1.51	1.51	2,070.3
Exterior Lighting	Screw-in	100.0%	0.00	0.00	5.5
Exterior Lighting	Area Lighting	100.0%	0.12	0.12	164.3
Exterior Lighting	Linear Lighting	100.0%	0.66	0.66	899.3
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.18	0.03	46.6
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.08	0.03	36.3
Refrigeration	Glass Door Display	65.7%	0.04	0.03	37.1
Refrigeration	Open Display Case	65.7%	0.24	0.16	219.8
Refrigeration	Icemaker	65.7%	0.14	0.09	121.5
Refrigeration	Vending Machine	65.7%	0.06	0.04	57.1
Food Preparation	Oven	64.8%	0.12	0.08	105.4
Food Preparation	Fryer	58.6%	0.17	0.10	137.9
Food Preparation	Dishwasher	52.3%	0.24	0.12	169.5
Food Preparation	Hot Food Container	52.3%	0.03	0.02	23.2
Food Preparation	Steamer	52.3%	0.17	0.09	124.3
Office Equipment	Desktop Computer	100.0%	0.31	0.31	424.8
Office Equipment	Laptop	100.0%	0.02	0.02	26.2
Office Equipment	Server	100.0%	0.07	0.07	100.0
Office Equipment	Monitor	100.0%	0.05	0.05	75.0
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03	46.5
Office Equipment	POS Terminal	36.0%	0.01	0.00	4.8
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04	54.7
Miscellaneous	Pool Pump	6.0%	0.05	0.00	3.8
Miscellaneous	Pool Heater	1.0%	0.03	0.00	0.4
Miscellaneous	Other Miscellaneous	100.0%	0.65	0.65	886.8
Total				9.77	13,371.5

Table A-55 California School New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	25.2%	3.17	0.80
Cooling	Water-Cooled Chiller	0.0%	3.66	0.00
Cooling	RTU	41.4%	2.02	0.84
Cooling	Room AC	2.7%	1.95	0.05
Cooling	Evaporative AC	0.0%	0.91	0.00
Cooling	Air-Source Heat Pump	7.0%	2.00	0.14
Cooling	Geothermal Heat Pump	5.1%	1.26	0.06
Heating	Electric Furnace	0.0%	4.58	0.00
Heating	Electric Room Heat	12.9%	4.36	0.56
Heating	Air-Source Heat Pump	7.0%	2.43	0.17
Heating	Geothermal Heat Pump	5.1%	2.24	0.11
Ventilation	Ventilation	100.0%	0.71	0.71
Water Heating	Water Heater	52.6%	1.05	0.56
Interior Lighting	Screw-in	100.0%	0.17	0.17
Interior Lighting	High-Bay Fixtures	100.0%	0.94	0.94
Interior Lighting	Linear Lighting	100.0%	1.48	1.48
Exterior Lighting	Screw-in	100.0%	0.01	0.01
Exterior Lighting	Area Lighting	100.0%	0.12	0.12
Exterior Lighting	Linear Lighting	100.0%	0.64	0.64
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.16	0.03
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.07	0.02
Refrigeration	Glass Door Display	65.7%	0.04	0.02
Refrigeration	Open Display Case	65.7%	0.22	0.14
Refrigeration	Icemaker	65.7%	0.11	0.08
Refrigeration	Vending Machine	65.7%	0.06	0.04
Food Preparation	Oven	64.8%	0.13	0.08
Food Preparation	Fryer	58.6%	0.15	0.09
Food Preparation	Dishwasher	52.3%	0.21	0.11
Food Preparation	Hot Food Container	52.3%	0.03	0.02
Food Preparation	Steamer	52.3%	0.16	0.08
Office Equipment	Desktop Computer	100.0%	0.31	0.31
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.07	0.07
Office Equipment	Monitor	100.0%	0.05	0.05
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03
Office Equipment	POS Terminal	36.0%	0.01	0.00
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04
Miscellaneous	Pool Pump	6.0%	0.05	0.00
Miscellaneous	Pool Heater	1.0%	0.03	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.65	0.65
Total				9.28

Table A-56 California Lodging Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	2.1%	1.12	0.02	40.9
Cooling	Water-Cooled Chiller	7.5%	1.37	0.10	180.8
Cooling	RTU	16.3%	3.55	0.58	1,015.5
Cooling	Room AC	40.1%	3.79	1.52	2,659.2
Cooling	Evaporative AC	0.5%	1.42	0.01	12.2
Cooling	Air-Source Heat Pump	18.0%	3.55	0.64	1,120.0
Cooling	Geothermal Heat Pump	3.4%	3.35	0.11	200.6
Heating	Electric Furnace	1.1%	1.93	0.02	36.5
Heating	Electric Room Heat	38.3%	1.84	0.70	1,235.1
Heating	Air-Source Heat Pump	18.0%	1.81	0.33	571.4
Heating	Geothermal Heat Pump	3.4%	1.17	0.04	69.7
Ventilation	Ventilation	100.0%	1.13	1.13	1,975.4
Water Heating	Water Heater	45.5%	4.07	1.85	3,241.2
Interior Lighting	Screw-in	100.0%	1.24	1.24	2,167.5
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29	2,254.4
Interior Lighting	Linear Lighting	100.0%	0.46	0.46	798.9
Exterior Lighting	Screw-in	100.0%	0.04	0.04	66.7
Exterior Lighting	Area Lighting	100.0%	1.73	1.73	3,032.3
Exterior Lighting	Linear Lighting	100.0%	0.03	0.03	44.8
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.50	0.01	26.3
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.11	0.02	37.4
Refrigeration	Glass Door Display	58.9%	0.12	0.07	118.9
Refrigeration	Open Display Case	58.9%	0.68	0.40	704.7
Refrigeration	Icemaker	58.9%	0.19	0.11	194.7
Refrigeration	Vending Machine	58.9%	0.18	0.10	182.9
Food Preparation	Oven	13.8%	0.33	0.05	79.1
Food Preparation	Fryer	21.0%	0.47	0.10	174.2
Food Preparation	Dishwasher	30.0%	0.65	0.20	342.7
Food Preparation	Hot Food Container	30.0%	0.09	0.03	46.9
Food Preparation	Steamer	30.0%	0.48	0.14	251.3
Office Equipment	Desktop Computer	100.0%	0.11	0.11	185.8
Office Equipment	Laptop	100.0%	0.02	0.02	28.7
Office Equipment	Server	100.0%	0.06	0.06	109.3
Office Equipment	Monitor	100.0%	0.02	0.02	32.8
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	20.3
Office Equipment	POS Terminal	58.0%	0.02	0.01	16.9
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.17	289.8
Miscellaneous	Pool Pump	76.0%	0.02	0.02	29.2
Miscellaneous	Pool Heater	27.0%	0.03	0.01	13.5
Miscellaneous	Other Miscellaneous	100.0%	0.83	0.83	1,453.5
Total				14.30	25,062.1

Table A-57 California Lodging New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	2.1%	1.04	0.02
Cooling	Water-Cooled Chiller	7.5%	1.16	0.09
Cooling	RTU	16.3%	3.62	0.59
Cooling	Room AC	40.1%	3.01	1.21
Cooling	Evaporative AC	0.5%	1.42	0.01
Cooling	Air-Source Heat Pump	18.0%	3.61	0.65
Cooling	Geothermal Heat Pump	3.4%	3.46	0.12
Heating	Electric Furnace	1.1%	1.81	0.02
Heating	Electric Room Heat	38.3%	1.72	0.66
Heating	Air-Source Heat Pump	18.0%	1.49	0.27
Heating	Geothermal Heat Pump	3.4%	1.03	0.04
Ventilation	Ventilation	100.0%	0.93	0.93
Water Heating	Water Heater	45.5%	4.05	1.84
Interior Lighting	Screw-in	100.0%	1.41	1.41
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02
Interior Lighting	Linear Lighting	100.0%	0.44	0.44
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	1.89	1.89
Exterior Lighting	Linear Lighting	100.0%	0.02	0.02
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.45	0.01
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.10	0.02
Refrigeration	Glass Door Display	58.9%	0.10	0.06
Refrigeration	Open Display Case	58.9%	0.61	0.36
Refrigeration	Icemaker	58.9%	0.17	0.10
Refrigeration	Vending Machine	58.9%	0.16	0.10
Food Preparation	Oven	13.8%	0.24	0.03
Food Preparation	Fryer	21.0%	0.43	0.09
Food Preparation	Dishwasher	30.0%	0.59	0.18
Food Preparation	Hot Food Container	30.0%	0.08	0.02
Food Preparation	Steamer	30.0%	0.43	0.13
Office Equipment	Desktop Computer	100.0%	0.11	0.11
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	58.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.17
Miscellaneous	Pool Pump	76.0%	0.02	0.02
Miscellaneous	Pool Heater	27.0%	0.03	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.83	0.83
Total			14.61	

Table A-58 California Warehouse Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	2.28	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	2.15	0.00	0.0
Cooling	RTU	15.3%	2.54	0.39	698.1
Cooling	Room AC	1.0%	2.70	0.03	48.8
Cooling	Evaporative AC	0.0%	1.02	0.00	0.0
Cooling	Air-Source Heat Pump	2.7%	2.54	0.07	123.8
Cooling	Geothermal Heat Pump	0.0%	1.55	0.00	0.0
Heating	Electric Furnace	2.7%	4.88	0.13	238.1
Heating	Electric Room Heat	14.7%	4.65	0.68	1,226.4
Heating	Air-Source Heat Pump	2.7%	4.38	0.12	213.5
Heating	Geothermal Heat Pump	0.0%	3.82	0.00	0.0
Ventilation	Ventilation	100.0%	0.30	0.30	538.6
Water Heating	Water Heater	38.3%	0.36	0.14	244.0
Interior Lighting	Screw-in	100.0%	0.11	0.11	194.3
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	3,039.4
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	505.2
Exterior Lighting	Screw-in	100.0%	0.02	0.02	35.8
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	677.6
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	138.8
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.67	0.01	13.2
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.15	0.00	5.4
Refrigeration	Glass Door Display	10.1%	0.15	0.02	27.8
Refrigeration	Open Display Case	10.1%	0.91	0.09	165.1
Refrigeration	Icemaker	10.1%	0.25	0.03	45.6
Refrigeration	Vending Machine	10.1%	0.12	0.01	21.4
Food Preparation	Oven	2.3%	0.05	0.00	1.9
Food Preparation	Fryer	2.3%	0.07	0.00	2.8
Food Preparation	Dishwasher	2.3%	0.09	0.00	3.8
Food Preparation	Hot Food Container	2.3%	0.01	0.00	0.5
Food Preparation	Steamer	2.3%	0.07	0.00	2.8
Office Equipment	Desktop Computer	100.0%	0.12	0.12	214.3
Office Equipment	Laptop	100.0%	0.01	0.01	26.5
Office Equipment	Server	89.0%	0.14	0.12	224.3
Office Equipment	Monitor	100.0%	0.02	0.02	37.8
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	23.5
Office Equipment	POS Terminal	77.0%	0.04	0.03	51.8
Miscellaneous	Non-HVAC Motors	49.9%	0.14	0.07	123.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.49	0.49	885.0
Total				5.46	9,799.0

Table A-59 California Warehouse New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	1.90	0.00
Cooling	Water-Cooled Chiller	0.0%	1.75	0.00
Cooling	RTU	15.3%	2.41	0.37
Cooling	Room AC	1.0%	2.15	0.02
Cooling	Evaporative AC	0.0%	1.02	0.00
Cooling	Air-Source Heat Pump	2.7%	2.11	0.06
Cooling	Geothermal Heat Pump	0.0%	1.11	0.00
Heating	Electric Furnace	2.7%	4.56	0.12
Heating	Electric Room Heat	14.7%	4.35	0.64
Heating	Air-Source Heat Pump	2.7%	3.98	0.11
Heating	Geothermal Heat Pump	0.0%	1.76	0.00
Ventilation	Ventilation	100.0%	0.24	0.24
Water Heating	Water Heater	38.3%	0.35	0.14
Interior Lighting	Screw-in	100.0%	0.12	0.12
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.04	0.04
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.60	0.01
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.13	0.00
Refrigeration	Glass Door Display	10.1%	0.14	0.01
Refrigeration	Open Display Case	10.1%	0.82	0.08
Refrigeration	Icemaker	10.1%	0.24	0.02
Refrigeration	Vending Machine	10.1%	0.10	0.01
Food Preparation	Oven	2.3%	0.05	0.00
Food Preparation	Fryer	2.3%	0.06	0.00
Food Preparation	Dishwasher	2.3%	0.08	0.00
Food Preparation	Hot Food Container	2.3%	0.01	0.00
Food Preparation	Steamer	2.3%	0.06	0.00
Office Equipment	Desktop Computer	100.0%	0.12	0.12
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.14	0.12
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.04	0.03
Miscellaneous	Non-HVAC Motors	49.9%	0.14	0.07
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.49	0.49
Total				5.43

Table A-60 California Warehouse, Controlled Atmosphere Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.0%	1.98	0.30	47.3
Cooling	Water-Cooled Chiller	1.7%	1.87	0.03	5.0
Cooling	RTU	19.7%	2.20	0.43	69.0
Cooling	Room AC	1.2%	2.35	0.03	4.4
Cooling	Evaporative AC	0.1%	0.88	0.00	0.2
Cooling	Air-Source Heat Pump	1.9%	2.20	0.04	6.5
Cooling	Geothermal Heat Pump	0.0%	1.34	0.00	0.0
Heating	Electric Furnace	2.0%	4.12	0.08	13.3
Heating	Electric Room Heat	11.1%	3.92	0.43	68.7
Heating	Air-Source Heat Pump	1.9%	3.69	0.07	10.9
Heating	Geothermal Heat Pump	0.0%	3.23	0.00	0.0
Ventilation	Ventilation	100.0%	0.63	0.63	100.4
Water Heating	Water Heater	46.7%	0.39	0.18	28.8
Interior Lighting	Screw-in	100.0%	0.11	0.11	17.2
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	268.7
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	44.7
Exterior Lighting	Screw-in	100.0%	0.02	0.02	3.2
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	59.9
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	12.3
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	14.44	13.25	2,101.7
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.65	0.01	2.1
Refrigeration	Glass Door Display	10.1%	0.67	0.07	10.7
Refrigeration	Open Display Case	10.1%	3.94	0.40	63.2
Refrigeration	Icemaker	91.7%	1.09	1.00	158.6
Refrigeration	Vending Machine	91.7%	0.51	0.47	74.5
Food Preparation	Oven	40.8%	0.05	0.02	3.4
Food Preparation	Fryer	40.8%	0.08	0.03	4.9
Food Preparation	Dishwasher	40.8%	0.11	0.04	6.8
Food Preparation	Hot Food Container	40.8%	0.01	0.01	0.9
Food Preparation	Steamer	40.8%	0.08	0.03	5.0
Office Equipment	Desktop Computer	100.0%	0.06	0.06	9.6
Office Equipment	Laptop	100.0%	0.01	0.01	1.2
Office Equipment	Server	89.0%	0.07	0.06	10.0
Office Equipment	Monitor	100.0%	0.01	0.01	1.7
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	1.0
Office Equipment	POS Terminal	77.0%	0.02	0.01	2.3
Miscellaneous	Non-HVAC Motors	79.5%	0.46	0.37	58.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.97	1.97	312.6
Total				22.62	3,589.0

Table A-61 California Warehouse, Controlled Atmosphere New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.0%	1.65	0.25
Cooling	Water-Cooled Chiller	1.7%	1.52	0.03
Cooling	RTU	19.7%	2.09	0.41
Cooling	Room AC	1.2%	1.87	0.02
Cooling	Evaporative AC	0.1%	0.88	0.00
Cooling	Air-Source Heat Pump	1.9%	1.83	0.03
Cooling	Geothermal Heat Pump	0.0%	0.97	0.00
Heating	Electric Furnace	2.0%	3.85	0.08
Heating	Electric Room Heat	11.1%	3.67	0.41
Heating	Air-Source Heat Pump	1.9%	3.35	0.06
Heating	Geothermal Heat Pump	0.0%	1.48	0.00
Ventilation	Ventilation	100.0%	0.51	0.51
Water Heating	Water Heater	46.7%	0.39	0.18
Interior Lighting	Screw-in	100.0%	0.12	0.12
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.04	0.04
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	13.00	11.92
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.58	0.01
Refrigeration	Glass Door Display	10.1%	0.60	0.06
Refrigeration	Open Display Case	10.1%	3.55	0.36
Refrigeration	Icemaker	91.7%	1.05	0.96
Refrigeration	Vending Machine	91.7%	0.45	0.41
Food Preparation	Oven	40.8%	0.06	0.02
Food Preparation	Fryer	40.8%	0.07	0.03
Food Preparation	Dishwasher	40.8%	0.09	0.04
Food Preparation	Hot Food Container	40.8%	0.01	0.01
Food Preparation	Steamer	40.8%	0.07	0.03
Office Equipment	Desktop Computer	100.0%	0.06	0.06
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.07	0.06
Office Equipment	Monitor	100.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	79.5%	0.46	0.37
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.97	1.97
Total				21.03

Table A-62 California Miscellaneous Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	9.1%	3.16	0.29	1,018.3
Cooling	Water-Cooled Chiller	4.7%	3.33	0.16	554.3
Cooling	RTU	53.8%	3.64	1.96	6,895.5
Cooling	Room AC	4.8%	3.88	0.19	656.4
Cooling	Evaporative AC	0.0%	1.46	0.00	0.4
Cooling	Air-Source Heat Pump	8.5%	3.64	0.31	1,087.4
Cooling	Geothermal Heat Pump	2.0%	2.22	0.05	160.0
Heating	Electric Furnace	12.8%	3.77	0.48	1,698.0
Heating	Electric Room Heat	15.2%	3.59	0.55	1,920.2
Heating	Air-Source Heat Pump	8.5%	3.22	0.27	961.8
Heating	Geothermal Heat Pump	2.0%	2.74	0.06	197.8
Ventilation	Ventilation	100.0%	0.66	0.66	2,312.9
Water Heating	Water Heater	52.9%	1.36	0.72	2,540.2
Interior Lighting	Screw-in	100.0%	0.61	0.61	2,131.6
Interior Lighting	High-Bay Fixtures	100.0%	1.56	1.56	5,494.8
Interior Lighting	Linear Lighting	100.0%	1.46	1.46	5,157.7
Exterior Lighting	Screw-in	100.0%	0.09	0.09	327.2
Exterior Lighting	Area Lighting	100.0%	0.64	0.64	2,248.4
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06	207.9
Refrigeration	Walk-in Refrigerator/Freezer	6.6%	0.50	0.03	115.4
Refrigeration	Reach-in Refrigerator/Freezer	14.8%	0.11	0.02	58.3
Refrigeration	Glass Door Display	8.2%	0.12	0.01	33.2
Refrigeration	Open Display Case	8.2%	0.68	0.06	197.0
Refrigeration	Icemaker	21.6%	0.19	0.04	143.5
Refrigeration	Vending Machine	21.6%	0.18	0.04	134.8
Food Preparation	Oven	58.9%	0.08	0.05	169.5
Food Preparation	Fryer	29.9%	0.12	0.04	124.4
Food Preparation	Dishwasher	15.4%	0.16	0.03	88.3
Food Preparation	Hot Food Container	15.4%	0.02	0.00	12.1
Food Preparation	Steamer	15.4%	0.12	0.02	64.7
Office Equipment	Desktop Computer	100.0%	0.19	0.19	681.9
Office Equipment	Laptop	100.0%	0.03	0.03	105.3
Office Equipment	Server	66.0%	0.11	0.08	264.8
Office Equipment	Monitor	100.0%	0.03	0.03	120.3
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	74.7
Office Equipment	POS Terminal	28.0%	0.03	0.01	30.0
Miscellaneous	Non-HVAC Motors	59.9%	0.15	0.09	316.8
Miscellaneous	Pool Pump	4.0%	0.02	0.00	2.3
Miscellaneous	Pool Heater	1.0%	0.02	0.00	0.7
Miscellaneous	Other Miscellaneous	100.0%	0.72	0.72	2,553.8
Total				11.60	40,862.6

Table A-63 California Miscellaneous New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	9.1%	2.64	0.24
Cooling	Water-Cooled Chiller	4.7%	2.70	0.13
Cooling	RTU	53.8%	3.49	1.88
Cooling	Room AC	4.8%	3.08	0.15
Cooling	Evaporative AC	0.0%	1.46	0.00
Cooling	Air-Source Heat Pump	8.5%	3.03	0.26
Cooling	Geothermal Heat Pump	2.0%	2.18	0.04
Heating	Electric Furnace	12.8%	3.53	0.45
Heating	Electric Room Heat	15.2%	3.36	0.51
Heating	Air-Source Heat Pump	8.5%	2.92	0.25
Heating	Geothermal Heat Pump	2.0%	1.65	0.03
Ventilation	Ventilation	100.0%	0.53	0.53
Water Heating	Water Heater	52.9%	1.36	0.72
Interior Lighting	Screw-in	100.0%	0.57	0.57
Interior Lighting	High-Bay Fixtures	100.0%	1.75	1.75
Interior Lighting	Linear Lighting	100.0%	1.46	1.46
Exterior Lighting	Screw-in	100.0%	0.11	0.11
Exterior Lighting	Area Lighting	100.0%	0.78	0.78
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06
Refrigeration	Walk-in Refrigerator/Freezer	6.6%	0.45	0.03
Refrigeration	Reach-in Refrigerator/Freezer	14.8%	0.10	0.01
Refrigeration	Glass Door Display	8.2%	0.10	0.01
Refrigeration	Open Display Case	8.2%	0.61	0.05
Refrigeration	Icemaker	21.6%	0.18	0.04
Refrigeration	Vending Machine	21.6%	0.16	0.03
Food Preparation	Oven	58.9%	0.09	0.05
Food Preparation	Fryer	29.9%	0.11	0.03
Food Preparation	Dishwasher	15.4%	0.15	0.02
Food Preparation	Hot Food Container	15.4%	0.02	0.00
Food Preparation	Steamer	15.4%	0.11	0.02
Office Equipment	Desktop Computer	100.0%	0.19	0.19
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	66.0%	0.11	0.08
Office Equipment	Monitor	100.0%	0.03	0.03
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02
Office Equipment	POS Terminal	28.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	59.9%	0.15	0.09
Miscellaneous	Pool Pump	4.0%	0.02	0.00
Miscellaneous	Pool Heater	1.0%	0.02	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.72	0.72
Total			11.39	

Table A-64 Idaho Large Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.4%	3.14	0.51	1,169.1
Cooling	Water-Cooled Chiller	10.1%	3.22	0.32	737.7
Cooling	RTU	53.0%	3.28	1.74	3,949.2
Cooling	Room AC	2.8%	3.60	0.10	229.4
Cooling	Evaporative AC	0.1%	1.31	0.00	1.7
Cooling	Air-Source Heat Pump	3.9%	3.28	0.13	287.8
Cooling	Geothermal Heat Pump	2.4%	2.00	0.05	110.5
Heating	Electric Furnace	1.0%	5.54	0.06	128.4
Heating	Electric Room Heat	19.6%	5.28	1.04	2,356.9
Heating	Air-Source Heat Pump	3.9%	4.86	0.19	427.1
Heating	Geothermal Heat Pump	2.4%	3.67	0.09	203.1
Ventilation	Ventilation	100.0%	3.21	3.21	7,291.0
Water Heating	Water Heater	45.2%	1.07	0.48	1,099.8
Interior Lighting	Screw-in	100.0%	0.35	0.35	799.3
Interior Lighting	High-Bay Fixtures	100.0%	1.01	1.01	2,295.9
Interior Lighting	Linear Lighting	100.0%	1.72	1.72	3,921.3
Exterior Lighting	Screw-in	100.0%	0.10	0.10	217.2
Exterior Lighting	Area Lighting	100.0%	1.28	1.28	2,905.0
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18	409.2
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.15	0.00	6.7
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00	10.5
Refrigeration	Glass Door Display	77.4%	0.03	0.03	59.3
Refrigeration	Open Display Case	77.4%	0.20	0.15	351.5
Refrigeration	Icemaker	44.9%	0.06	0.02	56.3
Refrigeration	Vending Machine	44.9%	0.05	0.02	52.9
Food Preparation	Oven	66.0%	0.09	0.06	136.5
Food Preparation	Fryer	76.4%	0.13	0.10	228.5
Food Preparation	Dishwasher	43.1%	0.18	0.08	177.3
Food Preparation	Hot Food Container	43.1%	0.02	0.01	24.3
Food Preparation	Steamer	43.1%	0.13	0.06	130.0
Office Equipment	Desktop Computer	100.0%	2.42	2.42	5,496.7
Office Equipment	Laptop	100.0%	0.37	0.37	848.8
Office Equipment	Server	100.0%	0.24	0.24	538.9
Office Equipment	Monitor	100.0%	0.43	0.43	970.0
Office Equipment	Printer/Copier/Fax	100.0%	0.22	0.22	501.5
Office Equipment	POS Terminal	40.0%	0.03	0.01	28.8
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23	524.9
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.05	1.05	2,378.1
Total				18.06	41,061.1

Table A-65 Idaho Large Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.4%	2.98	0.49
Cooling	Water-Cooled Chiller	10.1%	2.88	0.29
Cooling	RTU	53.0%	2.76	1.46
Cooling	Room AC	2.8%	2.86	0.08
Cooling	Evaporative AC	0.1%	1.31	0.00
Cooling	Air-Source Heat Pump	3.9%	2.73	0.11
Cooling	Geothermal Heat Pump	2.4%	1.72	0.04
Heating	Electric Furnace	1.0%	5.18	0.05
Heating	Electric Room Heat	19.6%	4.94	0.97
Heating	Air-Source Heat Pump	3.9%	4.41	0.17
Heating	Geothermal Heat Pump	2.4%	3.62	0.09
Ventilation	Ventilation	100.0%	2.50	2.50
Water Heating	Water Heater	45.2%	1.07	0.48
Interior Lighting	Screw-in	100.0%	0.48	0.48
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31
Interior Lighting	Linear Lighting	100.0%	1.76	1.76
Exterior Lighting	Screw-in	100.0%	0.12	0.12
Exterior Lighting	Area Lighting	100.0%	1.39	1.39
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.13	0.00
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00
Refrigeration	Glass Door Display	77.4%	0.03	0.02
Refrigeration	Open Display Case	77.4%	0.18	0.14
Refrigeration	Icemaker	44.9%	0.05	0.02
Refrigeration	Vending Machine	44.9%	0.05	0.02
Food Preparation	Oven	66.0%	0.09	0.06
Food Preparation	Fryer	76.4%	0.12	0.09
Food Preparation	Dishwasher	43.1%	0.16	0.07
Food Preparation	Hot Food Container	43.1%	0.02	0.01
Food Preparation	Steamer	43.1%	0.12	0.05
Office Equipment	Desktop Computer	100.0%	2.42	2.42
Office Equipment	Laptop	100.0%	0.37	0.37
Office Equipment	Server	100.0%	0.24	0.24
Office Equipment	Monitor	100.0%	0.43	0.43
Office Equipment	Printer/Copier/Fax	100.0%	0.22	0.22
Office Equipment	POS Terminal	40.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.05	1.05
Total			17.44	

Table A-66 Idaho Small Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.63	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.69	0.00	0.0
Cooling	RTU	74.0%	4.03	2.98	16,209.7
Cooling	Room AC	2.6%	4.43	0.12	628.1
Cooling	Evaporative AC	0.1%	1.61	0.00	4.6
Cooling	Air-Source Heat Pump	6.1%	4.03	0.25	1,342.7
Cooling	Geothermal Heat Pump	4.3%	2.45	0.11	574.9
Heating	Electric Furnace	0.7%	7.59	0.05	283.8
Heating	Electric Room Heat	13.3%	7.23	0.96	5,207.7
Heating	Air-Source Heat Pump	6.1%	6.72	0.41	2,238.7
Heating	Geothermal Heat Pump	4.3%	4.75	0.20	1,111.7
Ventilation	Ventilation	100.0%	1.41	1.41	7,648.2
Water Heating	Water Heater	45.8%	1.06	0.48	2,630.4
Interior Lighting	Screw-in	100.0%	0.38	0.38	2,060.7
Interior Lighting	High-Bay Fixtures	100.0%	1.51	1.51	8,203.5
Interior Lighting	Linear Lighting	100.0%	1.54	1.54	8,376.4
Exterior Lighting	Screw-in	100.0%	0.16	0.16	882.6
Exterior Lighting	Area Lighting	100.0%	1.58	1.58	8,570.8
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07	395.1
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.74	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	9.0%	0.17	0.01	81.1
Refrigeration	Glass Door Display	0.0%	0.17	0.00	0.0
Refrigeration	Open Display Case	0.0%	1.01	0.00	0.0
Refrigeration	Icemaker	5.1%	0.28	0.01	77.6
Refrigeration	Vending Machine	5.1%	0.13	0.01	36.5
Food Preparation	Oven	3.6%	0.21	0.01	41.9
Food Preparation	Fryer	3.6%	0.31	0.01	60.5
Food Preparation	Dishwasher	3.6%	0.42	0.02	83.3
Food Preparation	Hot Food Container	3.6%	0.06	0.00	11.4
Food Preparation	Steamer	3.6%	0.31	0.01	61.1
Office Equipment	Desktop Computer	100.0%	1.40	1.40	7,619.4
Office Equipment	Laptop	100.0%	0.22	0.22	1,176.5
Office Equipment	Server	100.0%	0.41	0.41	2,241.0
Office Equipment	Monitor	100.0%	0.25	0.25	1,344.6
Office Equipment	Printer/Copier/Fax	100.0%	0.19	0.19	1,042.8
Office Equipment	POS Terminal	20.0%	0.11	0.02	119.7
Miscellaneous	Non-HVAC Motors	22.0%	0.25	0.05	293.9
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06	5,735.2
Total				15.90	86,396.4

Table A-67 Idaho Small Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.43	0.00
Cooling	Water-Cooled Chiller	0.0%	3.30	0.00
Cooling	RTU	74.0%	3.23	2.39
Cooling	Room AC	2.6%	3.52	0.09
Cooling	Evaporative AC	0.1%	1.61	0.00
Cooling	Air-Source Heat Pump	6.1%	3.35	0.21
Cooling	Geothermal Heat Pump	4.3%	2.01	0.09
Heating	Electric Furnace	0.7%	7.10	0.05
Heating	Electric Room Heat	13.3%	6.76	0.90
Heating	Air-Source Heat Pump	6.1%	6.10	0.37
Heating	Geothermal Heat Pump	4.3%	3.68	0.16
Ventilation	Ventilation	100.0%	1.03	1.03
Water Heating	Water Heater	45.8%	1.05	0.48
Interior Lighting	Screw-in	100.0%	0.53	0.53
Interior Lighting	High-Bay Fixtures	100.0%	1.96	1.96
Interior Lighting	Linear Lighting	100.0%	1.52	1.52
Exterior Lighting	Screw-in	100.0%	0.23	0.23
Exterior Lighting	Area Lighting	100.0%	1.66	1.66
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.67	0.00
Refrigeration	Reach-in Refrigerator/Freezer	9.0%	0.15	0.01
Refrigeration	Glass Door Display	0.0%	0.15	0.00
Refrigeration	Open Display Case	0.0%	0.91	0.00
Refrigeration	Icemaker	5.1%	0.22	0.01
Refrigeration	Vending Machine	5.1%	0.12	0.01
Food Preparation	Oven	3.6%	0.21	0.01
Food Preparation	Fryer	3.6%	0.28	0.01
Food Preparation	Dishwasher	3.6%	0.38	0.01
Food Preparation	Hot Food Container	3.6%	0.05	0.00
Food Preparation	Steamer	3.6%	0.28	0.01
Office Equipment	Desktop Computer	100.0%	1.40	1.40
Office Equipment	Laptop	100.0%	0.22	0.22
Office Equipment	Server	100.0%	0.41	0.41
Office Equipment	Monitor	100.0%	0.25	0.25
Office Equipment	Printer/Copier/Fax	100.0%	0.19	0.19
Office Equipment	POS Terminal	20.0%	0.11	0.02
Miscellaneous	Non-HVAC Motors	22.0%	0.25	0.05
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06
Total			15.40	

Table A-68 Idaho Large Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	1.0%	3.23	0.03	35.3
Cooling	Water-Cooled Chiller	0.6%	3.29	0.02	22.1
Cooling	RTU	69.8%	3.59	2.50	2,745.7
Cooling	Room AC	3.1%	3.94	0.12	132.0
Cooling	Evaporative AC	3.6%	1.44	0.05	56.2
Cooling	Air-Source Heat Pump	2.7%	3.59	0.10	108.0
Cooling	Geothermal Heat Pump	2.0%	2.19	0.04	48.0
Heating	Electric Furnace	2.0%	5.90	0.12	126.7
Heating	Electric Room Heat	22.9%	5.62	1.29	1,410.4
Heating	Air-Source Heat Pump	2.7%	5.23	0.14	157.5
Heating	Geothermal Heat Pump	2.0%	3.75	0.08	82.4
Ventilation	Ventilation	100.0%	3.46	3.46	3,790.1
Water Heating	Water Heater	51.9%	1.15	0.60	656.3
Interior Lighting	Screw-in	100.0%	0.97	0.97	1,065.4
Interior Lighting	High-Bay Fixtures	100.0%	1.99	1.99	2,183.4
Interior Lighting	Linear Lighting	100.0%	3.00	3.00	3,293.9
Exterior Lighting	Screw-in	100.0%	0.24	0.24	261.0
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	926.2
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	87.6
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.38	0.01	8.4
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.09	0.01	13.1
Refrigeration	Glass Door Display	81.7%	0.09	0.07	78.8
Refrigeration	Open Display Case	81.7%	0.52	0.43	466.8
Refrigeration	Icemaker	52.4%	0.29	0.15	165.5
Refrigeration	Vending Machine	52.4%	0.14	0.07	77.7
Food Preparation	Oven	48.9%	0.18	0.09	96.3
Food Preparation	Fryer	45.2%	0.26	0.12	128.8
Food Preparation	Dishwasher	39.6%	0.36	0.14	155.2
Food Preparation	Hot Food Container	39.6%	0.05	0.02	21.2
Food Preparation	Steamer	39.6%	0.26	0.10	113.8
Office Equipment	Desktop Computer	100.0%	0.34	0.34	369.3
Office Equipment	Laptop	100.0%	0.05	0.05	57.0
Office Equipment	Server	82.0%	0.05	0.04	44.5
Office Equipment	Monitor	100.0%	0.06	0.06	65.2
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05	50.5
Office Equipment	POS Terminal	100.0%	0.01	0.01	8.7
Miscellaneous	Non-HVAC Motors	40.2%	0.29	0.12	129.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.21	1.21	1,328.1
Total				18.75	20,566.2

Table A-69 Idaho Large Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	1.0%	2.69	0.03
Cooling	Water-Cooled Chiller	0.6%	2.67	0.02
Cooling	RTU	69.8%	3.40	2.37
Cooling	Room AC	3.1%	3.13	0.10
Cooling	Evaporative AC	3.6%	1.44	0.05
Cooling	Air-Source Heat Pump	2.7%	2.99	0.08
Cooling	Geothermal Heat Pump	2.0%	1.44	0.03
Heating	Electric Furnace	2.0%	5.52	0.11
Heating	Electric Room Heat	22.9%	5.26	1.20
Heating	Air-Source Heat Pump	2.7%	4.75	0.13
Heating	Geothermal Heat Pump	2.0%	1.71	0.03
Ventilation	Ventilation	100.0%	2.56	2.56
Water Heating	Water Heater	51.9%	1.15	0.60
Interior Lighting	Screw-in	100.0%	0.61	0.61
Interior Lighting	High-Bay Fixtures	100.0%	2.33	2.33
Interior Lighting	Linear Lighting	100.0%	3.04	3.04
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.34	0.01
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.08	0.01
Refrigeration	Glass Door Display	81.7%	0.08	0.06
Refrigeration	Open Display Case	81.7%	0.47	0.38
Refrigeration	Icemaker	52.4%	0.25	0.13
Refrigeration	Vending Machine	52.4%	0.12	0.06
Food Preparation	Oven	48.9%	0.14	0.07
Food Preparation	Fryer	45.2%	0.23	0.11
Food Preparation	Dishwasher	39.6%	0.32	0.13
Food Preparation	Hot Food Container	39.6%	0.04	0.02
Food Preparation	Steamer	39.6%	0.24	0.09
Office Equipment	Desktop Computer	100.0%	0.34	0.34
Office Equipment	Laptop	100.0%	0.05	0.05
Office Equipment	Server	82.0%	0.05	0.04
Office Equipment	Monitor	100.0%	0.06	0.06
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05
Office Equipment	POS Terminal	100.0%	0.01	0.01
Miscellaneous	Non-HVAC Motors	40.2%	0.29	0.12
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.21	1.21
Total				17.55

Table A-70 Idaho Small Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.31	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.37	0.00	0.0
Cooling	RTU	69.2%	3.68	2.55	8,735.9
Cooling	Room AC	2.3%	3.81	0.09	297.0
Cooling	Evaporative AC	0.0%	1.47	0.00	2.3
Cooling	Air-Source Heat Pump	5.7%	3.68	0.21	719.5
Cooling	Geothermal Heat Pump	4.1%	2.24	0.09	317.5
Heating	Electric Furnace	0.8%	7.08	0.06	202.6
Heating	Electric Room Heat	16.1%	6.74	1.08	3,718.3
Heating	Air-Source Heat Pump	5.7%	5.80	0.33	1,134.6
Heating	Geothermal Heat Pump	4.1%	3.70	0.15	523.6
Ventilation	Ventilation	100.0%	1.28	1.28	4,398.4
Water Heating	Water Heater	49.3%	0.96	0.48	1,629.4
Interior Lighting	Screw-in	100.0%	0.64	0.64	2,198.0
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31	4,504.5
Interior Lighting	Linear Lighting	100.0%	1.98	1.98	6,795.5
Exterior Lighting	Screw-in	100.0%	0.24	0.24	815.7
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	2,895.1
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	273.8
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.30	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	10.5%	0.07	0.01	24.5
Refrigeration	Glass Door Display	1.8%	0.07	0.00	4.2
Refrigeration	Open Display Case	1.8%	0.41	0.01	24.9
Refrigeration	Icemaker	5.1%	0.23	0.01	39.9
Refrigeration	Vending Machine	5.1%	0.11	0.01	18.8
Food Preparation	Oven	3.6%	0.19	0.01	24.1
Food Preparation	Fryer	3.6%	0.28	0.01	34.8
Food Preparation	Dishwasher	3.6%	0.38	0.01	47.9
Food Preparation	Hot Food Container	3.6%	0.05	0.00	6.6
Food Preparation	Steamer	3.6%	0.28	0.01	35.1
Office Equipment	Desktop Computer	100.0%	0.11	0.11	362.9
Office Equipment	Laptop	100.0%	0.02	0.02	56.0
Office Equipment	Server	100.0%	0.12	0.12	426.9
Office Equipment	Monitor	100.0%	0.02	0.02	64.0
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	39.7
Office Equipment	POS Terminal	100.0%	0.03	0.03	114.0
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04	148.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85	2,903.9
Total				12.70	43,538.8

Table A-71 Idaho Small Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.76	0.00
Cooling	Water-Cooled Chiller	0.0%	2.74	0.00
Cooling	RTU	69.2%	3.53	2.44
Cooling	Room AC	2.3%	3.03	0.07
Cooling	Evaporative AC	0.0%	1.47	0.00
Cooling	Air-Source Heat Pump	5.7%	3.06	0.17
Cooling	Geothermal Heat Pump	4.1%	1.50	0.06
Heating	Electric Furnace	0.8%	6.62	0.06
Heating	Electric Room Heat	16.1%	6.31	1.01
Heating	Air-Source Heat Pump	5.7%	5.27	0.30
Heating	Geothermal Heat Pump	4.1%	1.94	0.08
Ventilation	Ventilation	100.0%	0.99	0.99
Water Heating	Water Heater	49.3%	0.96	0.47
Interior Lighting	Screw-in	100.0%	0.40	0.40
Interior Lighting	High-Bay Fixtures	100.0%	1.54	1.54
Interior Lighting	Linear Lighting	100.0%	2.00	2.00
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.27	0.00
Refrigeration	Reach-in Refrigerator/Freezer	10.5%	0.06	0.01
Refrigeration	Glass Door Display	1.8%	0.06	0.00
Refrigeration	Open Display Case	1.8%	0.37	0.01
Refrigeration	Icemaker	5.1%	0.20	0.01
Refrigeration	Vending Machine	5.1%	0.10	0.00
Food Preparation	Oven	3.6%	0.15	0.01
Food Preparation	Fryer	3.6%	0.25	0.01
Food Preparation	Dishwasher	3.6%	0.35	0.01
Food Preparation	Hot Food Container	3.6%	0.05	0.00
Food Preparation	Steamer	3.6%	0.25	0.01
Office Equipment	Desktop Computer	100.0%	0.11	0.11
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.12	0.12
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	100.0%	0.03	0.03
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85
Total				12.20

Table A-72 Idaho Restaurant Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.82	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.83	0.00	0.0
Cooling	RTU	75.4%	4.62	3.49	1,680.0
Cooling	Room AC	2.8%	5.08	0.14	67.6
Cooling	Evaporative AC	3.4%	1.85	0.06	30.4
Cooling	Air-Source Heat Pump	5.4%	4.62	0.25	120.3
Cooling	Geothermal Heat Pump	2.0%	2.82	0.06	27.1
Heating	Electric Furnace	6.2%	6.45	0.40	192.4
Heating	Electric Room Heat	0.6%	6.14	0.03	16.6
Heating	Air-Source Heat Pump	5.4%	4.93	0.27	128.4
Heating	Geothermal Heat Pump	2.0%	3.30	0.07	31.8
Ventilation	Ventilation	100.0%	2.50	2.50	1,202.8
Water Heating	Water Heater	32.1%	8.88	2.85	1,375.0
Interior Lighting	Screw-in	100.0%	2.28	2.28	1,098.6
Interior Lighting	High-Bay Fixtures	100.0%	2.92	2.92	1,406.8
Interior Lighting	Linear Lighting	100.0%	1.87	1.87	900.0
Exterior Lighting	Screw-in	100.0%	0.28	0.28	133.1
Exterior Lighting	Area Lighting	100.0%	2.14	2.14	1,031.9
Exterior Lighting	Linear Lighting	100.0%	0.40	0.40	194.5
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	7.55	5.59	2,692.0
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	3.39	0.24	114.3
Refrigeration	Glass Door Display	5.2%	1.74	0.09	43.6
Refrigeration	Open Display Case	5.2%	10.31	0.54	258.3
Refrigeration	Icemaker	97.3%	2.85	2.77	1,335.5
Refrigeration	Vending Machine	97.3%	1.34	1.30	627.2
Food Preparation	Oven	21.0%	4.52	0.95	457.6
Food Preparation	Fryer	82.0%	6.54	5.36	2,583.9
Food Preparation	Dishwasher	52.5%	4.50	2.36	1,138.6
Food Preparation	Hot Food Container	84.0%	0.62	0.52	249.3
Food Preparation	Steamer	16.0%	3.30	0.53	254.4
Office Equipment	Desktop Computer	100.0%	0.33	0.33	161.3
Office Equipment	Laptop	100.0%	0.04	0.04	19.9
Office Equipment	Server	50.0%	0.39	0.20	94.9
Office Equipment	Monitor	100.0%	0.06	0.06	28.5
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07	35.3
Office Equipment	POS Terminal	100.0%	0.11	0.11	50.7
Miscellaneous	Non-HVAC Motors	20.0%	0.84	0.17	80.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	2.89	2.89	1,390.7
Total				44.10	21,254.1

Table A-73 Idaho Restaurant New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.62	0.00
Cooling	Water-Cooled Chiller	0.0%	3.49	0.00
Cooling	RTU	75.4%	4.38	3.30
Cooling	Room AC	2.8%	4.03	0.11
Cooling	Evaporative AC	3.4%	1.85	0.06
Cooling	Air-Source Heat Pump	5.4%	4.32	0.23
Cooling	Geothermal Heat Pump	2.0%	2.73	0.05
Heating	Electric Furnace	6.2%	6.03	0.37
Heating	Electric Room Heat	0.6%	5.74	0.03
Heating	Air-Source Heat Pump	5.4%	4.14	0.22
Heating	Geothermal Heat Pump	2.0%	3.23	0.06
Ventilation	Ventilation	100.0%	1.92	1.92
Water Heating	Water Heater	32.1%	8.84	2.84
Interior Lighting	Screw-in	100.0%	1.93	1.93
Interior Lighting	High-Bay Fixtures	100.0%	4.18	4.18
Interior Lighting	Linear Lighting	100.0%	1.91	1.91
Exterior Lighting	Screw-in	100.0%	0.33	0.33
Exterior Lighting	Area Lighting	100.0%	2.49	2.49
Exterior Lighting	Linear Lighting	100.0%	0.41	0.41
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	6.79	5.03
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	3.05	0.21
Refrigeration	Glass Door Display	5.2%	1.56	0.08
Refrigeration	Open Display Case	5.2%	9.28	0.48
Refrigeration	Icemaker	97.3%	2.54	2.47
Refrigeration	Vending Machine	97.3%	1.21	1.18
Food Preparation	Oven	21.0%	3.51	0.74
Food Preparation	Fryer	82.0%	5.88	4.83
Food Preparation	Dishwasher	52.5%	4.05	2.13
Food Preparation	Hot Food Container	84.0%	0.55	0.47
Food Preparation	Steamer	16.0%	2.97	0.48
Office Equipment	Desktop Computer	100.0%	0.33	0.33
Office Equipment	Laptop	100.0%	0.04	0.04
Office Equipment	Server	50.0%	0.39	0.20
Office Equipment	Monitor	100.0%	0.06	0.06
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07
Office Equipment	POS Terminal	100.0%	0.11	0.11
Miscellaneous	Non-HVAC Motors	20.0%	0.84	0.17
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	2.89	2.89
Total				42.43

Table A-74 Idaho Grocery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.5%	4.68	0.03	11.3
Cooling	Water-Cooled Chiller	0.3%	4.77	0.02	7.1
Cooling	RTU	74.7%	5.20	3.89	1,734.8
Cooling	Room AC	2.2%	5.71	0.13	56.9
Cooling	Evaporative AC	1.2%	2.08	0.03	11.4
Cooling	Air-Source Heat Pump	4.3%	4.82	0.21	92.3
Cooling	Geothermal Heat Pump	0.0%	1.73	0.00	0.0
Heating	Electric Furnace	9.4%	7.24	0.68	303.3
Heating	Electric Room Heat	1.7%	6.89	0.12	53.2
Heating	Air-Source Heat Pump	4.3%	4.20	0.18	80.4
Heating	Geothermal Heat Pump	0.0%	2.84	0.00	0.0
Ventilation	Ventilation	100.0%	2.51	2.51	1,119.1
Water Heating	Water Heater	52.4%	2.63	1.38	615.6
Interior Lighting	Screw-in	100.0%	0.68	0.68	302.1
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02	901.7
Interior Lighting	Linear Lighting	100.0%	5.01	5.01	2,236.5
Exterior Lighting	Screw-in	100.0%	0.36	0.36	161.6
Exterior Lighting	Area Lighting	100.0%	1.78	1.78	796.0
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38	170.3
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	6.18	0.99	441.5
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.40	0.33	147.0
Refrigeration	Glass Door Display	94.9%	4.07	3.86	1,723.5
Refrigeration	Open Display Case	94.9%	24.12	22.89	10,215.8
Refrigeration	Icemaker	98.9%	0.33	0.33	147.1
Refrigeration	Vending Machine	98.9%	0.31	0.31	138.2
Food Preparation	Oven	11.0%	0.73	0.08	35.9
Food Preparation	Fryer	87.0%	1.06	0.92	411.2
Food Preparation	Dishwasher	54.9%	1.46	0.80	356.9
Food Preparation	Hot Food Container	73.0%	0.20	0.15	65.0
Food Preparation	Steamer	20.0%	1.07	0.21	95.4
Office Equipment	Desktop Computer	100.0%	0.18	0.18	82.1
Office Equipment	Laptop	64.0%	0.03	0.02	8.1
Office Equipment	Server	100.0%	0.11	0.11	48.3
Office Equipment	Monitor	100.0%	0.03	0.03	14.5
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	9.0
Office Equipment	POS Terminal	100.0%	0.07	0.07	32.2
Miscellaneous	Non-HVAC Motors	34.6%	0.83	0.29	129.0
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.62	3.62	1,616.0
Total				54.60	24,370.2

Table A-75 Idaho Grocery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.5%	3.90	0.02
Cooling	Water-Cooled Chiller	0.3%	3.87	0.01
Cooling	RTU	74.7%	5.57	4.17
Cooling	Room AC	2.2%	4.54	0.10
Cooling	Evaporative AC	1.2%	2.08	0.03
Cooling	Air-Source Heat Pump	4.3%	4.02	0.17
Cooling	Geothermal Heat Pump	0.0%	1.14	0.00
Heating	Electric Furnace	9.4%	6.77	0.64
Heating	Electric Room Heat	1.7%	6.44	0.11
Heating	Air-Source Heat Pump	4.3%	3.82	0.16
Heating	Geothermal Heat Pump	0.0%	4.22	0.00
Ventilation	Ventilation	100.0%	2.18	2.18
Water Heating	Water Heater	52.4%	2.62	1.37
Interior Lighting	Screw-in	100.0%	0.51	0.51
Interior Lighting	High-Bay Fixtures	100.0%	2.22	2.22
Interior Lighting	Linear Lighting	100.0%	5.20	5.20
Exterior Lighting	Screw-in	100.0%	0.30	0.30
Exterior Lighting	Area Lighting	100.0%	1.98	1.98
Exterior Lighting	Linear Lighting	100.0%	0.39	0.39
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	5.56	0.89
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.36	0.30
Refrigeration	Glass Door Display	94.9%	3.66	3.48
Refrigeration	Open Display Case	94.9%	21.71	20.60
Refrigeration	Icemaker	98.9%	0.32	0.32
Refrigeration	Vending Machine	98.9%	0.28	0.28
Food Preparation	Oven	11.0%	0.74	0.08
Food Preparation	Fryer	87.0%	0.95	0.83
Food Preparation	Dishwasher	54.9%	1.31	0.72
Food Preparation	Hot Food Container	73.0%	0.18	0.13
Food Preparation	Steamer	20.0%	0.96	0.19
Office Equipment	Desktop Computer	100.0%	0.18	0.18
Office Equipment	Laptop	64.0%	0.03	0.02
Office Equipment	Server	100.0%	0.11	0.11
Office Equipment	Monitor	100.0%	0.03	0.03
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02
Office Equipment	POS Terminal	100.0%	0.07	0.07
Miscellaneous	Non-HVAC Motors	34.6%	0.83	0.29
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.62	3.62
Total				51.73

Table A-76 Idaho Health Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.5%	5.56	0.92	604.9
Cooling	Water-Cooled Chiller	66.0%	6.33	4.18	2,756.0
Cooling	RTU	10.9%	5.35	0.58	383.0
Cooling	Room AC	0.4%	5.88	0.02	14.8
Cooling	Evaporative AC	0.0%	2.14	0.00	0.0
Cooling	Air-Source Heat Pump	1.6%	5.34	0.08	55.5
Cooling	Geothermal Heat Pump	0.9%	3.25	0.03	18.6
Heating	Electric Furnace	2.7%	15.90	0.43	283.3
Heating	Electric Room Heat	0.1%	15.15	0.01	5.6
Heating	Air-Source Heat Pump	1.6%	11.62	0.18	120.9
Heating	Geothermal Heat Pump	0.9%	8.16	0.07	46.6
Ventilation	Ventilation	100.0%	4.15	4.15	2,737.9
Water Heating	Water Heater	25.2%	4.15	1.04	688.8
Interior Lighting	Screw-in	100.0%	0.78	0.78	512.4
Interior Lighting	High-Bay Fixtures	100.0%	2.59	2.59	1,710.1
Interior Lighting	Linear Lighting	100.0%	4.04	4.04	2,662.0
Exterior Lighting	Screw-in	100.0%	0.04	0.04	29.1
Exterior Lighting	Area Lighting	100.0%	0.66	0.66	438.0
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	54.0
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.25	0.08	54.4
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.06	0.03	18.5
Refrigeration	Glass Door Display	90.4%	0.06	0.05	34.3
Refrigeration	Open Display Case	90.4%	0.34	0.31	203.4
Refrigeration	Icemaker	90.4%	0.19	0.17	112.4
Refrigeration	Vending Machine	90.4%	0.09	0.08	52.8
Food Preparation	Oven	69.7%	0.58	0.41	267.9
Food Preparation	Fryer	80.7%	0.84	0.68	448.6
Food Preparation	Dishwasher	53.5%	1.16	0.62	409.1
Food Preparation	Hot Food Container	53.5%	0.16	0.08	56.0
Food Preparation	Steamer	53.5%	0.85	0.45	300.0
Office Equipment	Desktop Computer	100.0%	0.51	0.51	334.4
Office Equipment	Laptop	100.0%	0.03	0.03	20.7
Office Equipment	Server	100.0%	0.06	0.06	39.3
Office Equipment	Monitor	100.0%	0.09	0.09	59.0
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	36.6
Office Equipment	POS Terminal	100.0%	0.04	0.04	26.3
Miscellaneous	Non-HVAC Motors	74.1%	0.50	0.37	243.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.68	3.68	2,424.6
Total				27.70	18,263.7

Table A-77 Idaho Health New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.5%	4.05	0.67
Cooling	Water-Cooled Chiller	66.0%	4.50	2.97
Cooling	RTU	10.9%	5.79	0.63
Cooling	Room AC	0.4%	4.67	0.02
Cooling	Evaporative AC	0.0%	2.14	0.00
Cooling	Air-Source Heat Pump	1.6%	4.45	0.07
Cooling	Geothermal Heat Pump	0.9%	3.62	0.03
Heating	Electric Furnace	2.7%	14.88	0.40
Heating	Electric Room Heat	0.1%	14.17	0.01
Heating	Air-Source Heat Pump	1.6%	10.56	0.17
Heating	Geothermal Heat Pump	0.9%	4.67	0.04
Ventilation	Ventilation	100.0%	2.76	2.76
Water Heating	Water Heater	25.2%	4.13	1.04
Interior Lighting	Screw-in	100.0%	0.92	0.92
Interior Lighting	High-Bay Fixtures	100.0%	3.10	3.10
Interior Lighting	Linear Lighting	100.0%	4.11	4.11
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	0.71	0.71
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.22	0.07
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.05	0.03
Refrigeration	Glass Door Display	90.4%	0.05	0.05
Refrigeration	Open Display Case	90.4%	0.31	0.28
Refrigeration	Icemaker	90.4%	0.16	0.15
Refrigeration	Vending Machine	90.4%	0.08	0.07
Food Preparation	Oven	69.7%	0.59	0.41
Food Preparation	Fryer	80.7%	0.76	0.61
Food Preparation	Dishwasher	53.5%	1.04	0.56
Food Preparation	Hot Food Container	53.5%	0.14	0.08
Food Preparation	Steamer	53.5%	0.77	0.41
Office Equipment	Desktop Computer	100.0%	0.51	0.51
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.09	0.09
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06
Office Equipment	POS Terminal	100.0%	0.04	0.04
Miscellaneous	Non-HVAC Motors	74.1%	0.50	0.37
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.68	3.68
Total				25.33

Table A-78 Idaho College Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	30.2%	4.85	1.46	5,551.1
Cooling	Water-Cooled Chiller	0.0%	6.29	0.00	0.0
Cooling	RTU	49.5%	3.05	1.51	5,730.6
Cooling	Room AC	3.2%	3.35	0.11	408.7
Cooling	Evaporative AC	0.0%	1.22	0.00	0.2
Cooling	Air-Source Heat Pump	5.7%	3.04	0.17	656.0
Cooling	Geothermal Heat Pump	0.6%	1.85	0.01	39.1
Heating	Electric Furnace	0.0%	11.77	0.00	0.0
Heating	Electric Room Heat	17.6%	11.21	1.97	7,497.6
Heating	Air-Source Heat Pump	5.7%	8.63	0.49	1,860.1
Heating	Geothermal Heat Pump	0.6%	6.38	0.04	134.5
Ventilation	Ventilation	100.0%	1.88	1.88	7,122.9
Water Heating	Water Heater	36.9%	2.56	0.94	3,584.6
Interior Lighting	Screw-in	100.0%	0.13	0.13	512.4
Interior Lighting	High-Bay Fixtures	100.0%	1.42	1.42	5,404.8
Interior Lighting	Linear Lighting	100.0%	2.19	2.19	8,306.8
Exterior Lighting	Screw-in	100.0%	0.02	0.02	76.0
Exterior Lighting	Area Lighting	100.0%	0.29	0.29	1,091.2
Exterior Lighting	Linear Lighting	100.0%	0.75	0.75	2,845.4
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.20	0.02	58.4
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.09	0.01	45.6
Refrigeration	Glass Door Display	26.6%	0.05	0.01	46.6
Refrigeration	Open Display Case	26.6%	0.27	0.07	275.9
Refrigeration	Icemaker	26.6%	0.15	0.04	152.5
Refrigeration	Vending Machine	26.6%	0.07	0.02	71.6
Food Preparation	Oven	21.0%	0.29	0.06	232.8
Food Preparation	Fryer	21.0%	0.42	0.09	336.6
Food Preparation	Dishwasher	21.0%	0.58	0.12	463.3
Food Preparation	Hot Food Container	21.0%	0.08	0.02	63.4
Food Preparation	Steamer	21.0%	0.42	0.09	339.7
Office Equipment	Desktop Computer	100.0%	0.58	0.58	2,217.9
Office Equipment	Laptop	100.0%	0.03	0.03	102.7
Office Equipment	Server	100.0%	0.07	0.07	260.9
Office Equipment	Monitor	100.0%	0.10	0.10	391.4
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08	303.6
Office Equipment	POS Terminal	100.0%	0.02	0.02	87.1
Miscellaneous	Non-HVAC Motors	88.8%	0.14	0.12	455.8
Miscellaneous	Pool Pump	90.3%	0.04	0.04	140.4
Miscellaneous	Pool Heater	36.2%	0.05	0.02	72.9
Miscellaneous	Other Miscellaneous	100.0%	0.96	0.96	3,628.4
Total				15.95	60,569.5

Table A-79 Idaho College New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	30.2%	4.59	1.38
Cooling	Water-Cooled Chiller	0.0%	5.63	0.00
Cooling	RTU	49.5%	2.72	1.35
Cooling	Room AC	3.2%	2.70	0.09
Cooling	Evaporative AC	0.0%	1.22	0.00
Cooling	Air-Source Heat Pump	5.7%	2.69	0.15
Cooling	Geothermal Heat Pump	0.6%	1.70	0.01
Heating	Electric Furnace	0.0%	11.00	0.00
Heating	Electric Room Heat	17.6%	10.48	1.85
Heating	Air-Source Heat Pump	5.7%	6.91	0.39
Heating	Geothermal Heat Pump	0.6%	5.96	0.03
Ventilation	Ventilation	100.0%	1.74	1.74
Water Heating	Water Heater	36.9%	2.55	0.94
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.62	1.62
Interior Lighting	Linear Lighting	100.0%	2.15	2.15
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.29	0.29
Exterior Lighting	Linear Lighting	100.0%	0.74	0.74
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.18	0.01
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.08	0.01
Refrigeration	Glass Door Display	26.6%	0.04	0.01
Refrigeration	Open Display Case	26.6%	0.25	0.07
Refrigeration	Icemaker	26.6%	0.12	0.03
Refrigeration	Vending Machine	26.6%	0.06	0.02
Food Preparation	Oven	21.0%	0.30	0.06
Food Preparation	Fryer	21.0%	0.38	0.08
Food Preparation	Dishwasher	21.0%	0.52	0.11
Food Preparation	Hot Food Container	21.0%	0.07	0.02
Food Preparation	Steamer	21.0%	0.38	0.08
Office Equipment	Desktop Computer	100.0%	0.58	0.58
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	100.0%	0.07	0.07
Office Equipment	Monitor	100.0%	0.10	0.10
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08
Office Equipment	POS Terminal	100.0%	0.02	0.02
Miscellaneous	Non-HVAC Motors	88.8%	0.14	0.12
Miscellaneous	Pool Pump	90.3%	0.04	0.04
Miscellaneous	Pool Heater	36.2%	0.05	0.02
Miscellaneous	Other Miscellaneous	100.0%	0.96	0.96
Total			15.42	

Table A-80 Idaho School Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	23.3%	2.54	0.59	1,458.9
Cooling	Water-Cooled Chiller	0.0%	3.29	0.00	0.0
Cooling	RTU	38.3%	1.60	0.61	1,506.1
Cooling	Room AC	2.5%	1.75	0.04	107.4
Cooling	Evaporative AC	0.0%	0.64	0.00	0.1
Cooling	Air-Source Heat Pump	5.3%	1.59	0.08	207.4
Cooling	Geothermal Heat Pump	3.5%	0.97	0.03	84.8
Heating	Electric Furnace	0.0%	7.37	0.00	0.0
Heating	Electric Room Heat	11.2%	7.02	0.78	1,934.5
Heating	Air-Source Heat Pump	5.3%	5.41	0.29	703.9
Heating	Geothermal Heat Pump	3.5%	4.00	0.14	349.5
Ventilation	Ventilation	100.0%	0.97	0.97	2,385.2
Water Heating	Water Heater	33.3%	1.35	0.45	1,107.1
Interior Lighting	Screw-in	100.0%	0.34	0.34	849.5
Interior Lighting	High-Bay Fixtures	100.0%	0.81	0.81	1,998.4
Interior Lighting	Linear Lighting	100.0%	1.51	1.51	3,731.4
Exterior Lighting	Screw-in	100.0%	0.00	0.00	9.8
Exterior Lighting	Area Lighting	100.0%	0.12	0.12	296.1
Exterior Lighting	Linear Lighting	100.0%	0.66	0.66	1,620.9
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.23	0.04	106.7
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.10	0.03	83.2
Refrigeration	Glass Door Display	65.7%	0.05	0.03	85.0
Refrigeration	Open Display Case	65.7%	0.31	0.20	503.6
Refrigeration	Icemaker	65.7%	0.17	0.11	278.3
Refrigeration	Vending Machine	65.7%	0.08	0.05	130.7
Food Preparation	Oven	64.8%	0.15	0.10	241.6
Food Preparation	Fryer	58.6%	0.22	0.13	315.9
Food Preparation	Dishwasher	52.3%	0.30	0.16	388.2
Food Preparation	Hot Food Container	52.3%	0.04	0.02	53.1
Food Preparation	Steamer	52.3%	0.22	0.12	284.7
Office Equipment	Desktop Computer	100.0%	0.39	0.39	973.2
Office Equipment	Laptop	100.0%	0.02	0.02	60.1
Office Equipment	Server	100.0%	0.09	0.09	229.0
Office Equipment	Monitor	100.0%	0.07	0.07	171.7
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04	106.6
Office Equipment	POS Terminal	36.0%	0.01	0.00	11.0
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04	99.8
Miscellaneous	Pool Pump	6.0%	0.05	0.00	6.9
Miscellaneous	Pool Heater	1.0%	0.03	0.00	0.7
Miscellaneous	Other Miscellaneous	100.0%	0.66	0.66	1,618.9
Total				9.77	24,099.9

Table A-81 Idaho School New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	23.3%	2.40	0.56
Cooling	Water-Cooled Chiller	0.0%	2.95	0.00
Cooling	RTU	38.3%	1.42	0.54
Cooling	Room AC	2.5%	1.41	0.04
Cooling	Evaporative AC	0.0%	0.64	0.00
Cooling	Air-Source Heat Pump	5.3%	1.41	0.07
Cooling	Geothermal Heat Pump	3.5%	0.89	0.03
Heating	Electric Furnace	0.0%	6.89	0.00
Heating	Electric Room Heat	11.2%	6.57	0.73
Heating	Air-Source Heat Pump	5.3%	4.33	0.23
Heating	Geothermal Heat Pump	3.5%	3.73	0.13
Ventilation	Ventilation	100.0%	0.90	0.90
Water Heating	Water Heater	33.3%	1.34	0.45
Interior Lighting	Screw-in	100.0%	0.17	0.17
Interior Lighting	High-Bay Fixtures	100.0%	0.95	0.95
Interior Lighting	Linear Lighting	100.0%	1.48	1.48
Exterior Lighting	Screw-in	100.0%	0.01	0.01
Exterior Lighting	Area Lighting	100.0%	0.12	0.12
Exterior Lighting	Linear Lighting	100.0%	0.64	0.64
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.20	0.04
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.09	0.03
Refrigeration	Glass Door Display	65.7%	0.05	0.03
Refrigeration	Open Display Case	65.7%	0.28	0.18
Refrigeration	Icemaker	65.7%	0.14	0.09
Refrigeration	Vending Machine	65.7%	0.07	0.05
Food Preparation	Oven	64.8%	0.15	0.10
Food Preparation	Fryer	58.6%	0.20	0.12
Food Preparation	Dishwasher	52.3%	0.27	0.14
Food Preparation	Hot Food Container	52.3%	0.04	0.02
Food Preparation	Steamer	52.3%	0.20	0.10
Office Equipment	Desktop Computer	100.0%	0.39	0.39
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.09	0.09
Office Equipment	Monitor	100.0%	0.07	0.07
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04
Office Equipment	POS Terminal	36.0%	0.01	0.00
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04
Miscellaneous	Pool Pump	6.0%	0.05	0.00
Miscellaneous	Pool Heater	1.0%	0.03	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.66	0.66
Total				9.27

Table A-82 Idaho Lodging Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	2.3%	0.65	0.02	6.1
Cooling	Water-Cooled Chiller	8.4%	0.82	0.07	27.8
Cooling	RTU	18.1%	1.99	0.36	145.8
Cooling	Room AC	44.6%	2.19	0.98	393.7
Cooling	Evaporative AC	0.5%	0.80	0.00	1.8
Cooling	Air-Source Heat Pump	10.5%	1.99	0.21	84.2
Cooling	Geothermal Heat Pump	3.4%	1.88	0.06	25.8
Heating	Electric Furnace	1.3%	3.68	0.05	20.0
Heating	Electric Room Heat	47.8%	3.51	1.68	676.7
Heating	Air-Source Heat Pump	10.5%	3.38	0.35	142.8
Heating	Geothermal Heat Pump	3.4%	2.27	0.08	31.3
Ventilation	Ventilation	100.0%	1.19	1.19	480.1
Water Heating	Water Heater	50.0%	4.04	2.02	813.9
Interior Lighting	Screw-in	100.0%	1.24	1.24	498.7
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29	518.7
Interior Lighting	Linear Lighting	100.0%	0.46	0.46	183.8
Exterior Lighting	Screw-in	100.0%	0.04	0.04	15.4
Exterior Lighting	Area Lighting	100.0%	1.73	1.73	697.7
Exterior Lighting	Linear Lighting	100.0%	0.03	0.03	10.3
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.50	0.01	6.0
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.11	0.02	8.5
Refrigeration	Glass Door Display	58.9%	0.11	0.07	27.1
Refrigeration	Open Display Case	58.9%	0.68	0.40	160.9
Refrigeration	Icemaker	58.9%	0.19	0.11	44.5
Refrigeration	Vending Machine	58.9%	0.18	0.10	41.8
Food Preparation	Oven	13.8%	0.32	0.04	18.1
Food Preparation	Fryer	21.0%	0.47	0.10	39.8
Food Preparation	Dishwasher	30.0%	0.65	0.19	78.2
Food Preparation	Hot Food Container	30.0%	0.09	0.03	10.7
Food Preparation	Steamer	30.0%	0.47	0.14	57.4
Office Equipment	Desktop Computer	100.0%	0.11	0.11	42.4
Office Equipment	Laptop	100.0%	0.02	0.02	6.5
Office Equipment	Server	100.0%	0.06	0.06	24.9
Office Equipment	Monitor	100.0%	0.02	0.02	7.5
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	4.6
Office Equipment	POS Terminal	58.0%	0.02	0.01	3.9
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.16	66.4
Miscellaneous	Pool Pump	76.0%	0.02	0.02	6.7
Miscellaneous	Pool Heater	27.0%	0.03	0.01	3.1
Miscellaneous	Other Miscellaneous	100.0%	0.83	0.83	332.9
Total				14.30	5,766.4

Table A-83 Idaho Lodging New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	2.3%	0.60	0.01
Cooling	Water-Cooled Chiller	8.4%	0.70	0.06
Cooling	RTU	18.1%	2.03	0.37
Cooling	Room AC	44.6%	1.74	0.78
Cooling	Evaporative AC	0.5%	0.80	0.00
Cooling	Air-Source Heat Pump	10.5%	2.02	0.21
Cooling	Geothermal Heat Pump	3.4%	1.94	0.07
Heating	Electric Furnace	1.3%	3.45	0.05
Heating	Electric Room Heat	47.8%	3.28	1.57
Heating	Air-Source Heat Pump	10.5%	2.77	0.29
Heating	Geothermal Heat Pump	3.4%	2.00	0.07
Ventilation	Ventilation	100.0%	1.03	1.03
Water Heating	Water Heater	50.0%	4.02	2.01
Interior Lighting	Screw-in	100.0%	1.41	1.41
Interior Lighting	High-Bay Fixtures	100.0%	1.93	1.93
Interior Lighting	Linear Lighting	100.0%	0.44	0.44
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	1.89	1.89
Exterior Lighting	Linear Lighting	100.0%	0.02	0.02
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.45	0.01
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.10	0.02
Refrigeration	Glass Door Display	58.9%	0.10	0.06
Refrigeration	Open Display Case	58.9%	0.61	0.36
Refrigeration	Icemaker	58.9%	0.16	0.09
Refrigeration	Vending Machine	58.9%	0.16	0.09
Food Preparation	Oven	13.8%	0.27	0.04
Food Preparation	Fryer	21.0%	0.42	0.09
Food Preparation	Dishwasher	30.0%	0.58	0.17
Food Preparation	Hot Food Container	30.0%	0.08	0.02
Food Preparation	Steamer	30.0%	0.43	0.13
Office Equipment	Desktop Computer	100.0%	0.11	0.11
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	58.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.16
Miscellaneous	Pool Pump	76.0%	0.02	0.02
Miscellaneous	Pool Heater	27.0%	0.03	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.83	0.83
Total			14.59	

Table A-84 Idaho Warehouse Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	1.51	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	1.53	0.00	0.0
Cooling	RTU	15.3%	1.62	0.25	1,029.4
Cooling	Room AC	1.0%	1.78	0.02	74.2
Cooling	Evaporative AC	0.0%	0.65	0.00	0.0
Cooling	Air-Source Heat Pump	2.7%	1.62	0.04	182.5
Cooling	Geothermal Heat Pump	0.0%	0.99	0.00	0.0
Heating	Electric Furnace	2.7%	7.10	0.19	797.6
Heating	Electric Room Heat	14.7%	6.76	0.99	4,108.8
Heating	Air-Source Heat Pump	2.7%	6.46	0.18	725.7
Heating	Geothermal Heat Pump	0.0%	5.32	0.00	0.0
Ventilation	Ventilation	100.0%	0.24	0.24	975.3
Water Heating	Water Heater	38.3%	0.24	0.09	378.9
Interior Lighting	Screw-in	100.0%	0.11	0.11	447.5
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	7,001.5
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	1,163.9
Exterior Lighting	Screw-in	100.0%	0.02	0.02	82.4
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	1,561.0
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	319.8
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.45	0.00	20.4
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.10	0.00	8.3
Refrigeration	Glass Door Display	10.1%	0.10	0.01	43.2
Refrigeration	Open Display Case	10.1%	0.61	0.06	256.3
Refrigeration	Icemaker	10.1%	0.17	0.02	70.8
Refrigeration	Vending Machine	10.1%	0.08	0.01	33.3
Food Preparation	Oven	2.3%	0.03	0.00	3.0
Food Preparation	Fryer	2.3%	0.05	0.00	4.3
Food Preparation	Dishwasher	2.3%	0.06	0.00	5.9
Food Preparation	Hot Food Container	2.3%	0.01	0.00	0.8
Food Preparation	Steamer	2.3%	0.05	0.00	4.4
Office Equipment	Desktop Computer	100.0%	0.08	0.08	332.7
Office Equipment	Laptop	100.0%	0.01	0.01	41.1
Office Equipment	Server	89.0%	0.09	0.08	348.3
Office Equipment	Monitor	100.0%	0.01	0.01	58.7
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	36.4
Office Equipment	POS Terminal	77.0%	0.03	0.02	80.5
Miscellaneous	Non-HVAC Motors	49.9%	0.14	0.07	290.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.50	0.50	2,085.5
Total				5.46	22,573.0

Table A-85 Idaho Warehouse New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	1.26	0.00
Cooling	Water-Cooled Chiller	0.0%	1.25	0.00
Cooling	RTU	15.3%	1.54	0.24
Cooling	Room AC	1.0%	1.42	0.01
Cooling	Evaporative AC	0.0%	0.65	0.00
Cooling	Air-Source Heat Pump	2.7%	1.35	0.04
Cooling	Geothermal Heat Pump	0.0%	0.71	0.00
Heating	Electric Furnace	2.7%	6.64	0.18
Heating	Electric Room Heat	14.7%	6.32	0.93
Heating	Air-Source Heat Pump	2.7%	5.87	0.16
Heating	Geothermal Heat Pump	0.0%	2.45	0.00
Ventilation	Ventilation	100.0%	0.20	0.20
Water Heating	Water Heater	38.3%	0.24	0.09
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.40	0.00
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.09	0.00
Refrigeration	Glass Door Display	10.1%	0.09	0.01
Refrigeration	Open Display Case	10.1%	0.55	0.06
Refrigeration	Icemaker	10.1%	0.17	0.02
Refrigeration	Vending Machine	10.1%	0.07	0.01
Food Preparation	Oven	2.3%	0.03	0.00
Food Preparation	Fryer	2.3%	0.04	0.00
Food Preparation	Dishwasher	2.3%	0.06	0.00
Food Preparation	Hot Food Container	2.3%	0.01	0.00
Food Preparation	Steamer	2.3%	0.04	0.00
Office Equipment	Desktop Computer	100.0%	0.08	0.08
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.09	0.08
Office Equipment	Monitor	100.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.03	0.02
Miscellaneous	Non-HVAC Motors	49.9%	0.14	0.07
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.50	0.50
Total				5.49

Table A-86 Idaho Warehouse, Controlled Atmosphere Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.0%	1.19	0.18	245.2
Cooling	Water-Cooled Chiller	1.7%	1.21	0.02	27.6
Cooling	RTU	19.7%	1.28	0.25	345.4
Cooling	Room AC	1.2%	1.41	0.02	22.9
Cooling	Evaporative AC	0.1%	0.51	0.00	0.8
Cooling	Air-Source Heat Pump	1.9%	1.28	0.02	32.6
Cooling	Geothermal Heat Pump	0.0%	0.78	0.00	0.0
Heating	Electric Furnace	2.0%	5.83	0.12	162.7
Heating	Electric Room Heat	11.1%	5.55	0.61	838.3
Heating	Air-Source Heat Pump	1.9%	5.30	0.10	135.0
Heating	Geothermal Heat Pump	0.0%	4.37	0.00	0.0
Ventilation	Ventilation	100.0%	0.68	0.68	928.7
Water Heating	Water Heater	46.7%	0.39	0.18	248.5
Interior Lighting	Screw-in	100.0%	0.11	0.11	148.0
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	2,315.2
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	384.9
Exterior Lighting	Screw-in	100.0%	0.02	0.02	27.2
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	516.2
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	105.7
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	14.44	13.25	18,108.0
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.65	0.01	17.7
Refrigeration	Glass Door Display	10.1%	0.67	0.07	91.9
Refrigeration	Open Display Case	10.1%	3.94	0.40	544.6
Refrigeration	Icemaker	91.7%	1.09	1.00	1,366.4
Refrigeration	Vending Machine	91.7%	0.51	0.47	641.7
Food Preparation	Oven	40.8%	0.05	0.02	29.5
Food Preparation	Fryer	40.8%	0.08	0.03	42.6
Food Preparation	Dishwasher	40.8%	0.11	0.04	58.7
Food Preparation	Hot Food Container	40.8%	0.01	0.01	8.0
Food Preparation	Steamer	40.8%	0.08	0.03	43.0
Office Equipment	Desktop Computer	100.0%	0.06	0.06	82.5
Office Equipment	Laptop	100.0%	0.01	0.01	10.2
Office Equipment	Server	89.0%	0.07	0.06	86.4
Office Equipment	Monitor	100.0%	0.01	0.01	14.6
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	9.0
Office Equipment	POS Terminal	77.0%	0.02	0.01	20.0
Miscellaneous	Non-HVAC Motors	79.5%	0.47	0.38	513.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	2.01	2.01	2,749.7
Total				22.62	30,922.7

Table A-87 Idaho Warehouse, Controlled Atmosphere New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.0%	0.99	0.15
Cooling	Water-Cooled Chiller	1.7%	0.98	0.02
Cooling	RTU	19.7%	1.21	0.24
Cooling	Room AC	1.2%	1.12	0.01
Cooling	Evaporative AC	0.1%	0.51	0.00
Cooling	Air-Source Heat Pump	1.9%	1.07	0.02
Cooling	Geothermal Heat Pump	0.0%	0.56	0.00
Heating	Electric Furnace	2.0%	5.45	0.11
Heating	Electric Room Heat	11.1%	5.19	0.57
Heating	Air-Source Heat Pump	1.9%	4.82	0.09
Heating	Geothermal Heat Pump	0.0%	2.01	0.00
Ventilation	Ventilation	100.0%	0.59	0.59
Water Heating	Water Heater	46.7%	0.39	0.18
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	13.00	11.92
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.58	0.01
Refrigeration	Glass Door Display	10.1%	0.60	0.06
Refrigeration	Open Display Case	10.1%	3.55	0.36
Refrigeration	Icemaker	91.7%	1.06	0.97
Refrigeration	Vending Machine	91.7%	0.46	0.43
Food Preparation	Oven	40.8%	0.05	0.02
Food Preparation	Fryer	40.8%	0.07	0.03
Food Preparation	Dishwasher	40.8%	0.09	0.04
Food Preparation	Hot Food Container	40.8%	0.01	0.01
Food Preparation	Steamer	40.8%	0.07	0.03
Office Equipment	Desktop Computer	100.0%	0.06	0.06
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.07	0.06
Office Equipment	Monitor	100.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	79.5%	0.47	0.38
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	2.01	2.01
Total				21.16

Table A-88 Idaho Miscellaneous Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	8.7%	2.60	0.23	1,127.5
Cooling	Water-Cooled Chiller	4.5%	2.64	0.12	594.2
Cooling	RTU	51.0%	2.89	1.47	7,370.2
Cooling	Room AC	4.6%	3.17	0.14	723.6
Cooling	Evaporative AC	0.0%	1.15	0.00	0.5
Cooling	Air-Source Heat Pump	5.0%	2.89	0.14	715.9
Cooling	Geothermal Heat Pump	1.3%	1.76	0.02	118.6
Heating	Electric Furnace	5.5%	7.38	0.41	2,029.5
Heating	Electric Room Heat	6.5%	7.03	0.46	2,295.1
Heating	Air-Source Heat Pump	5.0%	6.54	0.32	1,622.0
Heating	Geothermal Heat Pump	1.3%	4.69	0.06	316.5
Ventilation	Ventilation	100.0%	1.13	1.13	5,638.4
Water Heating	Water Heater	36.5%	2.14	0.78	3,910.8
Interior Lighting	Screw-in	100.0%	0.61	0.61	3,030.2
Interior Lighting	High-Bay Fixtures	100.0%	1.56	1.56	7,811.2
Interior Lighting	Linear Lighting	100.0%	1.46	1.46	7,332.0
Exterior Lighting	Screw-in	100.0%	0.09	0.09	465.1
Exterior Lighting	Area Lighting	100.0%	0.64	0.64	3,196.2
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06	295.5
Refrigeration	Walk-in Refrigerator/Freezer	6.7%	1.05	0.07	351.9
Refrigeration	Reach-in Refrigerator/Freezer	16.7%	0.24	0.04	197.5
Refrigeration	Glass Door Display	1.7%	0.24	0.00	20.3
Refrigeration	Open Display Case	1.7%	1.44	0.02	120.1
Refrigeration	Icemaker	21.6%	0.40	0.09	430.2
Refrigeration	Vending Machine	21.6%	0.37	0.08	404.1
Food Preparation	Oven	58.9%	0.13	0.08	378.7
Food Preparation	Fryer	29.9%	0.19	0.06	278.0
Food Preparation	Dishwasher	15.4%	0.26	0.04	197.2
Food Preparation	Hot Food Container	15.4%	0.03	0.01	27.0
Food Preparation	Steamer	15.4%	0.19	0.03	144.6
Office Equipment	Desktop Computer	100.0%	0.30	0.30	1,523.4
Office Equipment	Laptop	100.0%	0.05	0.05	235.2
Office Equipment	Server	66.0%	0.18	0.12	591.4
Office Equipment	Monitor	100.0%	0.05	0.05	268.8
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03	166.8
Office Equipment	POS Terminal	28.0%	0.05	0.01	67.0
Miscellaneous	Non-HVAC Motors	59.9%	0.15	0.09	451.3
Miscellaneous	Pool Pump	4.0%	0.02	0.00	3.3
Miscellaneous	Pool Heater	1.0%	0.02	0.00	1.1
Miscellaneous	Other Miscellaneous	100.0%	0.73	0.73	3,638.1
Total				11.60	58,088.7

Table A-89 Idaho Miscellaneous New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	8.7%	2.17	0.19
Cooling	Water-Cooled Chiller	4.5%	2.15	0.10
Cooling	RTU	51.0%	2.77	1.41
Cooling	Room AC	4.6%	2.52	0.11
Cooling	Evaporative AC	0.0%	1.15	0.00
Cooling	Air-Source Heat Pump	5.0%	2.40	0.12
Cooling	Geothermal Heat Pump	1.3%	1.73	0.02
Heating	Electric Furnace	5.5%	6.90	0.38
Heating	Electric Room Heat	6.5%	6.57	0.43
Heating	Air-Source Heat Pump	5.0%	5.94	0.29
Heating	Geothermal Heat Pump	1.3%	2.82	0.04
Ventilation	Ventilation	100.0%	0.91	0.91
Water Heating	Water Heater	36.5%	2.13	0.78
Interior Lighting	Screw-in	100.0%	0.75	0.75
Interior Lighting	High-Bay Fixtures	100.0%	1.73	1.73
Interior Lighting	Linear Lighting	100.0%	1.46	1.46
Exterior Lighting	Screw-in	100.0%	0.15	0.15
Exterior Lighting	Area Lighting	100.0%	0.78	0.78
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06
Refrigeration	Walk-in Refrigerator/Freezer	6.7%	0.95	0.06
Refrigeration	Reach-in Refrigerator/Freezer	16.7%	0.21	0.04
Refrigeration	Glass Door Display	1.7%	0.22	0.00
Refrigeration	Open Display Case	1.7%	1.30	0.02
Refrigeration	Icemaker	21.6%	0.39	0.08
Refrigeration	Vending Machine	21.6%	0.34	0.07
Food Preparation	Oven	58.9%	0.13	0.08
Food Preparation	Fryer	29.9%	0.17	0.05
Food Preparation	Dishwasher	15.4%	0.23	0.04
Food Preparation	Hot Food Container	15.4%	0.03	0.00
Food Preparation	Steamer	15.4%	0.17	0.03
Office Equipment	Desktop Computer	100.0%	0.30	0.30
Office Equipment	Laptop	100.0%	0.05	0.05
Office Equipment	Server	66.0%	0.18	0.12
Office Equipment	Monitor	100.0%	0.05	0.05
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03
Office Equipment	POS Terminal	28.0%	0.05	0.01
Miscellaneous	Non-HVAC Motors	59.9%	0.15	0.09
Miscellaneous	Pool Pump	4.0%	0.02	0.00
Miscellaneous	Pool Heater	1.0%	0.02	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.73	0.73
Total				11.56

Table A-90 Utah Large Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.8%	4.60	0.77	67,722.4
Cooling	Water-Cooled Chiller	10.4%	4.48	0.46	40,577.1
Cooling	RTU	54.5%	4.97	2.71	236,793.8
Cooling	Room AC	2.9%	5.57	0.16	14,048.4
Cooling	Evaporative AC	0.1%	1.99	0.00	100.5
Cooling	Air-Source Heat Pump	4.3%	4.97	0.22	18,850.6
Cooling	Geothermal Heat Pump	2.7%	3.03	0.08	7,117.2
Heating	Electric Furnace	1.6%	3.89	0.06	5,523.5
Heating	Electric Room Heat	31.3%	3.71	1.16	101,363.5
Heating	Air-Source Heat Pump	4.3%	3.40	0.15	12,920.8
Heating	Geothermal Heat Pump	2.7%	2.96	0.08	6,954.7
Ventilation	Ventilation	100.0%	2.54	2.54	222,489.3
Water Heating	Water Heater	45.2%	0.85	0.38	33,420.6
Interior Lighting	Screw-in	100.0%	0.35	0.35	30,742.3
Interior Lighting	High-Bay Fixtures	100.0%	1.01	1.01	88,304.4
Interior Lighting	Linear Lighting	100.0%	1.72	1.72	150,822.7
Exterior Lighting	Screw-in	100.0%	0.10	0.10	8,352.7
Exterior Lighting	Area Lighting	100.0%	1.28	1.28	111,734.1
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18	15,739.5
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.12	0.00	206.8
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00	324.9
Refrigeration	Glass Door Display	77.4%	0.03	0.02	1,843.5
Refrigeration	Open Display Case	77.4%	0.16	0.12	10,927.3
Refrigeration	Icemaker	44.9%	0.04	0.02	1,751.7
Refrigeration	Vending Machine	44.9%	0.04	0.02	1,645.3
Food Preparation	Oven	66.0%	0.05	0.03	2,601.5
Food Preparation	Fryer	76.4%	0.07	0.05	4,355.0
Food Preparation	Dishwasher	20.0%	0.09	0.02	1,571.6
Food Preparation	Hot Food Container	20.0%	0.01	0.00	215.1
Food Preparation	Steamer	20.0%	0.07	0.01	1,152.4
Office Equipment	Desktop Computer	100.0%	2.02	2.02	176,520.3
Office Equipment	Laptop	100.0%	0.31	0.31	27,256.8
Office Equipment	Server	100.0%	0.20	0.20	17,305.9
Office Equipment	Monitor	100.0%	0.36	0.36	31,150.6
Office Equipment	Printer/Copier/Fax	100.0%	0.18	0.18	16,106.3
Office Equipment	POS Terminal	40.0%	0.03	0.01	924.4
Miscellaneous	Non-HVAC Motors	89.6%	0.25	0.23	19,863.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.03	1.03	89,992.0
Total				18.06	1,579,293.5

Table A-91 Utah Large Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	19.1%	3.85	0.73
Cooling	Water-Cooled Chiller	11.7%	3.66	0.43
Cooling	RTU	61.8%	3.29	2.03
Cooling	Room AC	3.2%	3.75	0.12
Cooling	Evaporative AC	0.1%	1.99	0.00
Cooling	Air-Source Heat Pump	4.8%	3.51	0.17
Cooling	Geothermal Heat Pump	3.0%	2.56	0.08
Heating	Electric Furnace	1.6%	3.81	0.06
Heating	Electric Room Heat	31.3%	3.63	1.14
Heating	Air-Source Heat Pump	4.8%	2.81	0.13
Heating	Geothermal Heat Pump	3.0%	2.19	0.06
Ventilation	Ventilation	100.0%	1.95	1.95
Water Heating	Water Heater	45.2%	0.84	0.38
Interior Lighting	Screw-in	100.0%	0.48	0.48
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31
Interior Lighting	Linear Lighting	100.0%	1.76	1.76
Exterior Lighting	Screw-in	100.0%	0.12	0.12
Exterior Lighting	Area Lighting	100.0%	1.39	1.39
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18
Refrigeration	Walk-in Refrigerator/Freezer	2.4%	0.11	0.00
Refrigeration	Reach-in Refrigerator/Freezer	16.8%	0.02	0.00
Refrigeration	Glass Door Display	92.9%	0.02	0.02
Refrigeration	Open Display Case	92.9%	0.15	0.13
Refrigeration	Icemaker	53.9%	0.04	0.02
Refrigeration	Vending Machine	53.9%	0.04	0.02
Food Preparation	Oven	79.2%	0.05	0.04
Food Preparation	Fryer	91.7%	0.06	0.05
Food Preparation	Dishwasher	24.0%	0.08	0.02
Food Preparation	Hot Food Container	24.0%	0.01	0.00
Food Preparation	Steamer	24.0%	0.06	0.01
Office Equipment	Desktop Computer	125.0%	2.02	2.52
Office Equipment	Laptop	125.0%	0.31	0.39
Office Equipment	Server	125.0%	0.20	0.25
Office Equipment	Monitor	125.0%	0.36	0.45
Office Equipment	Printer/Copier/Fax	125.0%	0.18	0.23
Office Equipment	POS Terminal	44.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	107.5%	0.25	0.27
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.03	1.03
Total				18.02

Table A-92 Utah Small Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	5.12	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	4.93	0.00	0.0
Cooling	RTU	74.7%	5.70	4.26	365,060.3
Cooling	Room AC	2.6%	6.40	0.17	14,451.6
Cooling	Evaporative AC	0.1%	2.28	0.00	103.3
Cooling	Air-Source Heat Pump	6.9%	5.70	0.39	33,611.6
Cooling	Geothermal Heat Pump	4.4%	3.47	0.15	13,225.0
Heating	Electric Furnace	0.6%	5.32	0.03	2,808.7
Heating	Electric Room Heat	11.9%	5.06	0.60	51,543.4
Heating	Air-Source Heat Pump	6.9%	4.57	0.31	26,953.5
Heating	Geothermal Heat Pump	4.4%	3.69	0.16	14,033.7
Ventilation	Ventilation	100.0%	1.09	1.09	93,656.1
Water Heating	Water Heater	28.6%	0.81	0.23	19,869.1
Interior Lighting	Screw-in	100.0%	0.38	0.38	32,515.0
Interior Lighting	High-Bay Fixtures	100.0%	1.51	1.51	129,441.5
Interior Lighting	Linear Lighting	100.0%	1.54	1.54	132,170.4
Exterior Lighting	Screw-in	100.0%	0.16	0.16	13,926.4
Exterior Lighting	Area Lighting	100.0%	1.58	1.58	135,237.3
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07	6,234.6
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.45	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	15.8%	0.10	0.02	1,361.1
Refrigeration	Glass Door Display	0.0%	0.10	0.00	0.0
Refrigeration	Open Display Case	0.0%	0.61	0.00	0.0
Refrigeration	Icemaker	5.1%	0.17	0.01	739.1
Refrigeration	Vending Machine	5.1%	0.08	0.00	347.1
Food Preparation	Oven	1.5%	0.16	0.00	209.3
Food Preparation	Fryer	1.5%	0.24	0.00	302.7
Food Preparation	Dishwasher	1.5%	0.32	0.00	416.7
Food Preparation	Hot Food Container	1.5%	0.04	0.00	57.0
Food Preparation	Steamer	1.5%	0.24	0.00	305.5
Office Equipment	Desktop Computer	100.0%	1.15	1.15	98,946.6
Office Equipment	Laptop	100.0%	0.18	0.18	15,278.5
Office Equipment	Server	100.0%	0.34	0.34	29,101.9
Office Equipment	Monitor	100.0%	0.20	0.20	17,461.2
Office Equipment	Printer/Copier/Fax	100.0%	0.16	0.16	13,542.3
Office Equipment	POS Terminal	20.0%	0.09	0.02	1,554.5
Miscellaneous	Non-HVAC Motors	22.0%	0.26	0.06	4,815.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.10	1.10	93,954.6
Total				15.90	1,363,235.2

Table A-93 Utah Small Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	4.28	0.00
Cooling	Water-Cooled Chiller	0.0%	4.03	0.00
Cooling	RTU	89.4%	3.64	3.25
Cooling	Room AC	3.2%	4.30	0.14
Cooling	Evaporative AC	0.1%	2.28	0.00
Cooling	Air-Source Heat Pump	8.2%	4.03	0.33
Cooling	Geothermal Heat Pump	5.3%	2.84	0.15
Heating	Electric Furnace	0.6%	5.21	0.03
Heating	Electric Room Heat	11.9%	4.96	0.59
Heating	Air-Source Heat Pump	8.2%	3.77	0.31
Heating	Geothermal Heat Pump	5.3%	2.99	0.16
Ventilation	Ventilation	100.0%	0.81	0.81
Water Heating	Water Heater	28.6%	0.81	0.23
Interior Lighting	Screw-in	100.0%	0.53	0.53
Interior Lighting	High-Bay Fixtures	100.0%	1.96	1.96
Interior Lighting	Linear Lighting	100.0%	1.52	1.52
Exterior Lighting	Screw-in	100.0%	0.23	0.23
Exterior Lighting	Area Lighting	100.0%	1.66	1.66
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.40	0.00
Refrigeration	Reach-in Refrigerator/Freezer	18.9%	0.09	0.02
Refrigeration	Glass Door Display	0.0%	0.09	0.00
Refrigeration	Open Display Case	0.0%	0.55	0.00
Refrigeration	Icemaker	6.1%	0.13	0.01
Refrigeration	Vending Machine	6.1%	0.07	0.00
Food Preparation	Oven	1.9%	0.16	0.00
Food Preparation	Fryer	1.9%	0.21	0.00
Food Preparation	Dishwasher	1.9%	0.29	0.01
Food Preparation	Hot Food Container	1.9%	0.04	0.00
Food Preparation	Steamer	1.9%	0.21	0.00
Office Equipment	Desktop Computer	125.0%	1.15	1.44
Office Equipment	Laptop	125.0%	0.18	0.22
Office Equipment	Server	125.0%	0.34	0.42
Office Equipment	Monitor	125.0%	0.20	0.25
Office Equipment	Printer/Copier/Fax	125.0%	0.16	0.20
Office Equipment	POS Terminal	22.0%	0.09	0.02
Miscellaneous	Non-HVAC Motors	24.2%	0.26	0.06
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.10	1.10
Total			15.73	

Table A-94 Utah Large Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	1.2%	4.99	0.06	1,692.8
Cooling	Water-Cooled Chiller	0.7%	4.81	0.03	1,004.8
Cooling	RTU	80.6%	5.55	4.47	132,054.5
Cooling	Room AC	3.5%	6.23	0.22	6,486.6
Cooling	Evaporative AC	4.1%	2.22	0.09	2,701.1
Cooling	Air-Source Heat Pump	4.3%	5.55	0.24	6,998.7
Cooling	Geothermal Heat Pump	0.0%	3.38	0.00	0.0
Heating	Electric Furnace	0.9%	4.39	0.04	1,213.1
Heating	Electric Room Heat	10.9%	4.19	0.46	13,509.7
Heating	Air-Source Heat Pump	4.3%	3.79	0.16	4,783.0
Heating	Geothermal Heat Pump	0.0%	3.09	0.00	0.0
Ventilation	Ventilation	100.0%	2.87	2.87	84,696.7
Water Heating	Water Heater	38.2%	0.95	0.36	10,763.3
Interior Lighting	Screw-in	100.0%	0.97	0.97	28,672.2
Interior Lighting	High-Bay Fixtures	100.0%	1.99	1.99	58,759.4
Interior Lighting	Linear Lighting	100.0%	3.00	3.00	88,644.4
Exterior Lighting	Screw-in	100.0%	0.24	0.24	7,023.0
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	24,925.1
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	2,357.6
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.32	0.01	186.7
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.07	0.01	293.3
Refrigeration	Glass Door Display	81.7%	0.07	0.06	1,756.9
Refrigeration	Open Display Case	81.7%	0.43	0.35	10,413.6
Refrigeration	Icemaker	52.4%	0.24	0.13	3,691.3
Refrigeration	Vending Machine	52.4%	0.11	0.06	1,733.5
Food Preparation	Oven	48.9%	0.10	0.05	1,387.3
Food Preparation	Fryer	45.2%	0.14	0.06	1,854.5
Food Preparation	Dishwasher	18.5%	0.19	0.04	1,044.2
Food Preparation	Hot Food Container	18.5%	0.03	0.00	142.9
Food Preparation	Steamer	18.5%	0.14	0.03	765.7
Office Equipment	Desktop Computer	100.0%	0.29	0.29	8,684.0
Office Equipment	Laptop	100.0%	0.05	0.05	1,340.9
Office Equipment	Server	82.0%	0.04	0.04	1,047.2
Office Equipment	Monitor	100.0%	0.05	0.05	1,532.5
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04	1,188.5
Office Equipment	POS Terminal	100.0%	0.01	0.01	204.6
Miscellaneous	Non-HVAC Motors	40.2%	0.30	0.12	3,537.5
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.23	1.23	36,382.7
Total				18.75	553,473.8

Table A-95 Utah Large Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	1.5%	4.09	0.06
Cooling	Water-Cooled Chiller	0.9%	3.82	0.04
Cooling	RTU	104.7%	4.60	4.82
Cooling	Room AC	4.6%	4.19	0.19
Cooling	Evaporative AC	5.4%	2.22	0.12
Cooling	Air-Source Heat Pump	5.6%	4.52	0.25
Cooling	Geothermal Heat Pump	0.0%	2.17	0.00
Heating	Electric Furnace	0.9%	4.31	0.04
Heating	Electric Room Heat	10.9%	4.10	0.45
Heating	Air-Source Heat Pump	5.6%	3.13	0.17
Heating	Geothermal Heat Pump	0.0%	1.63	0.00
Ventilation	Ventilation	100.0%	2.17	2.17
Water Heating	Water Heater	38.2%	0.95	0.36
Interior Lighting	Screw-in	100.0%	0.61	0.61
Interior Lighting	High-Bay Fixtures	100.0%	2.33	2.33
Interior Lighting	Linear Lighting	100.0%	3.04	3.04
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.28	0.01
Refrigeration	Reach-in Refrigerator/Freezer	21.0%	0.06	0.01
Refrigeration	Glass Door Display	122.6%	0.07	0.08
Refrigeration	Open Display Case	122.6%	0.39	0.48
Refrigeration	Icemaker	78.6%	0.21	0.16
Refrigeration	Vending Machine	78.6%	0.10	0.08
Food Preparation	Oven	68.5%	0.07	0.05
Food Preparation	Fryer	63.3%	0.13	0.08
Food Preparation	Dishwasher	25.9%	0.17	0.04
Food Preparation	Hot Food Container	25.9%	0.02	0.01
Food Preparation	Steamer	25.9%	0.13	0.03
Office Equipment	Desktop Computer	110.0%	0.29	0.32
Office Equipment	Laptop	110.0%	0.05	0.05
Office Equipment	Server	98.4%	0.04	0.04
Office Equipment	Monitor	110.0%	0.05	0.06
Office Equipment	Printer/Copier/Fax	110.0%	0.04	0.04
Office Equipment	POS Terminal	125.0%	0.01	0.01
Miscellaneous	Non-HVAC Motors	48.2%	0.30	0.14
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.23	1.23
Total			18.90	

Table A-96 Utah Small Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	4.40	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	4.24	0.00	0.0
Cooling	RTU	82.0%	4.90	4.01	228,405.1
Cooling	Room AC	2.4%	4.84	0.12	6,739.1
Cooling	Evaporative AC	0.0%	1.96	0.00	54.7
Cooling	Air-Source Heat Pump	5.4%	4.89	0.27	15,170.2
Cooling	Geothermal Heat Pump	3.4%	2.98	0.10	5,784.7
Heating	Electric Furnace	0.4%	4.96	0.02	1,241.5
Heating	Electric Room Heat	8.5%	4.72	0.40	22,783.8
Heating	Air-Source Heat Pump	5.4%	3.75	0.20	11,624.9
Heating	Geothermal Heat Pump	3.4%	2.57	0.09	4,990.8
Ventilation	Ventilation	100.0%	0.94	0.94	53,468.9
Water Heating	Water Heater	37.8%	0.70	0.26	14,998.5
Interior Lighting	Screw-in	100.0%	0.64	0.64	36,482.6
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31	74,765.8
Interior Lighting	Linear Lighting	100.0%	1.98	1.98	112,791.7
Exterior Lighting	Screw-in	100.0%	0.24	0.24	13,539.5
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	48,052.9
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	4,545.1
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.12	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	15.0%	0.03	0.00	224.1
Refrigeration	Glass Door Display	7.5%	0.03	0.00	115.0
Refrigeration	Open Display Case	7.5%	0.16	0.01	681.6
Refrigeration	Icemaker	5.1%	0.09	0.00	256.2
Refrigeration	Vending Machine	5.1%	0.04	0.00	120.3
Food Preparation	Oven	1.5%	0.14	0.00	119.5
Food Preparation	Fryer	1.5%	0.20	0.00	172.8
Food Preparation	Dishwasher	1.5%	0.28	0.00	237.9
Food Preparation	Hot Food Container	1.5%	0.04	0.00	32.6
Food Preparation	Steamer	1.5%	0.20	0.00	174.4
Office Equipment	Desktop Computer	100.0%	0.08	0.08	4,678.3
Office Equipment	Laptop	100.0%	0.01	0.01	722.4
Office Equipment	Server	100.0%	0.10	0.10	5,503.9
Office Equipment	Monitor	100.0%	0.01	0.01	825.6
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	512.2
Office Equipment	POS Terminal	100.0%	0.03	0.03	1,470.0
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04	2,504.7
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.86	0.86	48,871.0
Total				12.70	722,662.4

Table A-97 Utah Small Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.60	0.00
Cooling	Water-Cooled Chiller	0.0%	3.37	0.00
Cooling	RTU	106.6%	3.60	3.84
Cooling	Room AC	3.2%	3.25	0.10
Cooling	Evaporative AC	0.1%	1.96	0.00
Cooling	Air-Source Heat Pump	7.1%	3.46	0.25
Cooling	Geothermal Heat Pump	4.4%	1.91	0.08
Heating	Electric Furnace	0.4%	4.86	0.02
Heating	Electric Room Heat	8.5%	4.63	0.39
Heating	Air-Source Heat Pump	7.1%	3.09	0.22
Heating	Geothermal Heat Pump	4.4%	1.56	0.07
Ventilation	Ventilation	100.0%	0.74	0.74
Water Heating	Water Heater	37.8%	0.69	0.26
Interior Lighting	Screw-in	100.0%	0.40	0.40
Interior Lighting	High-Bay Fixtures	100.0%	1.54	1.54
Interior Lighting	Linear Lighting	100.0%	2.00	2.00
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.11	0.00
Refrigeration	Reach-in Refrigerator/Freezer	22.5%	0.02	0.01
Refrigeration	Glass Door Display	11.3%	0.02	0.00
Refrigeration	Open Display Case	11.3%	0.14	0.02
Refrigeration	Icemaker	7.7%	0.08	0.01
Refrigeration	Vending Machine	7.7%	0.04	0.00
Food Preparation	Oven	2.1%	0.11	0.00
Food Preparation	Fryer	2.1%	0.18	0.00
Food Preparation	Dishwasher	2.1%	0.25	0.01
Food Preparation	Hot Food Container	2.1%	0.03	0.00
Food Preparation	Steamer	2.1%	0.18	0.00
Office Equipment	Desktop Computer	110.0%	0.08	0.09
Office Equipment	Laptop	110.0%	0.01	0.01
Office Equipment	Server	120.0%	0.10	0.12
Office Equipment	Monitor	110.0%	0.01	0.02
Office Equipment	Printer/Copier/Fax	110.0%	0.01	0.01
Office Equipment	POS Terminal	125.0%	0.03	0.03
Miscellaneous	Non-HVAC Motors	26.4%	0.20	0.05
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.86	0.86
Total				12.49

Table A-98 Utah Restaurant Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	7.04	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	6.87	0.00	0.0
Cooling	RTU	81.8%	8.31	6.80	67,956.6
Cooling	Room AC	3.0%	9.33	0.28	2,791.6
Cooling	Evaporative AC	3.7%	3.33	0.12	1,227.7
Cooling	Air-Source Heat Pump	5.9%	8.31	0.49	4,910.9
Cooling	Geothermal Heat Pump	0.0%	5.07	0.00	0.0
Heating	Electric Furnace	10.0%	5.69	0.57	5,660.2
Heating	Electric Room Heat	0.9%	5.42	0.05	488.5
Heating	Air-Source Heat Pump	5.9%	4.01	0.24	2,370.9
Heating	Geothermal Heat Pump	0.0%	2.87	0.00	0.0
Ventilation	Ventilation	100.0%	2.53	2.53	25,284.4
Water Heating	Water Heater	35.2%	8.95	3.15	31,471.9
Interior Lighting	Screw-in	100.0%	2.28	2.28	22,768.1
Interior Lighting	High-Bay Fixtures	100.0%	2.92	2.92	29,155.1
Interior Lighting	Linear Lighting	100.0%	1.87	1.87	18,652.4
Exterior Lighting	Screw-in	100.0%	0.28	0.28	2,758.6
Exterior Lighting	Area Lighting	100.0%	2.14	2.14	21,384.9
Exterior Lighting	Linear Lighting	100.0%	0.40	0.40	4,031.2
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	7.33	5.43	54,200.0
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	3.29	0.23	2,301.4
Refrigeration	Glass Door Display	5.2%	1.69	0.09	877.3
Refrigeration	Open Display Case	5.2%	10.01	0.52	5,200.1
Refrigeration	Icemaker	97.3%	2.77	2.69	26,887.8
Refrigeration	Vending Machine	97.3%	1.30	1.26	12,627.3
Food Preparation	Oven	21.0%	2.98	0.63	6,249.9
Food Preparation	Fryer	82.0%	4.31	3.53	35,291.9
Food Preparation	Dishwasher	31.7%	2.97	0.94	9,400.6
Food Preparation	Hot Food Container	84.0%	0.41	0.34	3,405.1
Food Preparation	Steamer	16.0%	2.17	0.35	3,474.7
Office Equipment	Desktop Computer	100.0%	0.32	0.32	3,157.2
Office Equipment	Laptop	100.0%	0.04	0.04	390.0
Office Equipment	Server	50.0%	0.37	0.19	1,857.2
Office Equipment	Monitor	100.0%	0.06	0.06	557.2
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07	691.4
Office Equipment	POS Terminal	100.0%	0.10	0.10	992.0
Miscellaneous	Non-HVAC Motors	20.0%	0.88	0.18	1,758.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.03	3.03	30,247.5
Total				44.10	440,479.7

Table A-99 Utah Restaurant New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	6.65	0.00
Cooling	Water-Cooled Chiller	0.0%	6.13	0.00
Cooling	RTU	98.0%	6.23	6.11
Cooling	Room AC	3.6%	6.27	0.22
Cooling	Evaporative AC	4.4%	3.33	0.15
Cooling	Air-Source Heat Pump	7.1%	6.16	0.44
Cooling	Geothermal Heat Pump	0.0%	4.86	0.00
Heating	Electric Furnace	10.0%	5.57	0.56
Heating	Electric Room Heat	0.9%	5.31	0.05
Heating	Air-Source Heat Pump	7.1%	3.59	0.25
Heating	Geothermal Heat Pump	0.0%	2.96	0.00
Ventilation	Ventilation	100.0%	1.99	1.99
Water Heating	Water Heater	37.0%	8.91	3.29
Interior Lighting	Screw-in	100.0%	1.93	1.93
Interior Lighting	High-Bay Fixtures	100.0%	4.18	4.18
Interior Lighting	Linear Lighting	100.0%	1.91	1.91
Exterior Lighting	Screw-in	100.0%	0.33	0.33
Exterior Lighting	Area Lighting	100.0%	2.49	2.49
Exterior Lighting	Linear Lighting	100.0%	0.41	0.41
Refrigeration	Walk-in Refrigerator/Freezer	76.1%	6.60	5.02
Refrigeration	Reach-in Refrigerator/Freezer	7.2%	2.96	0.21
Refrigeration	Glass Door Display	5.3%	1.52	0.08
Refrigeration	Open Display Case	5.3%	9.01	0.48
Refrigeration	Icemaker	100.0%	2.47	2.47
Refrigeration	Vending Machine	100.0%	1.18	1.18
Food Preparation	Oven	29.4%	2.32	0.68
Food Preparation	Fryer	114.8%	3.88	4.45
Food Preparation	Dishwasher	44.4%	2.67	1.19
Food Preparation	Hot Food Container	117.6%	0.37	0.43
Food Preparation	Steamer	22.4%	1.96	0.44
Office Equipment	Desktop Computer	110.0%	0.32	0.35
Office Equipment	Laptop	110.0%	0.04	0.04
Office Equipment	Server	55.0%	0.37	0.20
Office Equipment	Monitor	110.0%	0.06	0.06
Office Equipment	Printer/Copier/Fax	110.0%	0.07	0.08
Office Equipment	POS Terminal	120.0%	0.10	0.12
Miscellaneous	Non-HVAC Motors	24.0%	0.88	0.21
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.03	3.03
Total			45.03	

Table A-100 Utah Grocery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.5%	8.17	0.04	248.5
Cooling	Water-Cooled Chiller	0.3%	7.87	0.03	147.5
Cooling	RTU	73.8%	9.10	6.71	38,305.8
Cooling	Room AC	2.2%	10.21	0.22	1,283.2
Cooling	Evaporative AC	1.2%	3.64	0.04	252.5
Cooling	Air-Source Heat Pump	5.3%	8.63	0.46	2,604.1
Cooling	Geothermal Heat Pump	0.0%	3.34	0.00	0.0
Heating	Electric Furnace	8.5%	6.45	0.55	3,145.9
Heating	Electric Room Heat	1.6%	6.14	0.10	551.7
Heating	Air-Source Heat Pump	5.3%	3.32	0.18	1,002.7
Heating	Geothermal Heat Pump	0.0%	2.27	0.00	0.0
Ventilation	Ventilation	100.0%	2.35	2.35	13,435.3
Water Heating	Water Heater	27.3%	2.46	0.67	3,820.4
Interior Lighting	Screw-in	100.0%	0.68	0.68	3,861.3
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02	11,525.9
Interior Lighting	Linear Lighting	100.0%	5.01	5.01	28,586.7
Exterior Lighting	Screw-in	100.0%	0.36	0.36	2,065.2
Exterior Lighting	Area Lighting	100.0%	1.78	1.78	10,174.6
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38	2,176.9
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	6.00	0.96	5,475.2
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.38	0.32	1,822.5
Refrigeration	Glass Door Display	94.9%	3.95	3.75	21,372.3
Refrigeration	Open Display Case	94.9%	23.40	22.20	126,682.9
Refrigeration	Icemaker	98.9%	0.32	0.32	1,824.1
Refrigeration	Vending Machine	98.9%	0.30	0.30	1,713.3
Food Preparation	Oven	11.0%	0.40	0.04	254.2
Food Preparation	Fryer	87.0%	0.59	0.51	2,907.0
Food Preparation	Dishwasher	25.3%	0.81	0.20	1,165.0
Food Preparation	Hot Food Container	73.0%	0.11	0.08	459.5
Food Preparation	Steamer	20.0%	0.59	0.12	674.4
Office Equipment	Desktop Computer	100.0%	0.19	0.19	1,067.4
Office Equipment	Laptop	64.0%	0.03	0.02	105.5
Office Equipment	Server	100.0%	0.11	0.11	627.9
Office Equipment	Monitor	100.0%	0.03	0.03	188.4
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	116.9
Office Equipment	POS Terminal	100.0%	0.07	0.07	419.3
Miscellaneous	Non-HVAC Motors	34.6%	0.80	0.28	1,585.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.48	3.48	19,854.7
Total				54.60	311,503.9

Table A-101 Utah Grocery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.6%	6.70	0.04
Cooling	Water-Cooled Chiller	0.3%	6.26	0.02
Cooling	RTU	77.5%	8.07	6.25
Cooling	Room AC	2.2%	6.86	0.15
Cooling	Evaporative AC	1.2%	3.64	0.04
Cooling	Air-Source Heat Pump	5.3%	5.73	0.30
Cooling	Geothermal Heat Pump	0.0%	2.75	0.00
Heating	Electric Furnace	8.5%	6.32	0.54
Heating	Electric Room Heat	1.6%	6.02	0.09
Heating	Air-Source Heat Pump	5.3%	2.74	0.14
Heating	Geothermal Heat Pump	0.0%	3.36	0.00
Ventilation	Ventilation	100.0%	2.04	2.04
Water Heating	Water Heater	27.3%	2.44	0.67
Interior Lighting	Screw-in	100.0%	0.51	0.51
Interior Lighting	High-Bay Fixtures	100.0%	2.22	2.22
Interior Lighting	Linear Lighting	100.0%	5.20	5.20
Exterior Lighting	Screw-in	100.0%	0.30	0.30
Exterior Lighting	Area Lighting	100.0%	1.98	1.98
Exterior Lighting	Linear Lighting	100.0%	0.39	0.39
Refrigeration	Walk-in Refrigerator/Freezer	16.2%	5.40	0.87
Refrigeration	Reach-in Refrigerator/Freezer	84.0%	0.35	0.29
Refrigeration	Glass Door Display	96.0%	3.55	3.41
Refrigeration	Open Display Case	96.0%	21.06	20.21
Refrigeration	Icemaker	100.0%	0.32	0.32
Refrigeration	Vending Machine	100.0%	0.28	0.28
Food Preparation	Oven	15.4%	0.41	0.06
Food Preparation	Fryer	121.8%	0.53	0.64
Food Preparation	Dishwasher	35.5%	0.73	0.26
Food Preparation	Hot Food Container	102.2%	0.10	0.10
Food Preparation	Steamer	28.0%	0.53	0.15
Office Equipment	Desktop Computer	110.0%	0.19	0.21
Office Equipment	Laptop	70.4%	0.03	0.02
Office Equipment	Server	110.0%	0.11	0.12
Office Equipment	Monitor	110.0%	0.03	0.04
Office Equipment	Printer/Copier/Fax	110.0%	0.02	0.02
Office Equipment	POS Terminal	110.0%	0.07	0.08
Miscellaneous	Non-HVAC Motors	41.6%	0.80	0.33
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.48	3.48
Total			51.79	

Table A-102 Utah Health Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.7%	8.63	1.44	20,167.9
Cooling	Water-Cooled Chiller	66.7%	9.15	6.10	85,506.2
Cooling	RTU	11.0%	8.71	0.95	13,379.5
Cooling	Room AC	0.4%	9.77	0.04	526.8
Cooling	Evaporative AC	0.0%	3.48	0.00	0.0
Cooling	Air-Source Heat Pump	0.6%	8.70	0.05	703.3
Cooling	Geothermal Heat Pump	0.9%	5.30	0.05	642.4
Heating	Electric Furnace	3.7%	11.65	0.43	6,008.5
Heating	Electric Room Heat	0.1%	11.09	0.01	117.9
Heating	Air-Source Heat Pump	0.6%	7.60	0.04	614.7
Heating	Geothermal Heat Pump	0.9%	5.34	0.05	647.7
Ventilation	Ventilation	100.0%	3.36	3.36	47,052.1
Water Heating	Water Heater	13.8%	3.33	0.46	6,470.5
Interior Lighting	Screw-in	100.0%	0.78	0.78	10,889.9
Interior Lighting	High-Bay Fixtures	100.0%	2.59	2.59	36,342.0
Interior Lighting	Linear Lighting	100.0%	4.04	4.04	56,571.6
Exterior Lighting	Screw-in	100.0%	0.04	0.04	618.2
Exterior Lighting	Area Lighting	100.0%	0.66	0.66	9,308.0
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	1,147.6
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.23	0.08	1,052.9
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.05	0.03	358.0
Refrigeration	Glass Door Display	90.4%	0.05	0.05	664.4
Refrigeration	Open Display Case	90.4%	0.31	0.28	3,938.0
Refrigeration	Icemaker	90.4%	0.17	0.16	2,176.4
Refrigeration	Vending Machine	90.4%	0.08	0.07	1,022.1
Food Preparation	Oven	69.7%	0.35	0.25	3,435.2
Food Preparation	Fryer	80.7%	0.51	0.41	5,751.7
Food Preparation	Dishwasher	30.9%	0.70	0.22	3,029.1
Food Preparation	Hot Food Container	30.9%	0.10	0.03	414.6
Food Preparation	Steamer	30.9%	0.51	0.16	2,221.1
Office Equipment	Desktop Computer	100.0%	0.54	0.54	7,575.6
Office Equipment	Laptop	100.0%	0.03	0.03	467.9
Office Equipment	Server	100.0%	0.06	0.06	891.2
Office Equipment	Monitor	100.0%	0.10	0.10	1,336.9
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	829.5
Office Equipment	POS Terminal	100.0%	0.04	0.04	595.1
Miscellaneous	Non-HVAC Motors	74.1%	0.49	0.36	5,084.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.61	3.61	50,567.3
Total				27.70	388,125.8

Table A-103 Utah Health New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.7%	6.11	1.02
Cooling	Water-Cooled Chiller	66.7%	6.32	4.22
Cooling	RTU	11.0%	6.50	0.71
Cooling	Room AC	0.4%	6.57	0.03
Cooling	Evaporative AC	0.0%	3.48	0.00
Cooling	Air-Source Heat Pump	0.6%	6.15	0.04
Cooling	Geothermal Heat Pump	0.9%	5.08	0.04
Heating	Electric Furnace	3.7%	11.41	0.42
Heating	Electric Room Heat	0.1%	10.87	0.01
Heating	Air-Source Heat Pump	0.6%	6.26	0.04
Heating	Geothermal Heat Pump	0.9%	2.60	0.02
Ventilation	Ventilation	100.0%	2.31	2.31
Water Heating	Water Heater	13.8%	3.32	0.46
Interior Lighting	Screw-in	100.0%	0.92	0.92
Interior Lighting	High-Bay Fixtures	100.0%	3.10	3.10
Interior Lighting	Linear Lighting	100.0%	4.11	4.11
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	0.71	0.71
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	36.3%	0.20	0.07
Refrigeration	Reach-in Refrigerator/Freezer	55.0%	0.05	0.03
Refrigeration	Glass Door Display	99.4%	0.05	0.05
Refrigeration	Open Display Case	99.4%	0.28	0.28
Refrigeration	Icemaker	99.4%	0.15	0.15
Refrigeration	Vending Machine	99.4%	0.07	0.07
Food Preparation	Oven	97.6%	0.36	0.35
Food Preparation	Fryer	113.0%	0.46	0.52
Food Preparation	Dishwasher	43.2%	0.63	0.27
Food Preparation	Hot Food Container	43.2%	0.09	0.04
Food Preparation	Steamer	43.2%	0.46	0.20
Office Equipment	Desktop Computer	125.0%	0.54	0.68
Office Equipment	Laptop	125.0%	0.03	0.04
Office Equipment	Server	125.0%	0.06	0.08
Office Equipment	Monitor	125.0%	0.10	0.12
Office Equipment	Printer/Copier/Fax	125.0%	0.06	0.07
Office Equipment	POS Terminal	110.0%	0.04	0.05
Miscellaneous	Non-HVAC Motors	88.9%	0.49	0.44
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.61	3.61
Total			25.40	

Table A-104 Utah College Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	30.5%	6.26	1.91	47,268.7
Cooling	Water-Cooled Chiller	0.0%	7.61	0.00	0.0
Cooling	RTU	50.0%	4.20	2.10	52,001.5
Cooling	Room AC	3.2%	4.71	0.15	3,788.4
Cooling	Evaporative AC	0.0%	1.68	0.00	1.8
Cooling	Air-Source Heat Pump	5.8%	4.19	0.24	5,984.5
Cooling	Geothermal Heat Pump	0.6%	2.55	0.02	393.0
Heating	Electric Furnace	0.0%	8.49	0.00	0.0
Heating	Electric Room Heat	24.9%	8.08	2.01	49,860.5
Heating	Air-Source Heat Pump	5.8%	5.61	0.32	8,014.4
Heating	Geothermal Heat Pump	0.6%	4.23	0.03	650.9
Ventilation	Ventilation	100.0%	1.42	1.42	35,081.0
Water Heating	Water Heater	42.9%	1.92	0.83	20,430.0
Interior Lighting	Screw-in	100.0%	0.13	0.13	3,341.0
Interior Lighting	High-Bay Fixtures	100.0%	1.42	1.42	35,238.5
Interior Lighting	Linear Lighting	100.0%	2.19	2.19	54,158.4
Exterior Lighting	Screw-in	100.0%	0.02	0.02	495.5
Exterior Lighting	Area Lighting	100.0%	0.29	0.29	7,114.3
Exterior Lighting	Linear Lighting	100.0%	0.75	0.75	18,551.3
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.15	0.01	291.7
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.07	0.01	227.4
Refrigeration	Glass Door Display	26.6%	0.04	0.01	232.4
Refrigeration	Open Display Case	26.6%	0.21	0.06	1,377.3
Refrigeration	Icemaker	26.6%	0.12	0.03	761.2
Refrigeration	Vending Machine	26.6%	0.05	0.01	357.5
Food Preparation	Oven	9.4%	0.22	0.02	513.3
Food Preparation	Fryer	9.4%	0.32	0.03	742.3
Food Preparation	Dishwasher	9.4%	0.44	0.04	1,021.6
Food Preparation	Hot Food Container	9.4%	0.06	0.01	139.8
Food Preparation	Steamer	9.4%	0.32	0.03	749.1
Office Equipment	Desktop Computer	100.0%	0.46	0.46	11,286.3
Office Equipment	Laptop	100.0%	0.02	0.02	522.8
Office Equipment	Server	100.0%	0.05	0.05	1,327.8
Office Equipment	Monitor	100.0%	0.08	0.08	1,991.7
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	1,544.7
Office Equipment	POS Terminal	100.0%	0.02	0.02	443.3
Miscellaneous	Non-HVAC Motors	88.8%	0.14	0.12	3,075.5
Miscellaneous	Pool Pump	90.3%	0.04	0.04	947.0
Miscellaneous	Pool Heater	36.2%	0.05	0.02	492.1
Miscellaneous	Other Miscellaneous	100.0%	0.99	0.99	24,482.0
Total				15.95	394,900.6

Table A-105 Utah College New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	34.6%	5.24	1.81
Cooling	Water-Cooled Chiller	0.0%	6.21	0.00
Cooling	RTU	56.7%	3.00	1.70
Cooling	Room AC	3.2%	3.29	0.11
Cooling	Evaporative AC	0.0%	1.68	0.00
Cooling	Air-Source Heat Pump	6.5%	2.97	0.19
Cooling	Geothermal Heat Pump	0.7%	2.34	0.02
Heating	Electric Furnace	0.0%	8.32	0.00
Heating	Electric Room Heat	24.9%	7.92	1.97
Heating	Air-Source Heat Pump	6.5%	4.63	0.30
Heating	Geothermal Heat Pump	0.7%	4.08	0.03
Ventilation	Ventilation	100.0%	1.31	1.31
Water Heating	Water Heater	42.9%	1.92	0.82
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.62	1.62
Interior Lighting	Linear Lighting	100.0%	2.15	2.15
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.29	0.29
Exterior Lighting	Linear Lighting	100.0%	0.74	0.74
Refrigeration	Walk-in Refrigerator/Freezer	10.8%	0.14	0.01
Refrigeration	Reach-in Refrigerator/Freezer	18.7%	0.06	0.01
Refrigeration	Glass Door Display	37.2%	0.03	0.01
Refrigeration	Open Display Case	37.2%	0.19	0.07
Refrigeration	Icemaker	37.2%	0.09	0.03
Refrigeration	Vending Machine	37.2%	0.05	0.02
Food Preparation	Oven	13.2%	0.22	0.03
Food Preparation	Fryer	13.2%	0.29	0.04
Food Preparation	Dishwasher	13.2%	0.39	0.05
Food Preparation	Hot Food Container	13.2%	0.05	0.01
Food Preparation	Steamer	13.2%	0.29	0.04
Office Equipment	Desktop Computer	125.0%	0.46	0.57
Office Equipment	Laptop	125.0%	0.02	0.03
Office Equipment	Server	125.0%	0.05	0.07
Office Equipment	Monitor	125.0%	0.08	0.10
Office Equipment	Printer/Copier/Fax	125.0%	0.06	0.08
Office Equipment	POS Terminal	110.0%	0.02	0.02
Miscellaneous	Non-HVAC Motors	106.6%	0.14	0.15
Miscellaneous	Pool Pump	108.4%	0.04	0.05
Miscellaneous	Pool Heater	43.4%	0.05	0.02
Miscellaneous	Other Miscellaneous	100.0%	0.99	0.99
Total				15.64

Table A-106 Utah School Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	26.6%	3.74	0.99	36,057.2
Cooling	Water-Cooled Chiller	0.0%	4.54	0.00	0.0
Cooling	RTU	43.6%	2.51	1.09	39,667.5
Cooling	Room AC	2.8%	2.81	0.08	2,889.9
Cooling	Evaporative AC	0.0%	1.00	0.00	1.4
Cooling	Air-Source Heat Pump	6.2%	2.50	0.15	5,616.0
Cooling	Geothermal Heat Pump	4.2%	1.52	0.06	2,322.7
Heating	Electric Furnace	0.0%	6.22	0.00	0.0
Heating	Electric Room Heat	9.6%	5.93	0.57	20,701.5
Heating	Air-Source Heat Pump	6.2%	4.12	0.25	9,234.1
Heating	Geothermal Heat Pump	4.2%	3.10	0.13	4,723.4
Ventilation	Ventilation	100.0%	0.81	0.81	29,411.5
Water Heating	Water Heater	33.3%	1.12	0.37	13,600.6
Interior Lighting	Screw-in	100.0%	0.34	0.34	12,508.8
Interior Lighting	High-Bay Fixtures	100.0%	0.81	0.81	29,427.3
Interior Lighting	Linear Lighting	100.0%	1.51	1.51	54,946.9
Exterior Lighting	Screw-in	100.0%	0.00	0.00	145.0
Exterior Lighting	Area Lighting	100.0%	0.12	0.12	4,360.5
Exterior Lighting	Linear Lighting	100.0%	0.66	0.66	23,867.9
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.19	0.04	1,302.4
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.08	0.03	1,015.4
Refrigeration	Glass Door Display	65.7%	0.04	0.03	1,037.4
Refrigeration	Open Display Case	65.7%	0.26	0.17	6,148.9
Refrigeration	Icemaker	65.7%	0.14	0.09	3,398.3
Refrigeration	Vending Machine	65.7%	0.07	0.04	1,595.9
Food Preparation	Oven	64.8%	0.08	0.05	1,982.1
Food Preparation	Fryer	58.6%	0.12	0.07	2,592.2
Food Preparation	Dishwasher	24.5%	0.17	0.04	1,489.1
Food Preparation	Hot Food Container	24.5%	0.02	0.01	203.8
Food Preparation	Steamer	24.5%	0.12	0.03	1,091.9
Office Equipment	Desktop Computer	100.0%	0.32	0.32	11,802.1
Office Equipment	Laptop	100.0%	0.02	0.02	729.0
Office Equipment	Server	100.0%	0.08	0.08	2,777.0
Office Equipment	Monitor	100.0%	0.06	0.06	2,082.7
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04	1,292.2
Office Equipment	POS Terminal	36.0%	0.01	0.00	133.5
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04	1,429.3
Miscellaneous	Pool Pump	6.0%	0.05	0.00	99.2
Miscellaneous	Pool Heater	1.0%	0.03	0.00	10.7
Miscellaneous	Other Miscellaneous	100.0%	0.64	0.64	23,187.2
Total				9.77	354,882.1

Table A-107 Utah School New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	27.9%	3.13	0.87
Cooling	Water-Cooled Chiller	0.0%	3.71	0.00
Cooling	RTU	47.9%	1.79	0.86
Cooling	Room AC	2.8%	1.97	0.06
Cooling	Evaporative AC	0.0%	1.00	0.00
Cooling	Air-Source Heat Pump	7.4%	1.77	0.13
Cooling	Geothermal Heat Pump	5.0%	1.40	0.07
Heating	Electric Furnace	0.0%	6.10	0.00
Heating	Electric Room Heat	9.6%	5.81	0.56
Heating	Air-Source Heat Pump	7.4%	3.39	0.25
Heating	Geothermal Heat Pump	5.0%	2.99	0.15
Ventilation	Ventilation	100.0%	0.75	0.75
Water Heating	Water Heater	33.3%	1.12	0.37
Interior Lighting	Screw-in	100.0%	0.17	0.17
Interior Lighting	High-Bay Fixtures	100.0%	0.95	0.95
Interior Lighting	Linear Lighting	100.0%	1.48	1.48
Exterior Lighting	Screw-in	100.0%	0.01	0.01
Exterior Lighting	Area Lighting	100.0%	0.12	0.12
Exterior Lighting	Linear Lighting	100.0%	0.64	0.64
Refrigeration	Walk-in Refrigerator/Freezer	26.6%	0.17	0.05
Refrigeration	Reach-in Refrigerator/Freezer	46.2%	0.08	0.04
Refrigeration	Glass Door Display	92.0%	0.04	0.04
Refrigeration	Open Display Case	92.0%	0.23	0.21
Refrigeration	Icemaker	92.0%	0.11	0.10
Refrigeration	Vending Machine	92.0%	0.06	0.06
Food Preparation	Oven	90.7%	0.09	0.08
Food Preparation	Fryer	82.0%	0.11	0.09
Food Preparation	Dishwasher	34.2%	0.15	0.05
Food Preparation	Hot Food Container	34.2%	0.02	0.01
Food Preparation	Steamer	34.2%	0.11	0.04
Office Equipment	Desktop Computer	125.0%	0.32	0.41
Office Equipment	Laptop	125.0%	0.02	0.03
Office Equipment	Server	125.0%	0.08	0.10
Office Equipment	Monitor	125.0%	0.06	0.07
Office Equipment	Printer/Copier/Fax	125.0%	0.04	0.04
Office Equipment	POS Terminal	36.0%	0.01	0.00
Miscellaneous	Non-HVAC Motors	48.0%	0.09	0.04
Miscellaneous	Pool Pump	7.2%	0.05	0.00
Miscellaneous	Pool Heater	1.2%	0.03	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.64	0.64
Total				9.52

Table A-108 Utah Lodging Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1.29	0.03	626.6
Cooling	Water-Cooled Chiller	8.9%	1.48	0.13	2,599.6
Cooling	RTU	19.2%	3.85	0.74	14,668.0
Cooling	Room AC	47.3%	4.32	2.04	40,465.8
Cooling	Evaporative AC	0.6%	1.54	0.01	176.6
Cooling	Air-Source Heat Pump	6.0%	3.85	0.23	4,559.8
Cooling	Geothermal Heat Pump	3.4%	3.63	0.12	2,450.7
Heating	Electric Furnace	1.8%	2.46	0.05	892.0
Heating	Electric Room Heat	64.9%	2.34	1.52	30,143.7
Heating	Air-Source Heat Pump	6.0%	2.23	0.13	2,640.1
Heating	Geothermal Heat Pump	3.4%	1.62	0.06	1,093.6
Ventilation	Ventilation	100.0%	1.08	1.08	21,446.4
Water Heating	Water Heater	33.3%	3.64	1.21	24,064.2
Interior Lighting	Screw-in	100.0%	1.24	1.24	24,497.3
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29	25,478.5
Interior Lighting	Linear Lighting	100.0%	0.46	0.46	9,029.2
Exterior Lighting	Screw-in	100.0%	0.04	0.04	754.3
Exterior Lighting	Area Lighting	100.0%	1.73	1.73	34,270.4
Exterior Lighting	Linear Lighting	100.0%	0.03	0.03	506.7
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.46	0.01	275.2
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.10	0.02	391.2
Refrigeration	Glass Door Display	58.9%	0.11	0.06	1,244.5
Refrigeration	Open Display Case	58.9%	0.63	0.37	7,376.7
Refrigeration	Icemaker	58.9%	0.17	0.10	2,038.4
Refrigeration	Vending Machine	58.9%	0.16	0.10	1,914.6
Food Preparation	Oven	13.8%	0.23	0.03	641.2
Food Preparation	Fryer	21.0%	0.34	0.07	1,411.1
Food Preparation	Dishwasher	15.3%	0.47	0.07	1,411.6
Food Preparation	Hot Food Container	15.3%	0.06	0.01	193.2
Food Preparation	Steamer	15.3%	0.34	0.05	1,035.1
Office Equipment	Desktop Computer	100.0%	0.10	0.10	2,016.9
Office Equipment	Laptop	100.0%	0.02	0.02	311.4
Office Equipment	Server	100.0%	0.06	0.06	1,186.4
Office Equipment	Monitor	100.0%	0.02	0.02	355.9
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	220.8
Office Equipment	POS Terminal	58.0%	0.02	0.01	183.8
Miscellaneous	Non-HVAC Motors	91.3%	0.19	0.17	3,355.4
Miscellaneous	Pool Pump	76.0%	0.02	0.02	338.5
Miscellaneous	Pool Heater	27.0%	0.03	0.01	155.9
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85	16,827.8
Total				14.30	283,249.2

Table A-109 Utah Lodging New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	2.9%	1.20	0.04
Cooling	Water-Cooled Chiller	10.6%	1.25	0.13
Cooling	RTU	23.0%	3.85	0.89
Cooling	Room AC	56.6%	2.90	1.64
Cooling	Evaporative AC	0.7%	1.54	0.01
Cooling	Air-Source Heat Pump	6.9%	3.85	0.27
Cooling	Geothermal Heat Pump	4.0%	3.67	0.15
Heating	Electric Furnace	1.8%	2.41	0.04
Heating	Electric Room Heat	64.9%	2.30	1.49
Heating	Air-Source Heat Pump	6.9%	1.89	0.13
Heating	Geothermal Heat Pump	4.0%	1.41	0.06
Ventilation	Ventilation	100.0%	0.94	0.94
Water Heating	Water Heater	33.3%	3.63	1.21
Interior Lighting	Screw-in	100.0%	1.41	1.41
Interior Lighting	High-Bay Fixtures	100.0%	1.93	1.93
Interior Lighting	Linear Lighting	100.0%	0.44	0.44
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	1.89	1.89
Exterior Lighting	Linear Lighting	100.0%	0.02	0.02
Refrigeration	Walk-in Refrigerator/Freezer	3.9%	0.42	0.02
Refrigeration	Reach-in Refrigerator/Freezer	24.7%	0.09	0.02
Refrigeration	Glass Door Display	76.6%	0.10	0.07
Refrigeration	Open Display Case	76.6%	0.57	0.44
Refrigeration	Icemaker	76.6%	0.15	0.11
Refrigeration	Vending Machine	76.6%	0.15	0.11
Food Preparation	Oven	17.9%	0.19	0.03
Food Preparation	Fryer	27.3%	0.31	0.08
Food Preparation	Dishwasher	19.8%	0.42	0.08
Food Preparation	Hot Food Container	19.8%	0.06	0.01
Food Preparation	Steamer	19.8%	0.31	0.06
Office Equipment	Desktop Computer	125.0%	0.10	0.13
Office Equipment	Laptop	125.0%	0.02	0.02
Office Equipment	Server	125.0%	0.06	0.07
Office Equipment	Monitor	125.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	125.0%	0.01	0.01
Office Equipment	POS Terminal	63.8%	0.02	0.01
Miscellaneous	Non-HVAC Motors	109.5%	0.19	0.20
Miscellaneous	Pool Pump	91.2%	0.02	0.02
Miscellaneous	Pool Heater	32.4%	0.03	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85
Total				15.14

Table A-110 Utah Warehouse Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	2.53	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	2.38	0.00	0.0
Cooling	RTU	16.3%	2.81	0.46	59,582.1
Cooling	Room AC	1.1%	3.15	0.03	4,387.3
Cooling	Evaporative AC	0.0%	1.12	0.00	0.0
Cooling	Air-Source Heat Pump	1.7%	2.81	0.05	6,291.8
Cooling	Geothermal Heat Pump	0.0%	1.71	0.00	0.0
Heating	Electric Furnace	2.9%	6.08	0.17	22,779.9
Heating	Electric Room Heat	15.5%	5.79	0.90	117,348.8
Heating	Air-Source Heat Pump	1.7%	5.46	0.09	12,214.0
Heating	Geothermal Heat Pump	0.0%	4.76	0.00	0.0
Ventilation	Ventilation	100.0%	0.22	0.22	28,978.8
Water Heating	Water Heater	38.3%	0.22	0.09	11,177.4
Interior Lighting	Screw-in	100.0%	0.11	0.11	14,111.1
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	220,758.2
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	36,696.8
Exterior Lighting	Screw-in	100.0%	0.02	0.02	2,597.8
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	49,217.6
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	10,083.2
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.43	0.00	616.6
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.10	0.00	251.9
Refrigeration	Glass Door Display	10.1%	0.10	0.01	1,305.4
Refrigeration	Open Display Case	10.1%	0.59	0.06	7,737.4
Refrigeration	Icemaker	10.1%	0.16	0.02	2,138.1
Refrigeration	Vending Machine	10.1%	0.08	0.01	1,004.1
Food Preparation	Oven	0.9%	0.03	0.00	33.6
Food Preparation	Fryer	0.9%	0.04	0.00	48.6
Food Preparation	Dishwasher	0.9%	0.06	0.00	67.0
Food Preparation	Hot Food Container	0.9%	0.01	0.00	9.2
Food Preparation	Steamer	0.9%	0.04	0.00	49.1
Office Equipment	Desktop Computer	100.0%	0.09	0.09	11,527.0
Office Equipment	Laptop	100.0%	0.01	0.01	1,423.9
Office Equipment	Server	89.0%	0.10	0.09	12,069.5
Office Equipment	Monitor	100.0%	0.02	0.02	2,034.2
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	1,262.1
Office Equipment	POS Terminal	77.0%	0.03	0.02	2,788.9
Miscellaneous	Non-HVAC Motors	49.9%	0.13	0.07	8,690.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.48	0.48	62,443.2
Total				5.46	711,725.0

Table A-111 Utah Warehouse New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.07	0.00
Cooling	Water-Cooled Chiller	0.0%	1.89	0.00
Cooling	RTU	16.3%	2.33	0.38
Cooling	Room AC	1.1%	2.12	0.02
Cooling	Evaporative AC	0.0%	1.12	0.00
Cooling	Air-Source Heat Pump	1.7%	2.29	0.04
Cooling	Geothermal Heat Pump	0.0%	1.31	0.00
Heating	Electric Furnace	2.9%	5.96	0.17
Heating	Electric Room Heat	15.5%	5.67	0.88
Heating	Air-Source Heat Pump	1.7%	4.49	0.08
Heating	Geothermal Heat Pump	0.0%	2.97	0.00
Ventilation	Ventilation	100.0%	0.19	0.19
Water Heating	Water Heater	38.3%	0.22	0.09
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	1.3%	0.39	0.01
Refrigeration	Reach-in Refrigerator/Freezer	2.4%	0.09	0.00
Refrigeration	Glass Door Display	12.1%	0.09	0.01
Refrigeration	Open Display Case	12.1%	0.53	0.06
Refrigeration	Icemaker	12.1%	0.16	0.02
Refrigeration	Vending Machine	12.1%	0.07	0.01
Food Preparation	Oven	1.0%	0.03	0.00
Food Preparation	Fryer	0.9%	0.04	0.00
Food Preparation	Dishwasher	1.0%	0.05	0.00
Food Preparation	Hot Food Container	0.9%	0.01	0.00
Food Preparation	Steamer	0.9%	0.04	0.00
Office Equipment	Desktop Computer	125.0%	0.09	0.11
Office Equipment	Laptop	125.0%	0.01	0.01
Office Equipment	Server	111.3%	0.10	0.12
Office Equipment	Monitor	125.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	125.0%	0.01	0.01
Office Equipment	POS Terminal	84.7%	0.03	0.02
Miscellaneous	Non-HVAC Motors	59.8%	0.13	0.08
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.48	0.48
Total				5.56

Table A-112 Utah Warehouse, Controlled Atmosphere Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.0%	2.16	0.32	1,056.2
Cooling	Water-Cooled Chiller	1.7%	2.03	0.03	110.7
Cooling	RTU	19.6%	2.40	0.47	1,540.9
Cooling	Room AC	1.2%	2.69	0.03	104.2
Cooling	Evaporative AC	0.1%	0.96	0.00	3.7
Cooling	Air-Source Heat Pump	1.9%	2.40	0.04	145.4
Cooling	Geothermal Heat Pump	0.0%	1.46	0.00	0.0
Heating	Electric Furnace	1.9%	4.99	0.10	314.4
Heating	Electric Room Heat	10.4%	4.76	0.50	1,619.8
Heating	Air-Source Heat Pump	1.9%	4.48	0.08	271.4
Heating	Geothermal Heat Pump	0.0%	3.91	0.00	0.0
Ventilation	Ventilation	100.0%	0.66	0.66	2,157.8
Water Heating	Water Heater	38.9%	0.38	0.15	478.6
Interior Lighting	Screw-in	100.0%	0.11	0.11	354.0
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	5,538.8
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	920.7
Exterior Lighting	Screw-in	100.0%	0.02	0.02	65.2
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	1,234.9
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	253.0
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	14.39	13.20	43,168.7
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.65	0.01	42.3
Refrigeration	Glass Door Display	10.1%	0.66	0.07	219.0
Refrigeration	Open Display Case	10.1%	3.93	0.40	1,298.4
Refrigeration	Icemaker	91.7%	1.09	1.00	3,257.4
Refrigeration	Vending Machine	91.7%	0.51	0.47	1,529.8
Food Preparation	Oven	19.8%	0.05	0.01	33.2
Food Preparation	Fryer	19.8%	0.07	0.01	48.0
Food Preparation	Dishwasher	19.8%	0.10	0.02	66.1
Food Preparation	Hot Food Container	19.8%	0.01	0.00	9.0
Food Preparation	Steamer	19.8%	0.07	0.01	48.5
Office Equipment	Desktop Computer	100.0%	0.06	0.06	205.9
Office Equipment	Laptop	100.0%	0.01	0.01	25.4
Office Equipment	Server	89.0%	0.07	0.07	215.6
Office Equipment	Monitor	100.0%	0.01	0.01	36.3
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	22.5
Office Equipment	POS Terminal	77.0%	0.02	0.02	49.8
Miscellaneous	Non-HVAC Motors	79.5%	0.46	0.36	1,185.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.94	1.94	6,348.4
Total				22.62	73,979.7

Table A-113 Utah Warehouse, Controlled Atmosphere New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.0%	1.77	0.26
Cooling	Water-Cooled Chiller	1.7%	1.62	0.03
Cooling	RTU	19.6%	1.99	0.39
Cooling	Room AC	1.2%	1.81	0.02
Cooling	Evaporative AC	0.1%	0.96	0.00
Cooling	Air-Source Heat Pump	1.9%	1.95	0.04
Cooling	Geothermal Heat Pump	0.0%	1.12	0.00
Heating	Electric Furnace	1.9%	4.89	0.09
Heating	Electric Room Heat	10.4%	4.66	0.49
Heating	Air-Source Heat Pump	1.9%	3.69	0.07
Heating	Geothermal Heat Pump	0.0%	2.44	0.00
Ventilation	Ventilation	100.0%	0.57	0.57
Water Heating	Water Heater	38.9%	0.37	0.15
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	110.0%	12.95	14.26
Refrigeration	Reach-in Refrigerator/Freezer	2.4%	0.58	0.01
Refrigeration	Glass Door Display	12.1%	0.60	0.07
Refrigeration	Open Display Case	12.1%	3.54	0.43
Refrigeration	Icemaker	110.0%	1.06	1.17
Refrigeration	Vending Machine	110.0%	0.46	0.51
Food Preparation	Oven	23.7%	0.05	0.01
Food Preparation	Fryer	21.8%	0.07	0.01
Food Preparation	Dishwasher	23.7%	0.09	0.02
Food Preparation	Hot Food Container	21.8%	0.01	0.00
Food Preparation	Steamer	21.8%	0.07	0.01
Office Equipment	Desktop Computer	125.0%	0.06	0.08
Office Equipment	Laptop	125.0%	0.01	0.01
Office Equipment	Server	111.3%	0.07	0.08
Office Equipment	Monitor	125.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	125.0%	0.01	0.01
Office Equipment	POS Terminal	84.7%	0.02	0.02
Miscellaneous	Non-HVAC Motors	95.4%	0.46	0.43
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.94	1.94
Total			23.95	

Table A-114 Utah Data Center Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	17.8%	35.37	6.29	7,781.4
Cooling	Water-Cooled Chiller	10.9%	34.41	3.77	4,662.4
Cooling	RTU	57.6%	38.17	21.99	27,208.1
Cooling	Room AC	3.0%	42.83	1.30	1,614.2
Cooling	Evaporative AC	0.1%	15.27	0.01	11.5
Cooling	Air-Source Heat Pump	5.3%	38.16	2.03	2,517.8
Cooling	Geothermal Heat Pump	3.2%	23.26	0.75	926.8
Heating	Electric Furnace	1.5%	3.00	0.05	57.5
Heating	Electric Room Heat	29.8%	2.86	0.85	1,054.8
Heating	Air-Source Heat Pump	5.3%	2.63	0.14	173.2
Heating	Geothermal Heat Pump	3.2%	2.28	0.07	90.9
Ventilation	Ventilation	100.0%	25.38	25.38	31,406.9
Water Heating	Water Heater	45.2%	0.65	0.29	362.9
Interior Lighting	Screw-in	100.0%	0.74	0.74	916.7
Interior Lighting	High-Bay Fixtures	100.0%	2.74	2.74	3,388.3
Interior Lighting	Linear Lighting	100.0%	3.91	3.91	4,834.5
Exterior Lighting	Screw-in	100.0%	0.11	0.11	135.4
Exterior Lighting	Area Lighting	100.0%	1.12	1.12	1,381.9
Exterior Lighting	Linear Lighting	100.0%	0.24	0.24	298.0
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.10	0.00	2.6
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.02	0.00	4.0
Refrigeration	Glass Door Display	5.1%	0.02	0.00	1.5
Refrigeration	Open Display Case	5.1%	0.14	0.01	8.9
Refrigeration	Icemaker	5.1%	0.04	0.00	2.5
Refrigeration	Vending Machine	5.1%	0.02	0.00	1.2
Food Preparation	Oven	1.5%	0.07	0.00	1.3
Food Preparation	Fryer	1.5%	0.10	0.00	1.9
Food Preparation	Dishwasher	1.5%	0.14	0.00	2.6
Food Preparation	Hot Food Container	1.5%	0.02	0.00	0.4
Food Preparation	Steamer	1.5%	0.10	0.00	1.9
Office Equipment	Desktop Computer	100.0%	5.40	5.40	6,683.0
Office Equipment	Laptop	100.0%	0.33	0.33	412.8
Office Equipment	Server	100.0%	63.54	63.54	78,623.8
Office Equipment	Monitor	100.0%	0.95	0.95	1,179.4
Office Equipment	Printer/Copier/Fax	100.0%	0.59	0.59	731.7
Office Equipment	POS Terminal	40.0%	0.17	0.07	84.0
Miscellaneous	Non-HVAC Motors	89.6%	4.68	4.19	5,186.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	18.99	18.99	23,495.3
Total				165.88	205,248.0

Table A-115 Utah Data Center New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.6%	29.00	4.82
Cooling	Water-Cooled Chiller	12.3%	27.37	3.38
Cooling	RTU	53.9%	31.63	17.05
Cooling	Room AC	2.8%	28.78	0.82
Cooling	Evaporative AC	0.1%	15.27	0.01
Cooling	Air-Source Heat Pump	6.3%	31.04	1.95
Cooling	Geothermal Heat Pump	3.8%	17.74	0.67
Heating	Electric Furnace	1.5%	2.94	0.05
Heating	Electric Room Heat	29.8%	2.80	0.84
Heating	Air-Source Heat Pump	6.3%	2.16	0.14
Heating	Geothermal Heat Pump	3.8%	1.42	0.05
Ventilation	Ventilation	100.0%	22.01	22.01
Water Heating	Water Heater	45.2%	0.65	0.29
Interior Lighting	Screw-in	100.0%	1.00	1.00
Interior Lighting	High-Bay Fixtures	100.0%	3.35	3.35
Interior Lighting	Linear Lighting	100.0%	3.99	3.99
Exterior Lighting	Screw-in	100.0%	0.14	0.14
Exterior Lighting	Area Lighting	100.0%	1.21	1.21
Exterior Lighting	Linear Lighting	100.0%	0.25	0.25
Refrigeration	Walk-in Refrigerator/Freezer	2.2%	0.09	0.00
Refrigeration	Reach-in Refrigerator/Freezer	15.4%	0.02	0.00
Refrigeration	Glass Door Display	5.6%	0.02	0.00
Refrigeration	Open Display Case	5.6%	0.13	0.01
Refrigeration	Icemaker	5.6%	0.04	0.00
Refrigeration	Vending Machine	5.6%	0.02	0.00
Food Preparation	Oven	1.7%	0.07	0.00
Food Preparation	Fryer	1.7%	0.09	0.00
Food Preparation	Dishwasher	1.7%	0.13	0.00
Food Preparation	Hot Food Container	1.7%	0.02	0.00
Food Preparation	Steamer	1.7%	0.09	0.00
Office Equipment	Desktop Computer	125.0%	5.40	6.75
Office Equipment	Laptop	125.0%	0.33	0.42
Office Equipment	Server	125.0%	63.54	79.43
Office Equipment	Monitor	125.0%	0.95	1.19
Office Equipment	Printer/Copier/Fax	125.0%	0.59	0.74
Office Equipment	POS Terminal	44.0%	0.17	0.07
Miscellaneous	Non-HVAC Motors	107.5%	4.68	5.03
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	18.99	18.99
Total				174.65

Table A-116 Utah Miscellaneous Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	9.9%	3.62	0.36	28,408.7
Cooling	Water-Cooled Chiller	5.1%	3.49	0.18	14,174.8
Cooling	RTU	58.5%	4.03	2.36	186,164.9
Cooling	Room AC	5.2%	4.52	0.24	18,671.8
Cooling	Evaporative AC	0.0%	1.61	0.00	11.5
Cooling	Air-Source Heat Pump	4.6%	4.03	0.18	14,566.4
Cooling	Geothermal Heat Pump	1.1%	2.46	0.03	2,066.9
Heating	Electric Furnace	10.1%	4.81	0.48	38,203.7
Heating	Electric Room Heat	12.0%	4.58	0.55	43,202.4
Heating	Air-Source Heat Pump	4.6%	4.15	0.19	14,997.1
Heating	Geothermal Heat Pump	1.1%	3.38	0.04	2,844.7
Ventilation	Ventilation	100.0%	0.84	0.84	66,126.4
Water Heating	Water Heater	8.5%	1.58	0.13	10,641.8
Interior Lighting	Screw-in	100.0%	0.61	0.61	47,780.0
Interior Lighting	High-Bay Fixtures	100.0%	1.56	1.56	123,165.1
Interior Lighting	Linear Lighting	100.0%	1.46	1.46	115,610.6
Exterior Lighting	Screw-in	100.0%	0.09	0.09	7,333.5
Exterior Lighting	Area Lighting	100.0%	0.64	0.64	50,397.5
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06	4,659.7
Refrigeration	Walk-in Refrigerator/Freezer	2.3%	0.91	0.02	1,669.0
Refrigeration	Reach-in Refrigerator/Freezer	18.6%	0.20	0.04	2,996.7
Refrigeration	Glass Door Display	2.3%	0.21	0.00	384.4
Refrigeration	Open Display Case	2.3%	1.24	0.03	2,278.8
Refrigeration	Icemaker	21.6%	0.34	0.07	5,848.7
Refrigeration	Vending Machine	21.6%	0.32	0.07	5,493.5
Food Preparation	Oven	58.9%	0.06	0.03	2,628.2
Food Preparation	Fryer	29.9%	0.08	0.02	1,929.4
Food Preparation	Dishwasher	7.3%	0.11	0.01	649.2
Food Preparation	Hot Food Container	7.3%	0.02	0.00	88.9
Food Preparation	Steamer	7.3%	0.08	0.01	476.1
Office Equipment	Desktop Computer	100.0%	0.25	0.25	19,497.1
Office Equipment	Laptop	100.0%	0.04	0.04	3,010.6
Office Equipment	Server	66.0%	0.15	0.10	7,569.5
Office Equipment	Monitor	100.0%	0.04	0.04	3,440.7
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03	2,134.8
Office Equipment	POS Terminal	28.0%	0.04	0.01	857.7
Miscellaneous	Non-HVAC Motors	59.9%	0.15	0.09	7,270.4
Miscellaneous	Pool Pump	4.0%	0.02	0.00	52.5
Miscellaneous	Pool Heater	1.0%	0.02	0.00	17.0
Miscellaneous	Other Miscellaneous	100.0%	0.74	0.74	58,613.3
Total				11.60	915,934.0

Table A-117 Utah Miscellaneous New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	13.5%	2.97	0.40
Cooling	Water-Cooled Chiller	7.0%	2.77	0.19
Cooling	RTU	79.4%	2.97	2.36
Cooling	Room AC	7.1%	3.04	0.22
Cooling	Evaporative AC	0.0%	1.61	0.00
Cooling	Air-Source Heat Pump	6.2%	2.85	0.18
Cooling	Geothermal Heat Pump	1.4%	2.32	0.03
Heating	Electric Furnace	10.1%	4.71	0.47
Heating	Electric Room Heat	12.0%	4.49	0.54
Heating	Air-Source Heat Pump	6.2%	3.42	0.21
Heating	Geothermal Heat Pump	1.4%	2.34	0.03
Ventilation	Ventilation	100.0%	0.69	0.69
Water Heating	Water Heater	8.5%	1.58	0.13
Interior Lighting	Screw-in	100.0%	0.75	0.75
Interior Lighting	High-Bay Fixtures	100.0%	1.73	1.73
Interior Lighting	Linear Lighting	100.0%	1.46	1.46
Exterior Lighting	Screw-in	100.0%	0.15	0.15
Exterior Lighting	Area Lighting	100.0%	0.78	0.78
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06
Refrigeration	Walk-in Refrigerator/Freezer	3.3%	0.82	0.03
Refrigeration	Reach-in Refrigerator/Freezer	26.0%	0.18	0.05
Refrigeration	Glass Door Display	3.3%	0.19	0.01
Refrigeration	Open Display Case	3.3%	1.12	0.04
Refrigeration	Icemaker	30.2%	0.33	0.10
Refrigeration	Vending Machine	30.2%	0.29	0.09
Food Preparation	Oven	82.5%	0.06	0.05
Food Preparation	Fryer	41.9%	0.07	0.03
Food Preparation	Dishwasher	10.2%	0.10	0.01
Food Preparation	Hot Food Container	10.2%	0.01	0.00
Food Preparation	Steamer	10.2%	0.07	0.01
Office Equipment	Desktop Computer	125.0%	0.25	0.31
Office Equipment	Laptop	125.0%	0.04	0.05
Office Equipment	Server	82.5%	0.15	0.12
Office Equipment	Monitor	125.0%	0.04	0.05
Office Equipment	Printer/Copier/Fax	125.0%	0.03	0.03
Office Equipment	POS Terminal	33.6%	0.04	0.01
Miscellaneous	Non-HVAC Motors	71.9%	0.15	0.11
Miscellaneous	Pool Pump	4.6%	0.02	0.00
Miscellaneous	Pool Heater	1.2%	0.02	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.74	0.74
Total				12.21

Table A-118 Washington Large Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	13.8%	2.90	0.40	1.5
Cooling	Water-Cooled Chiller	8.5%	3.17	0.27	1.0
Cooling	RTU	44.8%	3.03	1.36	5.1
Cooling	Room AC	2.4%	3.57	0.08	0.3
Cooling	Evaporative AC	0.0%	1.21	0.00	0.0
Cooling	Air-Source Heat Pump	14.3%	3.03	0.43	1.6
Cooling	Geothermal Heat Pump	7.7%	1.85	0.14	0.5
Heating	Electric Furnace	1.3%	5.28	0.07	0.2
Heating	Electric Room Heat	24.3%	5.03	1.22	4.6
Heating	Air-Source Heat Pump	14.3%	4.47	0.64	2.4
Heating	Geothermal Heat Pump	7.7%	3.60	0.28	1.0
Ventilation	Ventilation	100.0%	2.93	2.93	10.9
Water Heating	Water Heater	45.2%	0.98	0.44	1.7
Interior Lighting	Screw-in	100.0%	0.35	0.35	1.3
Interior Lighting	High-Bay Fixtures	100.0%	1.01	1.01	3.8
Interior Lighting	Linear Lighting	100.0%	1.72	1.72	6.5
Exterior Lighting	Screw-in	100.0%	0.10	0.10	0.4
Exterior Lighting	Area Lighting	100.0%	1.28	1.28	4.8
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18	0.7
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.13	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00	0.0
Refrigeration	Glass Door Display	77.4%	0.03	0.02	0.1
Refrigeration	Open Display Case	77.4%	0.18	0.14	0.5
Refrigeration	Icemaker	44.9%	0.05	0.02	0.1
Refrigeration	Vending Machine	44.9%	0.05	0.02	0.1
Food Preparation	Oven	66.0%	0.08	0.05	0.2
Food Preparation	Fryer	76.4%	0.12	0.09	0.3
Food Preparation	Dishwasher	43.1%	0.17	0.07	0.3
Food Preparation	Hot Food Container	43.1%	0.02	0.01	0.0
Food Preparation	Steamer	43.1%	0.12	0.05	0.2
Office Equipment	Desktop Computer	100.0%	2.21	2.21	8.3
Office Equipment	Laptop	100.0%	0.34	0.34	1.3
Office Equipment	Server	100.0%	0.22	0.22	0.8
Office Equipment	Monitor	100.0%	0.39	0.39	1.5
Office Equipment	Printer/Copier/Fax	100.0%	0.20	0.20	0.8
Office Equipment	POS Terminal	40.0%	0.03	0.01	0.0
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23	0.9
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06	4.0
Total				18.06	67.5

Table A-119 Washington Large Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	13.8%	2.74	0.38
Cooling	Water-Cooled Chiller	8.5%	2.84	0.24
Cooling	RTU	44.8%	2.56	1.15
Cooling	Room AC	2.4%	2.84	0.07
Cooling	Evaporative AC	0.0%	1.21	0.00
Cooling	Air-Source Heat Pump	14.3%	2.52	0.36
Cooling	Geothermal Heat Pump	7.7%	1.59	0.12
Heating	Electric Furnace	1.3%	4.94	0.06
Heating	Electric Room Heat	24.3%	4.71	1.14
Heating	Air-Source Heat Pump	14.3%	4.06	0.58
Heating	Geothermal Heat Pump	7.7%	3.56	0.27
Ventilation	Ventilation	100.0%	2.27	2.27
Water Heating	Water Heater	45.2%	0.97	0.44
Interior Lighting	Screw-in	100.0%	0.33	0.33
Interior Lighting	High-Bay Fixtures	100.0%	0.96	0.96
Interior Lighting	Linear Lighting	100.0%	1.64	1.64
Exterior Lighting	Screw-in	100.0%	0.09	0.09
Exterior Lighting	Area Lighting	100.0%	1.21	1.21
Exterior Lighting	Linear Lighting	100.0%	0.17	0.17
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.12	0.00
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00
Refrigeration	Glass Door Display	77.4%	0.03	0.02
Refrigeration	Open Display Case	77.4%	0.16	0.13
Refrigeration	Icemaker	44.9%	0.05	0.02
Refrigeration	Vending Machine	44.9%	0.04	0.02
Food Preparation	Oven	66.0%	0.09	0.06
Food Preparation	Fryer	76.4%	0.11	0.08
Food Preparation	Dishwasher	43.1%	0.15	0.06
Food Preparation	Hot Food Container	43.1%	0.02	0.01
Food Preparation	Steamer	43.1%	0.11	0.05
Office Equipment	Desktop Computer	100.0%	2.21	2.21
Office Equipment	Laptop	100.0%	0.34	0.34
Office Equipment	Server	100.0%	0.22	0.22
Office Equipment	Monitor	100.0%	0.39	0.39
Office Equipment	Printer/Copier/Fax	100.0%	0.20	0.20
Office Equipment	POS Terminal	40.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.23
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.06	1.06
Total			16.62	

Table A-120 Washington Small Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.04	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.31	0.00	0.0
Cooling	RTU	66.1%	3.46	2.29	30.6
Cooling	Room AC	2.3%	4.08	0.10	1.3
Cooling	Evaporative AC	0.0%	1.39	0.00	0.0
Cooling	Air-Source Heat Pump	14.1%	3.46	0.49	6.5
Cooling	Geothermal Heat Pump	7.6%	2.11	0.16	2.1
Heating	Electric Furnace	1.2%	6.53	0.08	1.0
Heating	Electric Room Heat	22.4%	6.22	1.39	18.6
Heating	Air-Source Heat Pump	14.1%	5.49	0.77	10.3
Heating	Geothermal Heat Pump	7.6%	4.25	0.32	4.3
Ventilation	Ventilation	100.0%	1.20	1.20	16.0
Water Heating	Water Heater	60.0%	0.90	0.54	7.2
Interior Lighting	Screw-in	100.0%	0.38	0.38	5.1
Interior Lighting	High-Bay Fixtures	100.0%	1.51	1.51	20.2
Interior Lighting	Linear Lighting	100.0%	1.54	1.54	20.6
Exterior Lighting	Screw-in	100.0%	0.16	0.16	2.2
Exterior Lighting	Area Lighting	100.0%	1.58	1.58	21.1
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07	1.0
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.64	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	8.8%	0.14	0.01	0.2
Refrigeration	Glass Door Display	0.0%	0.15	0.00	0.0
Refrigeration	Open Display Case	0.0%	0.87	0.00	0.0
Refrigeration	Icemaker	5.1%	0.24	0.01	0.2
Refrigeration	Vending Machine	5.1%	0.11	0.01	0.1
Food Preparation	Oven	3.6%	0.18	0.01	0.1
Food Preparation	Fryer	3.6%	0.26	0.01	0.1
Food Preparation	Dishwasher	3.6%	0.36	0.01	0.2
Food Preparation	Hot Food Container	3.6%	0.05	0.00	0.0
Food Preparation	Steamer	3.6%	0.26	0.01	0.1
Office Equipment	Desktop Computer	100.0%	1.19	1.19	15.9
Office Equipment	Laptop	100.0%	0.18	0.18	2.5
Office Equipment	Server	100.0%	0.35	0.35	4.7
Office Equipment	Monitor	100.0%	0.21	0.21	2.8
Office Equipment	Printer/Copier/Fax	100.0%	0.16	0.16	2.2
Office Equipment	POS Terminal	20.0%	0.09	0.02	0.3
Miscellaneous	Non-HVAC Motors	22.0%	0.25	0.06	0.7
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.08	1.08	14.4
Total				15.90	212.6

Table A-121 Washington Small Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.88	0.00
Cooling	Water-Cooled Chiller	0.0%	2.96	0.00
Cooling	RTU	66.1%	2.77	1.83
Cooling	Room AC	2.3%	3.24	0.08
Cooling	Evaporative AC	0.0%	1.39	0.00
Cooling	Air-Source Heat Pump	14.1%	2.88	0.41
Cooling	Geothermal Heat Pump	7.6%	1.72	0.13
Heating	Electric Furnace	1.2%	6.10	0.07
Heating	Electric Room Heat	22.4%	5.81	1.30
Heating	Air-Source Heat Pump	14.1%	4.98	0.70
Heating	Geothermal Heat Pump	7.6%	3.29	0.25
Ventilation	Ventilation	100.0%	0.86	0.86
Water Heating	Water Heater	60.0%	0.89	0.54
Interior Lighting	Screw-in	100.0%	0.36	0.36
Interior Lighting	High-Bay Fixtures	100.0%	1.44	1.44
Interior Lighting	Linear Lighting	100.0%	1.47	1.47
Exterior Lighting	Screw-in	100.0%	0.15	0.15
Exterior Lighting	Area Lighting	100.0%	1.50	1.50
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.57	0.00
Refrigeration	Reach-in Refrigerator/Freezer	8.8%	0.13	0.01
Refrigeration	Glass Door Display	0.0%	0.13	0.00
Refrigeration	Open Display Case	0.0%	0.78	0.00
Refrigeration	Icemaker	5.1%	0.19	0.01
Refrigeration	Vending Machine	5.1%	0.10	0.01
Food Preparation	Oven	3.6%	0.19	0.01
Food Preparation	Fryer	3.6%	0.23	0.01
Food Preparation	Dishwasher	3.6%	0.32	0.01
Food Preparation	Hot Food Container	3.6%	0.04	0.00
Food Preparation	Steamer	3.6%	0.24	0.01
Office Equipment	Desktop Computer	100.0%	1.19	1.19
Office Equipment	Laptop	100.0%	0.18	0.18
Office Equipment	Server	100.0%	0.35	0.35
Office Equipment	Monitor	100.0%	0.21	0.21
Office Equipment	Printer/Copier/Fax	100.0%	0.16	0.16
Office Equipment	POS Terminal	20.0%	0.09	0.02
Miscellaneous	Non-HVAC Motors	22.0%	0.25	0.06
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.08	1.08
Total			14.47	

Table A-122 Washington Large Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	1.1%	2.72	0.03	0.1
Cooling	Water-Cooled Chiller	0.7%	2.96	0.02	0.1
Cooling	RTU	80.1%	3.10	2.48	8.1
Cooling	Room AC	3.5%	3.65	0.13	0.4
Cooling	Evaporative AC	4.1%	1.24	0.05	0.2
Cooling	Air-Source Heat Pump	4.2%	3.10	0.13	0.4
Cooling	Geothermal Heat Pump	0.0%	1.89	0.00	0.0
Heating	Electric Furnace	3.4%	5.06	0.17	0.6
Heating	Electric Room Heat	39.9%	4.82	1.93	6.3
Heating	Air-Source Heat Pump	4.2%	4.25	0.18	0.6
Heating	Geothermal Heat Pump	0.0%	3.32	0.00	0.0
Ventilation	Ventilation	100.0%	3.02	3.02	9.8
Water Heating	Water Heater	65.5%	1.01	0.66	2.2
Interior Lighting	Screw-in	100.0%	0.97	0.97	3.2
Interior Lighting	High-Bay Fixtures	100.0%	1.99	1.99	6.5
Interior Lighting	Linear Lighting	100.0%	3.00	3.00	9.8
Exterior Lighting	Screw-in	100.0%	0.24	0.24	0.8
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	2.8
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	0.3
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.33	0.01	0.0
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.07	0.01	0.0
Refrigeration	Glass Door Display	81.7%	0.08	0.06	0.2
Refrigeration	Open Display Case	81.7%	0.46	0.37	1.2
Refrigeration	Icemaker	52.4%	0.25	0.13	0.4
Refrigeration	Vending Machine	52.4%	0.12	0.06	0.2
Food Preparation	Oven	48.9%	0.16	0.08	0.3
Food Preparation	Fryer	45.2%	0.23	0.10	0.3
Food Preparation	Dishwasher	39.6%	0.31	0.12	0.4
Food Preparation	Hot Food Container	39.6%	0.04	0.02	0.1
Food Preparation	Steamer	39.6%	0.23	0.09	0.3
Office Equipment	Desktop Computer	100.0%	0.29	0.29	1.0
Office Equipment	Laptop	100.0%	0.05	0.05	0.1
Office Equipment	Server	82.0%	0.04	0.04	0.1
Office Equipment	Monitor	100.0%	0.05	0.05	0.2
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04	0.1
Office Equipment	POS Terminal	100.0%	0.01	0.01	0.0
Miscellaneous	Non-HVAC Motors	40.2%	0.31	0.12	0.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.17	1.17	3.8
Total				18.75	61.2

Table A-123 Washington Large Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	1.1%	2.27	0.03
Cooling	Water-Cooled Chiller	0.7%	2.41	0.02
Cooling	RTU	80.1%	2.94	2.35
Cooling	Room AC	3.5%	2.90	0.10
Cooling	Evaporative AC	4.1%	1.24	0.05
Cooling	Air-Source Heat Pump	4.2%	2.58	0.11
Cooling	Geothermal Heat Pump	0.0%	1.25	0.00
Heating	Electric Furnace	3.4%	4.73	0.16
Heating	Electric Room Heat	39.9%	4.51	1.80
Heating	Air-Source Heat Pump	4.2%	3.86	0.16
Heating	Geothermal Heat Pump	0.0%	1.52	0.00
Ventilation	Ventilation	100.0%	2.18	2.18
Water Heating	Water Heater	65.5%	0.98	0.64
Interior Lighting	Screw-in	100.0%	0.92	0.92
Interior Lighting	High-Bay Fixtures	100.0%	1.89	1.89
Interior Lighting	Linear Lighting	100.0%	2.86	2.86
Exterior Lighting	Screw-in	100.0%	0.23	0.23
Exterior Lighting	Area Lighting	100.0%	0.80	0.80
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.30	0.01
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.07	0.01
Refrigeration	Glass Door Display	81.7%	0.07	0.06
Refrigeration	Open Display Case	81.7%	0.41	0.33
Refrigeration	Icemaker	52.4%	0.22	0.12
Refrigeration	Vending Machine	52.4%	0.11	0.06
Food Preparation	Oven	48.9%	0.13	0.06
Food Preparation	Fryer	45.2%	0.20	0.09
Food Preparation	Dishwasher	39.6%	0.28	0.11
Food Preparation	Hot Food Container	39.6%	0.04	0.02
Food Preparation	Steamer	39.6%	0.21	0.08
Office Equipment	Desktop Computer	100.0%	0.29	0.29
Office Equipment	Laptop	100.0%	0.05	0.05
Office Equipment	Server	82.0%	0.04	0.04
Office Equipment	Monitor	100.0%	0.05	0.05
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04
Office Equipment	POS Terminal	100.0%	0.01	0.01
Miscellaneous	Non-HVAC Motors	40.2%	0.31	0.12
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.17	1.17
Total			17.09	

Table A-124 Washington Small Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	2.90	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.15	0.00	0.0
Cooling	RTU	67.6%	3.30	2.23	20.0
Cooling	Room AC	2.4%	3.46	0.08	0.7
Cooling	Evaporative AC	0.0%	1.32	0.00	0.0
Cooling	Air-Source Heat Pump	14.4%	3.29	0.47	4.3
Cooling	Geothermal Heat Pump	7.7%	2.01	0.16	1.4
Heating	Electric Furnace	0.5%	7.12	0.04	0.3
Heating	Electric Room Heat	10.2%	6.78	0.69	6.2
Heating	Air-Source Heat Pump	14.4%	5.28	0.76	6.8
Heating	Geothermal Heat Pump	7.7%	3.59	0.28	2.5
Ventilation	Ventilation	100.0%	1.13	1.13	10.2
Water Heating	Water Heater	61.8%	0.85	0.53	4.7
Interior Lighting	Screw-in	100.0%	0.64	0.64	5.8
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31	11.8
Interior Lighting	Linear Lighting	100.0%	1.98	1.98	17.8
Exterior Lighting	Screw-in	100.0%	0.24	0.24	2.1
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	7.6
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	0.7
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.19	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	5.4%	0.04	0.00	0.0
Refrigeration	Glass Door Display	5.4%	0.04	0.00	0.0
Refrigeration	Open Display Case	5.4%	0.26	0.01	0.1
Refrigeration	Icemaker	5.1%	0.14	0.01	0.1
Refrigeration	Vending Machine	5.1%	0.07	0.00	0.0
Food Preparation	Oven	3.6%	0.17	0.01	0.1
Food Preparation	Fryer	3.6%	0.25	0.01	0.1
Food Preparation	Dishwasher	3.6%	0.34	0.01	0.1
Food Preparation	Hot Food Container	3.6%	0.05	0.00	0.0
Food Preparation	Steamer	3.6%	0.25	0.01	0.1
Office Equipment	Desktop Computer	100.0%	0.09	0.09	0.8
Office Equipment	Laptop	100.0%	0.01	0.01	0.1
Office Equipment	Server	100.0%	0.11	0.11	1.0
Office Equipment	Monitor	100.0%	0.02	0.02	0.1
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	0.1
Office Equipment	POS Terminal	100.0%	0.03	0.03	0.3
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04	0.4
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85	7.6
Total				12.70	114.2

Table A-125 Washington Small Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.42	0.00
Cooling	Water-Cooled Chiller	0.0%	2.56	0.00
Cooling	RTU	67.6%	3.16	2.14
Cooling	Room AC	2.4%	2.75	0.07
Cooling	Evaporative AC	0.0%	1.32	0.00
Cooling	Air-Source Heat Pump	14.4%	2.74	0.40
Cooling	Geothermal Heat Pump	7.7%	1.34	0.10
Heating	Electric Furnace	0.5%	6.66	0.04
Heating	Electric Room Heat	10.2%	6.34	0.64
Heating	Air-Source Heat Pump	14.4%	4.79	0.69
Heating	Geothermal Heat Pump	7.7%	1.88	0.15
Ventilation	Ventilation	100.0%	0.86	0.86
Water Heating	Water Heater	61.8%	0.83	0.51
Interior Lighting	Screw-in	100.0%	0.61	0.61
Interior Lighting	High-Bay Fixtures	100.0%	1.25	1.25
Interior Lighting	Linear Lighting	100.0%	1.88	1.88
Exterior Lighting	Screw-in	100.0%	0.23	0.23
Exterior Lighting	Area Lighting	100.0%	0.80	0.80
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.17	0.00
Refrigeration	Reach-in Refrigerator/Freezer	5.4%	0.04	0.00
Refrigeration	Glass Door Display	5.4%	0.04	0.00
Refrigeration	Open Display Case	5.4%	0.23	0.01
Refrigeration	Icemaker	5.1%	0.12	0.01
Refrigeration	Vending Machine	5.1%	0.06	0.00
Food Preparation	Oven	3.6%	0.14	0.01
Food Preparation	Fryer	3.6%	0.22	0.01
Food Preparation	Dishwasher	3.6%	0.30	0.01
Food Preparation	Hot Food Container	3.6%	0.04	0.00
Food Preparation	Steamer	3.6%	0.22	0.01
Office Equipment	Desktop Computer	100.0%	0.09	0.09
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	100.0%	0.11	0.11
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	100.0%	0.03	0.03
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.85	0.85
Total			11.66	

Table A-126 Washington Restaurant Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.72	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.74	0.00	0.0
Cooling	RTU	74.5%	4.24	3.16	5.0
Cooling	Room AC	2.7%	4.99	0.14	0.2
Cooling	Evaporative AC	3.4%	1.70	0.06	0.1
Cooling	Air-Source Heat Pump	8.4%	4.24	0.36	0.6
Cooling	Geothermal Heat Pump	0.0%	2.58	0.00	0.0
Heating	Electric Furnace	20.6%	5.50	1.13	1.8
Heating	Electric Room Heat	1.9%	5.23	0.10	0.2
Heating	Air-Source Heat Pump	8.4%	3.83	0.32	0.5
Heating	Geothermal Heat Pump	0.0%	2.71	0.00	0.0
Ventilation	Ventilation	100.0%	2.32	2.32	3.7
Water Heating	Water Heater	57.9%	7.04	4.08	6.4
Interior Lighting	Screw-in	100.0%	2.28	2.28	3.6
Interior Lighting	High-Bay Fixtures	100.0%	2.92	2.92	4.6
Interior Lighting	Linear Lighting	100.0%	1.87	1.87	3.0
Exterior Lighting	Screw-in	100.0%	0.28	0.28	0.4
Exterior Lighting	Area Lighting	100.0%	2.14	2.14	3.4
Exterior Lighting	Linear Lighting	100.0%	0.40	0.40	0.6
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	7.01	5.19	8.2
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	3.15	0.22	0.3
Refrigeration	Glass Door Display	5.2%	1.61	0.08	0.1
Refrigeration	Open Display Case	5.2%	9.57	0.50	0.8
Refrigeration	Icemaker	97.3%	2.64	2.57	4.1
Refrigeration	Vending Machine	97.3%	1.24	1.21	1.9
Food Preparation	Oven	21.0%	4.20	0.88	1.4
Food Preparation	Fryer	82.0%	6.07	4.98	7.9
Food Preparation	Dishwasher	52.5%	4.18	2.19	3.5
Food Preparation	Hot Food Container	84.0%	0.57	0.48	0.8
Food Preparation	Steamer	16.0%	3.06	0.49	0.8
Office Equipment	Desktop Computer	100.0%	0.31	0.31	0.5
Office Equipment	Laptop	100.0%	0.04	0.04	0.1
Office Equipment	Server	50.0%	0.37	0.18	0.3
Office Equipment	Monitor	100.0%	0.05	0.05	0.1
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07	0.1
Office Equipment	POS Terminal	100.0%	0.10	0.10	0.2
Miscellaneous	Non-HVAC Motors	20.0%	0.72	0.14	0.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	2.86	2.86	4.5
Total				44.10	69.7

Table A-127 Washington Restaurant New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.52	0.00
Cooling	Water-Cooled Chiller	0.0%	3.41	0.00
Cooling	RTU	74.5%	4.02	2.99
Cooling	Room AC	2.7%	3.97	0.11
Cooling	Evaporative AC	3.4%	1.70	0.06
Cooling	Air-Source Heat Pump	8.4%	3.97	0.33
Cooling	Geothermal Heat Pump	0.0%	2.51	0.00
Heating	Electric Furnace	20.6%	5.14	1.06
Heating	Electric Room Heat	1.9%	4.90	0.09
Heating	Air-Source Heat Pump	8.4%	3.21	0.27
Heating	Geothermal Heat Pump	0.0%	2.65	0.00
Ventilation	Ventilation	100.0%	1.82	1.82
Water Heating	Water Heater	57.9%	7.01	4.06
Interior Lighting	Screw-in	100.0%	2.17	2.17
Interior Lighting	High-Bay Fixtures	100.0%	2.77	2.77
Interior Lighting	Linear Lighting	100.0%	1.78	1.78
Exterior Lighting	Screw-in	100.0%	0.26	0.26
Exterior Lighting	Area Lighting	100.0%	2.04	2.04
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	6.31	4.67
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	2.83	0.20
Refrigeration	Glass Door Display	5.2%	1.45	0.08
Refrigeration	Open Display Case	5.2%	8.61	0.45
Refrigeration	Icemaker	97.3%	2.33	2.27
Refrigeration	Vending Machine	97.3%	1.11	1.08
Food Preparation	Oven	21.0%	3.45	0.73
Food Preparation	Fryer	82.0%	5.46	4.48
Food Preparation	Dishwasher	52.5%	3.76	1.97
Food Preparation	Hot Food Container	84.0%	0.51	0.43
Food Preparation	Steamer	16.0%	2.76	0.44
Office Equipment	Desktop Computer	100.0%	0.31	0.31
Office Equipment	Laptop	100.0%	0.04	0.04
Office Equipment	Server	50.0%	0.37	0.18
Office Equipment	Monitor	100.0%	0.05	0.05
Office Equipment	Printer/Copier/Fax	100.0%	0.07	0.07
Office Equipment	POS Terminal	100.0%	0.10	0.10
Miscellaneous	Non-HVAC Motors	20.0%	0.72	0.14
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	2.86	2.86
Total				40.74

Table A-128 Washington Grocery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.5%	4.54	0.02	0.0
Cooling	Water-Cooled Chiller	0.3%	4.93	0.02	0.0
Cooling	RTU	71.9%	5.16	3.71	5.8
Cooling	Room AC	2.1%	6.08	0.13	0.2
Cooling	Evaporative AC	1.2%	2.06	0.02	0.0
Cooling	Air-Source Heat Pump	7.3%	4.73	0.34	0.5
Cooling	Geothermal Heat Pump	0.0%	1.60	0.00	0.0
Heating	Electric Furnace	6.9%	8.22	0.56	0.9
Heating	Electric Room Heat	1.3%	7.83	0.10	0.2
Heating	Air-Source Heat Pump	7.3%	4.22	0.31	0.5
Heating	Geothermal Heat Pump	0.0%	2.94	0.00	0.0
Ventilation	Ventilation	100.0%	2.49	2.49	3.9
Water Heating	Water Heater	62.5%	2.61	1.63	2.5
Interior Lighting	Screw-in	100.0%	0.68	0.68	1.1
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02	3.2
Interior Lighting	Linear Lighting	100.0%	5.01	5.01	7.8
Exterior Lighting	Screw-in	100.0%	0.36	0.36	0.6
Exterior Lighting	Area Lighting	100.0%	1.78	1.78	2.8
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38	0.6
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	6.13	0.98	1.5
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.39	0.33	0.5
Refrigeration	Glass Door Display	94.9%	4.03	3.83	6.0
Refrigeration	Open Display Case	94.9%	23.91	22.69	35.4
Refrigeration	Icemaker	98.9%	0.33	0.33	0.5
Refrigeration	Vending Machine	98.9%	0.31	0.31	0.5
Food Preparation	Oven	11.0%	0.73	0.08	0.1
Food Preparation	Fryer	87.0%	1.05	0.91	1.4
Food Preparation	Dishwasher	54.9%	1.44	0.79	1.2
Food Preparation	Hot Food Container	73.0%	0.20	0.14	0.2
Food Preparation	Steamer	20.0%	1.06	0.21	0.3
Office Equipment	Desktop Computer	100.0%	0.18	0.18	0.3
Office Equipment	Laptop	64.0%	0.03	0.02	0.0
Office Equipment	Server	100.0%	0.11	0.11	0.2
Office Equipment	Monitor	100.0%	0.03	0.03	0.1
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	0.0
Office Equipment	POS Terminal	100.0%	0.07	0.07	0.1
Miscellaneous	Non-HVAC Motors	34.6%	1.14	0.39	0.6
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.60	3.60	5.6
Total				54.60	85.2

Table A-129 Washington Grocery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.5%	3.78	0.02
Cooling	Water-Cooled Chiller	0.3%	4.01	0.01
Cooling	RTU	71.9%	5.53	3.98
Cooling	Room AC	2.1%	4.83	0.10
Cooling	Evaporative AC	1.2%	2.06	0.02
Cooling	Air-Source Heat Pump	7.3%	3.94	0.29
Cooling	Geothermal Heat Pump	0.0%	1.06	0.00
Heating	Electric Furnace	6.9%	7.69	0.53
Heating	Electric Room Heat	1.3%	7.33	0.09
Heating	Air-Source Heat Pump	7.3%	3.83	0.28
Heating	Geothermal Heat Pump	0.0%	4.36	0.00
Ventilation	Ventilation	100.0%	1.56	1.56
Water Heating	Water Heater	62.5%	2.60	1.62
Interior Lighting	Screw-in	100.0%	0.64	0.64
Interior Lighting	High-Bay Fixtures	100.0%	1.92	1.92
Interior Lighting	Linear Lighting	100.0%	4.76	4.76
Exterior Lighting	Screw-in	100.0%	0.34	0.34
Exterior Lighting	Area Lighting	100.0%	1.70	1.70
Exterior Lighting	Linear Lighting	100.0%	0.36	0.36
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	5.52	0.88
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.35	0.29
Refrigeration	Glass Door Display	94.9%	3.63	3.44
Refrigeration	Open Display Case	94.9%	21.52	20.42
Refrigeration	Icemaker	98.9%	0.32	0.31
Refrigeration	Vending Machine	98.9%	0.28	0.28
Food Preparation	Oven	11.0%	0.50	0.05
Food Preparation	Fryer	87.0%	0.94	0.82
Food Preparation	Dishwasher	54.9%	1.30	0.71
Food Preparation	Hot Food Container	73.0%	0.18	0.13
Food Preparation	Steamer	20.0%	0.95	0.19
Office Equipment	Desktop Computer	100.0%	0.18	0.18
Office Equipment	Laptop	64.0%	0.03	0.02
Office Equipment	Server	100.0%	0.11	0.11
Office Equipment	Monitor	100.0%	0.03	0.03
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02
Office Equipment	POS Terminal	100.0%	0.07	0.07
Miscellaneous	Non-HVAC Motors	34.6%	1.14	0.39
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.60	3.60
Total				50.21

Table A-130 Washington Health Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.7%	5.32	0.89	3.2
Cooling	Water-Cooled Chiller	66.7%	6.77	4.52	16.5
Cooling	RTU	11.0%	5.29	0.58	2.1
Cooling	Room AC	0.4%	6.23	0.02	0.1
Cooling	Evaporative AC	0.0%	2.12	0.00	0.0
Cooling	Air-Source Heat Pump	0.6%	5.28	0.03	0.1
Cooling	Geothermal Heat Pump	0.9%	3.21	0.03	0.1
Heating	Electric Furnace	2.5%	16.70	0.42	1.5
Heating	Electric Room Heat	0.1%	15.90	0.01	0.0
Heating	Air-Source Heat Pump	0.6%	10.88	0.06	0.2
Heating	Geothermal Heat Pump	0.9%	7.68	0.07	0.2
Ventilation	Ventilation	100.0%	4.33	4.33	15.8
Water Heating	Water Heater	12.6%	4.33	0.55	2.0
Interior Lighting	Screw-in	100.0%	0.78	0.78	2.8
Interior Lighting	High-Bay Fixtures	100.0%	2.59	2.59	9.5
Interior Lighting	Linear Lighting	100.0%	4.04	4.04	14.7
Exterior Lighting	Screw-in	100.0%	0.04	0.04	0.2
Exterior Lighting	Area Lighting	100.0%	0.66	0.66	2.4
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	0.3
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.26	0.09	0.3
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.06	0.03	0.1
Refrigeration	Glass Door Display	90.4%	0.06	0.05	0.2
Refrigeration	Open Display Case	90.4%	0.36	0.32	1.2
Refrigeration	Icemaker	90.4%	0.20	0.18	0.6
Refrigeration	Vending Machine	90.4%	0.09	0.08	0.3
Food Preparation	Oven	69.7%	0.61	0.42	1.5
Food Preparation	Fryer	80.7%	0.88	0.71	2.6
Food Preparation	Dishwasher	53.5%	1.21	0.65	2.4
Food Preparation	Hot Food Container	53.5%	0.17	0.09	0.3
Food Preparation	Steamer	53.5%	0.89	0.47	1.7
Office Equipment	Desktop Computer	100.0%	0.53	0.53	1.9
Office Equipment	Laptop	100.0%	0.03	0.03	0.1
Office Equipment	Server	100.0%	0.06	0.06	0.2
Office Equipment	Monitor	100.0%	0.09	0.09	0.3
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	0.2
Office Equipment	POS Terminal	100.0%	0.04	0.04	0.2
Miscellaneous	Non-HVAC Motors	74.1%	0.48	0.35	1.3
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.73	3.73	13.6
Total				27.70	101.1

Table A-131 Washington Health New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.7%	3.88	0.65
Cooling	Water-Cooled Chiller	66.7%	4.77	3.18
Cooling	RTU	11.0%	5.73	0.63
Cooling	Room AC	0.4%	4.95	0.02
Cooling	Evaporative AC	0.0%	2.12	0.00
Cooling	Air-Source Heat Pump	0.6%	4.40	0.03
Cooling	Geothermal Heat Pump	0.9%	3.58	0.03
Heating	Electric Furnace	2.5%	15.62	0.39
Heating	Electric Room Heat	0.1%	14.87	0.01
Heating	Air-Source Heat Pump	0.6%	9.88	0.06
Heating	Geothermal Heat Pump	0.9%	4.39	0.04
Ventilation	Ventilation	100.0%	2.53	2.53
Water Heating	Water Heater	12.6%	4.31	0.54
Interior Lighting	Screw-in	100.0%	0.74	0.74
Interior Lighting	High-Bay Fixtures	100.0%	2.47	2.47
Interior Lighting	Linear Lighting	100.0%	3.84	3.84
Exterior Lighting	Screw-in	100.0%	0.04	0.04
Exterior Lighting	Area Lighting	100.0%	0.63	0.63
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.23	0.08
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.05	0.03
Refrigeration	Glass Door Display	90.4%	0.05	0.05
Refrigeration	Open Display Case	90.4%	0.32	0.29
Refrigeration	Icemaker	90.4%	0.17	0.15
Refrigeration	Vending Machine	90.4%	0.08	0.08
Food Preparation	Oven	69.7%	0.65	0.46
Food Preparation	Fryer	80.7%	0.79	0.64
Food Preparation	Dishwasher	53.5%	1.09	0.58
Food Preparation	Hot Food Container	53.5%	0.15	0.08
Food Preparation	Steamer	53.5%	0.80	0.43
Office Equipment	Desktop Computer	100.0%	0.53	0.53
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.09	0.09
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06
Office Equipment	POS Terminal	100.0%	0.04	0.04
Miscellaneous	Non-HVAC Motors	74.1%	0.48	0.35
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.73	3.73
Total			23.64	

Table A-132 Washington College Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	29.1%	4.91	1.43	4.9
Cooling	Water-Cooled Chiller	0.0%	6.17	0.00	0.0
Cooling	RTU	47.8%	2.88	1.38	4.7
Cooling	Room AC	3.1%	3.38	0.11	0.4
Cooling	Evaporative AC	0.0%	1.15	0.00	0.0
Cooling	Air-Source Heat Pump	8.1%	2.87	0.23	0.8
Cooling	Geothermal Heat Pump	5.9%	1.75	0.10	0.3
Heating	Electric Furnace	0.0%	13.28	0.00	0.0
Heating	Electric Room Heat	9.9%	12.65	1.25	4.3
Heating	Air-Source Heat Pump	8.1%	8.85	0.72	2.4
Heating	Geothermal Heat Pump	5.9%	6.66	0.39	1.3
Ventilation	Ventilation	100.0%	1.77	1.77	6.0
Water Heating	Water Heater	55.3%	2.41	1.34	4.5
Interior Lighting	Screw-in	100.0%	0.13	0.13	0.5
Interior Lighting	High-Bay Fixtures	100.0%	1.42	1.42	4.8
Interior Lighting	Linear Lighting	100.0%	2.19	2.19	7.5
Exterior Lighting	Screw-in	100.0%	0.02	0.02	0.1
Exterior Lighting	Area Lighting	100.0%	0.29	0.29	1.0
Exterior Lighting	Linear Lighting	100.0%	0.75	0.75	2.6
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.19	0.01	0.0
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.08	0.01	0.0
Refrigeration	Glass Door Display	26.6%	0.04	0.01	0.0
Refrigeration	Open Display Case	26.6%	0.26	0.07	0.2
Refrigeration	Icemaker	26.6%	0.14	0.04	0.1
Refrigeration	Vending Machine	26.6%	0.07	0.02	0.1
Food Preparation	Oven	21.0%	0.27	0.06	0.2
Food Preparation	Fryer	21.0%	0.40	0.08	0.3
Food Preparation	Dishwasher	21.0%	0.55	0.12	0.4
Food Preparation	Hot Food Container	21.0%	0.07	0.02	0.1
Food Preparation	Steamer	21.0%	0.40	0.08	0.3
Office Equipment	Desktop Computer	100.0%	0.55	0.55	1.9
Office Equipment	Laptop	100.0%	0.03	0.03	0.1
Office Equipment	Server	100.0%	0.06	0.06	0.2
Office Equipment	Monitor	100.0%	0.10	0.10	0.3
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08	0.3
Office Equipment	POS Terminal	100.0%	0.02	0.02	0.1
Miscellaneous	Non-HVAC Motors	88.8%	0.20	0.18	0.6
Miscellaneous	Pool Pump	90.3%	0.03	0.03	0.1
Miscellaneous	Pool Heater	36.2%	0.04	0.01	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.87	0.87	3.0
Total				15.95	54.3

Table A-133 Washington College New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	29.1%	4.65	1.36
Cooling	Water-Cooled Chiller	0.0%	5.52	0.00
Cooling	RTU	47.8%	2.57	1.23
Cooling	Room AC	3.1%	2.73	0.08
Cooling	Evaporative AC	0.0%	1.15	0.00
Cooling	Air-Source Heat Pump	8.1%	2.53	0.21
Cooling	Geothermal Heat Pump	5.9%	1.60	0.09
Heating	Electric Furnace	0.0%	12.42	0.00
Heating	Electric Room Heat	9.9%	11.83	1.17
Heating	Air-Source Heat Pump	8.1%	7.08	0.57
Heating	Geothermal Heat Pump	5.9%	6.21	0.36
Ventilation	Ventilation	100.0%	1.63	1.63
Water Heating	Water Heater	55.3%	2.40	1.33
Interior Lighting	Screw-in	100.0%	0.13	0.13
Interior Lighting	High-Bay Fixtures	100.0%	1.35	1.35
Interior Lighting	Linear Lighting	100.0%	2.08	2.08
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.27	0.27
Exterior Lighting	Linear Lighting	100.0%	0.71	0.71
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.17	0.01
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.08	0.01
Refrigeration	Glass Door Display	26.6%	0.04	0.01
Refrigeration	Open Display Case	26.6%	0.23	0.06
Refrigeration	Icemaker	26.6%	0.12	0.03
Refrigeration	Vending Machine	26.6%	0.06	0.02
Food Preparation	Oven	21.0%	0.29	0.06
Food Preparation	Fryer	21.0%	0.36	0.08
Food Preparation	Dishwasher	21.0%	0.49	0.10
Food Preparation	Hot Food Container	21.0%	0.07	0.01
Food Preparation	Steamer	21.0%	0.36	0.08
Office Equipment	Desktop Computer	100.0%	0.55	0.55
Office Equipment	Laptop	100.0%	0.03	0.03
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.10	0.10
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08
Office Equipment	POS Terminal	100.0%	0.02	0.02
Miscellaneous	Non-HVAC Motors	88.8%	0.20	0.18
Miscellaneous	Pool Pump	90.3%	0.03	0.03
Miscellaneous	Pool Heater	36.2%	0.04	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.87	0.87
Total			15.00	

Table A-134 Washington School Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	22.6%	2.66	0.60	5.1
Cooling	Water-Cooled Chiller	0.0%	3.34	0.00	0.0
Cooling	RTU	37.1%	1.56	0.58	4.9
Cooling	Room AC	2.4%	1.84	0.04	0.4
Cooling	Evaporative AC	0.0%	0.62	0.00	0.0
Cooling	Air-Source Heat Pump	6.3%	1.56	0.10	0.8
Cooling	Geothermal Heat Pump	4.5%	0.95	0.04	0.4
Heating	Electric Furnace	0.0%	8.40	0.00	0.0
Heating	Electric Room Heat	5.8%	8.00	0.47	4.0
Heating	Air-Source Heat Pump	6.3%	5.60	0.35	3.0
Heating	Geothermal Heat Pump	4.5%	4.21	0.19	1.6
Ventilation	Ventilation	100.0%	0.97	0.97	8.2
Water Heating	Water Heater	50.0%	1.35	0.67	5.7
Interior Lighting	Screw-in	100.0%	0.34	0.34	2.9
Interior Lighting	High-Bay Fixtures	100.0%	0.81	0.81	6.9
Interior Lighting	Linear Lighting	100.0%	1.51	1.51	12.9
Exterior Lighting	Screw-in	100.0%	0.00	0.00	0.0
Exterior Lighting	Area Lighting	100.0%	0.12	0.12	1.0
Exterior Lighting	Linear Lighting	100.0%	0.66	0.66	5.6
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.23	0.04	0.4
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.10	0.03	0.3
Refrigeration	Glass Door Display	65.7%	0.05	0.03	0.3
Refrigeration	Open Display Case	65.7%	0.31	0.20	1.7
Refrigeration	Icemaker	65.7%	0.17	0.11	1.0
Refrigeration	Vending Machine	65.7%	0.08	0.05	0.5
Food Preparation	Oven	64.8%	0.15	0.10	0.8
Food Preparation	Fryer	58.6%	0.22	0.13	1.1
Food Preparation	Dishwasher	52.3%	0.30	0.16	1.3
Food Preparation	Hot Food Container	52.3%	0.04	0.02	0.2
Food Preparation	Steamer	52.3%	0.22	0.12	1.0
Office Equipment	Desktop Computer	100.0%	0.39	0.39	3.4
Office Equipment	Laptop	100.0%	0.02	0.02	0.2
Office Equipment	Server	100.0%	0.09	0.09	0.8
Office Equipment	Monitor	100.0%	0.07	0.07	0.6
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04	0.4
Office Equipment	POS Terminal	36.0%	0.01	0.00	0.0
Miscellaneous	Non-HVAC Motors	43.7%	0.13	0.06	0.5
Miscellaneous	Pool Pump	6.0%	0.04	0.00	0.0
Miscellaneous	Pool Heater	1.0%	0.03	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.62	0.62	5.3
Total				9.77	83.3

Table A-135 Washington School New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	22.6%	2.52	0.57
Cooling	Water-Cooled Chiller	0.0%	2.99	0.00
Cooling	RTU	37.1%	1.39	0.52
Cooling	Room AC	2.4%	1.48	0.04
Cooling	Evaporative AC	0.0%	0.62	0.00
Cooling	Air-Source Heat Pump	6.3%	1.37	0.09
Cooling	Geothermal Heat Pump	4.5%	0.87	0.04
Heating	Electric Furnace	0.0%	7.85	0.00
Heating	Electric Room Heat	5.8%	7.48	0.44
Heating	Air-Source Heat Pump	6.3%	4.48	0.28
Heating	Geothermal Heat Pump	4.5%	3.93	0.18
Ventilation	Ventilation	100.0%	0.89	0.89
Water Heating	Water Heater	50.0%	1.34	0.67
Interior Lighting	Screw-in	100.0%	0.33	0.33
Interior Lighting	High-Bay Fixtures	100.0%	0.77	0.77
Interior Lighting	Linear Lighting	100.0%	1.44	1.44
Exterior Lighting	Screw-in	100.0%	0.00	0.00
Exterior Lighting	Area Lighting	100.0%	0.11	0.11
Exterior Lighting	Linear Lighting	100.0%	0.62	0.62
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.20	0.04
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.09	0.03
Refrigeration	Glass Door Display	65.7%	0.05	0.03
Refrigeration	Open Display Case	65.7%	0.28	0.18
Refrigeration	Icemaker	65.7%	0.15	0.10
Refrigeration	Vending Machine	65.7%	0.07	0.05
Food Preparation	Oven	64.8%	0.16	0.11
Food Preparation	Fryer	58.6%	0.20	0.12
Food Preparation	Dishwasher	52.3%	0.27	0.14
Food Preparation	Hot Food Container	52.3%	0.04	0.02
Food Preparation	Steamer	52.3%	0.20	0.10
Office Equipment	Desktop Computer	100.0%	0.39	0.39
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.09	0.09
Office Equipment	Monitor	100.0%	0.07	0.07
Office Equipment	Printer/Copier/Fax	100.0%	0.04	0.04
Office Equipment	POS Terminal	36.0%	0.01	0.00
Miscellaneous	Non-HVAC Motors	43.7%	0.13	0.06
Miscellaneous	Pool Pump	6.0%	0.04	0.00
Miscellaneous	Pool Heater	1.0%	0.03	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.62	0.62
Total				9.20

Table A-136 Washington Lodging Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	2.4%	0.59	0.01	0.0
Cooling	Water-Cooled Chiller	8.6%	0.75	0.06	0.1
Cooling	RTU	18.5%	1.83	0.34	0.7
Cooling	Room AC	45.5%	2.15	0.98	2.0
Cooling	Evaporative AC	0.6%	0.73	0.00	0.0
Cooling	Air-Source Heat Pump	6.0%	1.83	0.11	0.2
Cooling	Geothermal Heat Pump	6.4%	1.73	0.11	0.2
Heating	Electric Furnace	1.7%	3.54	0.06	0.1
Heating	Electric Room Heat	62.0%	3.37	2.09	4.3
Heating	Air-Source Heat Pump	6.0%	3.15	0.19	0.4
Heating	Geothermal Heat Pump	6.4%	2.22	0.14	0.3
Ventilation	Ventilation	100.0%	1.13	1.13	2.3
Water Heating	Water Heater	50.0%	3.84	1.92	3.9
Interior Lighting	Screw-in	100.0%	1.24	1.24	2.5
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29	2.6
Interior Lighting	Linear Lighting	100.0%	0.46	0.46	0.9
Exterior Lighting	Screw-in	100.0%	0.04	0.04	0.1
Exterior Lighting	Area Lighting	100.0%	1.73	1.73	3.5
Exterior Lighting	Linear Lighting	100.0%	0.03	0.03	0.1
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.47	0.01	0.0
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.11	0.02	0.0
Refrigeration	Glass Door Display	58.9%	0.11	0.06	0.1
Refrigeration	Open Display Case	58.9%	0.65	0.38	0.8
Refrigeration	Icemaker	58.9%	0.18	0.10	0.2
Refrigeration	Vending Machine	58.9%	0.17	0.10	0.2
Food Preparation	Oven	13.8%	0.31	0.04	0.1
Food Preparation	Fryer	21.0%	0.45	0.09	0.2
Food Preparation	Dishwasher	30.0%	0.62	0.18	0.4
Food Preparation	Hot Food Container	30.0%	0.08	0.03	0.1
Food Preparation	Steamer	30.0%	0.45	0.14	0.3
Office Equipment	Desktop Computer	100.0%	0.10	0.10	0.2
Office Equipment	Laptop	100.0%	0.02	0.02	0.0
Office Equipment	Server	100.0%	0.06	0.06	0.1
Office Equipment	Monitor	100.0%	0.02	0.02	0.0
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	0.0
Office Equipment	POS Terminal	58.0%	0.02	0.01	0.0
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.16	0.3
Miscellaneous	Pool Pump	76.0%	0.02	0.01	0.0
Miscellaneous	Pool Heater	27.0%	0.02	0.01	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.81	0.81	1.7
Total				14.30	29.2

Table A-137 Washington Lodging New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	2.4%	0.54	0.01
Cooling	Water-Cooled Chiller	8.6%	0.63	0.05
Cooling	RTU	18.5%	1.86	0.34
Cooling	Room AC	45.5%	1.71	0.78
Cooling	Evaporative AC	0.6%	0.73	0.00
Cooling	Air-Source Heat Pump	6.0%	1.86	0.11
Cooling	Geothermal Heat Pump	6.4%	1.78	0.11
Heating	Electric Furnace	1.7%	3.31	0.06
Heating	Electric Room Heat	62.0%	3.15	1.95
Heating	Air-Source Heat Pump	6.0%	2.58	0.15
Heating	Geothermal Heat Pump	6.4%	1.96	0.13
Ventilation	Ventilation	100.0%	0.93	0.93
Water Heating	Water Heater	50.0%	3.83	1.91
Interior Lighting	Screw-in	100.0%	1.18	1.18
Interior Lighting	High-Bay Fixtures	100.0%	1.22	1.22
Interior Lighting	Linear Lighting	100.0%	0.43	0.43
Exterior Lighting	Screw-in	100.0%	0.04	0.04
Exterior Lighting	Area Lighting	100.0%	1.64	1.64
Exterior Lighting	Linear Lighting	100.0%	0.02	0.02
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.43	0.01
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.10	0.02
Refrigeration	Glass Door Display	58.9%	0.10	0.06
Refrigeration	Open Display Case	58.9%	0.58	0.34
Refrigeration	Icemaker	58.9%	0.16	0.09
Refrigeration	Vending Machine	58.9%	0.15	0.09
Food Preparation	Oven	13.8%	0.23	0.03
Food Preparation	Fryer	21.0%	0.40	0.08
Food Preparation	Dishwasher	30.0%	0.55	0.17
Food Preparation	Hot Food Container	30.0%	0.08	0.02
Food Preparation	Steamer	30.0%	0.41	0.12
Office Equipment	Desktop Computer	100.0%	0.10	0.10
Office Equipment	Laptop	100.0%	0.02	0.02
Office Equipment	Server	100.0%	0.06	0.06
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	58.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	91.3%	0.18	0.16
Miscellaneous	Pool Pump	76.0%	0.02	0.01
Miscellaneous	Pool Heater	27.0%	0.02	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.81	0.81
Total			13.34	

Table A-138 Washington Warehouse Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	1.64	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	1.73	0.00	0.0
Cooling	RTU	16.3%	1.83	0.30	6.0
Cooling	Room AC	1.1%	2.16	0.02	0.5
Cooling	Evaporative AC	0.0%	0.73	0.00	0.0
Cooling	Air-Source Heat Pump	1.7%	1.83	0.03	0.6
Cooling	Geothermal Heat Pump	0.0%	1.11	0.00	0.0
Heating	Electric Furnace	2.3%	8.05	0.19	3.8
Heating	Electric Room Heat	12.6%	7.66	0.97	19.6
Heating	Air-Source Heat Pump	1.7%	7.07	0.12	2.5
Heating	Geothermal Heat Pump	0.0%	6.09	0.00	0.0
Ventilation	Ventilation	100.0%	0.27	0.27	5.4
Water Heating	Water Heater	55.3%	0.27	0.15	3.0
Interior Lighting	Screw-in	100.0%	0.11	0.11	2.2
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	34.3
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	5.7
Exterior Lighting	Screw-in	100.0%	0.02	0.02	0.4
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	7.6
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	1.6
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.51	0.01	0.1
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.11	0.00	0.0
Refrigeration	Glass Door Display	10.1%	0.12	0.01	0.2
Refrigeration	Open Display Case	10.1%	0.69	0.07	1.4
Refrigeration	Icemaker	10.1%	0.19	0.02	0.4
Refrigeration	Vending Machine	10.1%	0.09	0.01	0.2
Food Preparation	Oven	2.3%	0.04	0.00	0.0
Food Preparation	Fryer	2.3%	0.05	0.00	0.0
Food Preparation	Dishwasher	2.3%	0.07	0.00	0.0
Food Preparation	Hot Food Container	2.3%	0.01	0.00	0.0
Food Preparation	Steamer	2.3%	0.05	0.00	0.0
Office Equipment	Desktop Computer	100.0%	0.09	0.09	1.8
Office Equipment	Laptop	100.0%	0.01	0.01	0.2
Office Equipment	Server	89.0%	0.11	0.10	1.9
Office Equipment	Monitor	100.0%	0.02	0.02	0.3
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	0.2
Office Equipment	POS Terminal	77.0%	0.03	0.02	0.4
Miscellaneous	Non-HVAC Motors	49.9%	0.12	0.06	1.2
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.43	0.43	8.6
Total				5.46	110.4

Table A-139 Washington Warehouse New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	1.37	0.00
Cooling	Water-Cooled Chiller	0.0%	1.41	0.00
Cooling	RTU	16.3%	1.74	0.28
Cooling	Room AC	1.1%	1.71	0.02
Cooling	Evaporative AC	0.0%	0.73	0.00
Cooling	Air-Source Heat Pump	1.7%	1.52	0.03
Cooling	Geothermal Heat Pump	0.0%	0.80	0.00
Heating	Electric Furnace	2.3%	7.53	0.18
Heating	Electric Room Heat	12.6%	7.17	0.91
Heating	Air-Source Heat Pump	1.7%	6.42	0.11
Heating	Geothermal Heat Pump	0.0%	2.80	0.00
Ventilation	Ventilation	100.0%	0.21	0.21
Water Heating	Water Heater	55.3%	0.27	0.15
Interior Lighting	Screw-in	100.0%	0.10	0.10
Interior Lighting	High-Bay Fixtures	100.0%	1.61	1.61
Interior Lighting	Linear Lighting	100.0%	0.27	0.27
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.36	0.36
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.46	0.01
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.10	0.00
Refrigeration	Glass Door Display	10.1%	0.11	0.01
Refrigeration	Open Display Case	10.1%	0.63	0.06
Refrigeration	Icemaker	10.1%	0.19	0.02
Refrigeration	Vending Machine	10.1%	0.08	0.01
Food Preparation	Oven	2.3%	0.04	0.00
Food Preparation	Fryer	2.3%	0.05	0.00
Food Preparation	Dishwasher	2.3%	0.06	0.00
Food Preparation	Hot Food Container	2.3%	0.01	0.00
Food Preparation	Steamer	2.3%	0.05	0.00
Office Equipment	Desktop Computer	100.0%	0.09	0.09
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.11	0.10
Office Equipment	Monitor	100.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.03	0.02
Miscellaneous	Non-HVAC Motors	49.9%	0.12	0.06
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.43	0.43
Total				5.16

Table A-140 Washington Warehouse, Controlled Atmosphere Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.0%	1.19	0.18	2.7
Cooling	Water-Cooled Chiller	1.7%	1.25	0.02	0.3
Cooling	RTU	19.7%	1.32	0.26	4.0
Cooling	Room AC	1.2%	1.56	0.02	0.3
Cooling	Evaporative AC	0.1%	0.53	0.00	0.0
Cooling	Air-Source Heat Pump	1.9%	1.32	0.02	0.4
Cooling	Geothermal Heat Pump	0.0%	0.81	0.00	0.0
Heating	Electric Furnace	1.6%	5.99	0.10	1.5
Heating	Electric Room Heat	8.9%	5.70	0.51	7.8
Heating	Air-Source Heat Pump	1.9%	5.26	0.10	1.5
Heating	Geothermal Heat Pump	0.0%	4.54	0.00	0.0
Ventilation	Ventilation	100.0%	0.69	0.69	10.6
Water Heating	Water Heater	67.5%	0.40	0.27	4.1
Interior Lighting	Screw-in	100.0%	0.11	0.11	1.7
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	25.9
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	4.3
Exterior Lighting	Screw-in	100.0%	0.02	0.02	0.3
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	5.8
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	1.2
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	14.76	13.53	207.3
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.66	0.01	0.2
Refrigeration	Glass Door Display	10.1%	0.68	0.07	1.1
Refrigeration	Open Display Case	10.1%	4.03	0.41	6.2
Refrigeration	Icemaker	91.7%	1.11	1.02	15.6
Refrigeration	Vending Machine	91.7%	0.52	0.48	7.3
Food Preparation	Oven	40.8%	0.05	0.02	0.3
Food Preparation	Fryer	40.8%	0.08	0.03	0.5
Food Preparation	Dishwasher	40.8%	0.11	0.04	0.7
Food Preparation	Hot Food Container	40.8%	0.01	0.01	0.1
Food Preparation	Steamer	40.8%	0.08	0.03	0.5
Office Equipment	Desktop Computer	100.0%	0.06	0.06	0.9
Office Equipment	Laptop	100.0%	0.01	0.01	0.1
Office Equipment	Server	89.0%	0.07	0.06	1.0
Office Equipment	Monitor	100.0%	0.01	0.01	0.2
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	0.1
Office Equipment	POS Terminal	77.0%	0.02	0.01	0.2
Miscellaneous	Non-HVAC Motors	79.5%	0.48	0.38	5.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.69	1.69	25.9
Total				22.62	346.5

Table A-141 Washington Warehouse, Controlled Atmosphere New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.0%	0.99	0.15
Cooling	Water-Cooled Chiller	1.7%	1.02	0.02
Cooling	RTU	19.7%	1.25	0.25
Cooling	Room AC	1.2%	1.24	0.01
Cooling	Evaporative AC	0.1%	0.53	0.00
Cooling	Air-Source Heat Pump	1.9%	1.10	0.02
Cooling	Geothermal Heat Pump	0.0%	0.58	0.00
Heating	Electric Furnace	1.6%	5.60	0.09
Heating	Electric Room Heat	8.9%	5.34	0.47
Heating	Air-Source Heat Pump	1.9%	4.78	0.09
Heating	Geothermal Heat Pump	0.0%	2.09	0.00
Ventilation	Ventilation	100.0%	0.55	0.55
Water Heating	Water Heater	67.5%	0.40	0.27
Interior Lighting	Screw-in	100.0%	0.10	0.10
Interior Lighting	High-Bay Fixtures	100.0%	1.61	1.61
Interior Lighting	Linear Lighting	100.0%	0.27	0.27
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.36	0.36
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	13.28	12.18
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.60	0.01
Refrigeration	Glass Door Display	10.1%	0.61	0.06
Refrigeration	Open Display Case	10.1%	3.63	0.37
Refrigeration	Icemaker	91.7%	1.07	0.98
Refrigeration	Vending Machine	91.7%	0.46	0.42
Food Preparation	Oven	40.8%	0.06	0.02
Food Preparation	Fryer	40.8%	0.07	0.03
Food Preparation	Dishwasher	40.8%	0.10	0.04
Food Preparation	Hot Food Container	40.8%	0.01	0.01
Food Preparation	Steamer	40.8%	0.07	0.03
Office Equipment	Desktop Computer	100.0%	0.06	0.06
Office Equipment	Laptop	100.0%	0.01	0.01
Office Equipment	Server	89.0%	0.07	0.06
Office Equipment	Monitor	100.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01
Office Equipment	POS Terminal	77.0%	0.02	0.01
Miscellaneous	Non-HVAC Motors	79.5%	0.48	0.38
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.69	1.69
Total				20.75

Table A-142 Washington Data Center Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	14.8%	36.06	5.34	0.0
Cooling	Water-Cooled Chiller	9.1%	39.43	3.59	0.0
Cooling	RTU	47.9%	37.73	18.09	0.2
Cooling	Room AC	2.5%	44.41	1.13	0.0
Cooling	Evaporative AC	0.1%	15.09	0.01	0.0
Cooling	Air-Source Heat Pump	15.3%	37.73	5.78	0.0
Cooling	Geothermal Heat Pump	8.2%	22.99	1.89	0.0
Heating	Electric Furnace	1.2%	3.68	0.04	0.0
Heating	Electric Room Heat	22.9%	3.50	0.80	0.0
Heating	Air-Source Heat Pump	15.3%	3.11	0.48	0.0
Heating	Geothermal Heat Pump	8.2%	2.51	0.21	0.0
Ventilation	Ventilation	100.0%	26.31	26.31	0.2
Water Heating	Water Heater	45.2%	0.68	0.31	0.0
Interior Lighting	Screw-in	100.0%	0.74	0.74	0.0
Interior Lighting	High-Bay Fixtures	100.0%	2.74	2.74	0.0
Interior Lighting	Linear Lighting	100.0%	3.91	3.91	0.0
Exterior Lighting	Screw-in	100.0%	0.11	0.11	0.0
Exterior Lighting	Area Lighting	100.0%	1.12	1.12	0.0
Exterior Lighting	Linear Lighting	100.0%	0.24	0.24	0.0
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.11	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.02	0.00	0.0
Refrigeration	Glass Door Display	5.1%	0.02	0.00	0.0
Refrigeration	Open Display Case	5.1%	0.14	0.01	0.0
Refrigeration	Icemaker	5.1%	0.04	0.00	0.0
Refrigeration	Vending Machine	5.1%	0.02	0.00	0.0
Food Preparation	Oven	3.6%	0.07	0.00	0.0
Food Preparation	Fryer	3.6%	0.11	0.00	0.0
Food Preparation	Dishwasher	3.6%	0.14	0.01	0.0
Food Preparation	Hot Food Container	3.6%	0.02	0.00	0.0
Food Preparation	Steamer	3.6%	0.11	0.00	0.0
Office Equipment	Desktop Computer	100.0%	5.32	5.32	0.0
Office Equipment	Laptop	100.0%	0.33	0.33	0.0
Office Equipment	Server	100.0%	62.58	62.58	0.5
Office Equipment	Monitor	100.0%	0.94	0.94	0.0
Office Equipment	Printer/Copier/Fax	100.0%	0.58	0.58	0.0
Office Equipment	POS Terminal	40.0%	0.17	0.07	0.0
Miscellaneous	Non-HVAC Motors	89.6%	5.38	4.82	0.0
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	18.39	18.39	0.2
Total				165.88	1.4

Table A-143 Washington Data Center New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	14.8%	30.08	4.45
Cooling	Water-Cooled Chiller	9.1%	32.05	2.92
Cooling	RTU	47.9%	35.78	17.16
Cooling	Room AC	2.5%	35.30	0.89
Cooling	Evaporative AC	0.1%	15.09	0.01
Cooling	Air-Source Heat Pump	15.3%	31.41	4.82
Cooling	Geothermal Heat Pump	8.2%	16.56	1.36
Heating	Electric Furnace	1.2%	3.44	0.04
Heating	Electric Room Heat	22.9%	3.27	0.75
Heating	Air-Source Heat Pump	15.3%	2.82	0.43
Heating	Geothermal Heat Pump	8.2%	1.15	0.09
Ventilation	Ventilation	100.0%	21.02	21.02
Water Heating	Water Heater	45.2%	0.67	0.30
Interior Lighting	Screw-in	100.0%	0.70	0.70
Interior Lighting	High-Bay Fixtures	100.0%	2.60	2.60
Interior Lighting	Linear Lighting	100.0%	3.71	3.71
Exterior Lighting	Screw-in	100.0%	0.10	0.10
Exterior Lighting	Area Lighting	100.0%	1.06	1.06
Exterior Lighting	Linear Lighting	100.0%	0.23	0.23
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.09	0.00
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.02	0.00
Refrigeration	Glass Door Display	5.1%	0.02	0.00
Refrigeration	Open Display Case	5.1%	0.13	0.01
Refrigeration	Icemaker	5.1%	0.04	0.00
Refrigeration	Vending Machine	5.1%	0.02	0.00
Food Preparation	Oven	3.6%	0.08	0.00
Food Preparation	Fryer	3.6%	0.09	0.00
Food Preparation	Dishwasher	3.6%	0.13	0.00
Food Preparation	Hot Food Container	3.6%	0.02	0.00
Food Preparation	Steamer	3.6%	0.10	0.00
Office Equipment	Desktop Computer	100.0%	5.32	5.32
Office Equipment	Laptop	100.0%	0.33	0.33
Office Equipment	Server	100.0%	62.58	62.58
Office Equipment	Monitor	100.0%	0.94	0.94
Office Equipment	Printer/Copier/Fax	100.0%	0.58	0.58
Office Equipment	POS Terminal	40.0%	0.17	0.07
Miscellaneous	Non-HVAC Motors	89.6%	5.38	4.82
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	18.39	18.39
Total				155.71

Table A-144 Washington Miscellaneous Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	10.0%	1.95	0.19	2.9
Cooling	Water-Cooled Chiller	5.2%	2.12	0.11	1.6
Cooling	RTU	58.6%	2.22	1.30	19.3
Cooling	Room AC	5.2%	2.61	0.14	2.0
Cooling	Evaporative AC	0.0%	0.89	0.00	0.0
Cooling	Air-Source Heat Pump	5.7%	2.22	0.13	1.9
Cooling	Geothermal Heat Pump	1.1%	1.35	0.01	0.2
Heating	Electric Furnace	13.5%	5.59	0.76	11.3
Heating	Electric Room Heat	16.1%	5.33	0.86	12.7
Heating	Air-Source Heat Pump	5.7%	4.69	0.27	3.9
Heating	Geothermal Heat Pump	1.1%	3.67	0.04	0.6
Ventilation	Ventilation	100.0%	0.87	0.87	12.9
Water Heating	Water Heater	53.0%	1.65	0.88	13.0
Interior Lighting	Screw-in	100.0%	0.61	0.61	9.0
Interior Lighting	High-Bay Fixtures	100.0%	1.56	1.56	23.2
Interior Lighting	Linear Lighting	100.0%	1.46	1.46	21.8
Exterior Lighting	Screw-in	100.0%	0.09	0.09	1.4
Exterior Lighting	Area Lighting	100.0%	0.64	0.64	9.5
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06	0.9
Refrigeration	Walk-in Refrigerator/Freezer	10.3%	0.68	0.07	1.1
Refrigeration	Reach-in Refrigerator/Freezer	12.1%	0.15	0.02	0.3
Refrigeration	Glass Door Display	3.4%	0.16	0.01	0.1
Refrigeration	Open Display Case	3.4%	0.93	0.03	0.5
Refrigeration	Icemaker	21.6%	0.26	0.06	0.8
Refrigeration	Vending Machine	21.6%	0.24	0.05	0.8
Food Preparation	Oven	58.9%	0.10	0.06	0.9
Food Preparation	Fryer	29.9%	0.14	0.04	0.6
Food Preparation	Dishwasher	15.4%	0.20	0.03	0.5
Food Preparation	Hot Food Container	15.4%	0.03	0.00	0.1
Food Preparation	Steamer	15.4%	0.14	0.02	0.3
Office Equipment	Desktop Computer	100.0%	0.24	0.24	3.5
Office Equipment	Laptop	100.0%	0.04	0.04	0.5
Office Equipment	Server	66.0%	0.14	0.09	1.4
Office Equipment	Monitor	100.0%	0.04	0.04	0.6
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03	0.4
Office Equipment	POS Terminal	28.0%	0.04	0.01	0.2
Miscellaneous	Non-HVAC Motors	59.9%	0.18	0.11	1.6
Miscellaneous	Pool Pump	4.0%	0.01	0.00	0.0
Miscellaneous	Pool Heater	1.0%	0.02	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.69	0.69	10.3
Total				11.60	172.4

Table A-145 Washington Miscellaneous New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	10.0%	1.62	0.16
Cooling	Water-Cooled Chiller	5.2%	1.72	0.09
Cooling	RTU	58.6%	2.12	1.25
Cooling	Room AC	5.2%	2.07	0.11
Cooling	Evaporative AC	0.0%	0.89	0.00
Cooling	Air-Source Heat Pump	5.7%	1.84	0.10
Cooling	Geothermal Heat Pump	1.1%	1.33	0.01
Heating	Electric Furnace	13.5%	5.23	0.71
Heating	Electric Room Heat	16.1%	4.98	0.80
Heating	Air-Source Heat Pump	5.7%	4.26	0.24
Heating	Geothermal Heat Pump	1.1%	2.20	0.02
Ventilation	Ventilation	100.0%	0.70	0.70
Water Heating	Water Heater	53.0%	1.65	0.87
Interior Lighting	Screw-in	100.0%	0.58	0.58
Interior Lighting	High-Bay Fixtures	100.0%	1.48	1.48
Interior Lighting	Linear Lighting	100.0%	1.39	1.39
Exterior Lighting	Screw-in	100.0%	0.09	0.09
Exterior Lighting	Area Lighting	100.0%	0.61	0.61
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06
Refrigeration	Walk-in Refrigerator/Freezer	10.3%	0.62	0.06
Refrigeration	Reach-in Refrigerator/Freezer	12.1%	0.14	0.02
Refrigeration	Glass Door Display	3.4%	0.14	0.00
Refrigeration	Open Display Case	3.4%	0.84	0.03
Refrigeration	Icemaker	21.6%	0.25	0.05
Refrigeration	Vending Machine	21.6%	0.22	0.05
Food Preparation	Oven	58.9%	0.11	0.06
Food Preparation	Fryer	29.9%	0.13	0.04
Food Preparation	Dishwasher	15.4%	0.18	0.03
Food Preparation	Hot Food Container	15.4%	0.02	0.00
Food Preparation	Steamer	15.4%	0.13	0.02
Office Equipment	Desktop Computer	100.0%	0.24	0.24
Office Equipment	Laptop	100.0%	0.04	0.04
Office Equipment	Server	66.0%	0.14	0.09
Office Equipment	Monitor	100.0%	0.04	0.04
Office Equipment	Printer/Copier/Fax	100.0%	0.03	0.03
Office Equipment	POS Terminal	28.0%	0.04	0.01
Miscellaneous	Non-HVAC Motors	59.9%	0.18	0.11
Miscellaneous	Pool Pump	4.0%	0.01	0.00
Miscellaneous	Pool Heater	1.0%	0.02	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.69	0.69
Total			10.88	

Table A-146 Wyoming Large Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	17.3%	2.84	0.49	2,959.3
Cooling	Water-Cooled Chiller	10.7%	2.96	0.32	1,896.8
Cooling	RTU	56.1%	3.00	1.68	10,132.7
Cooling	Room AC	3.0%	3.79	0.11	676.9
Cooling	Evaporative AC	0.1%	1.20	0.00	4.3
Cooling	Air-Source Heat Pump	2.8%	3.00	0.09	512.7
Cooling	Geothermal Heat Pump	1.7%	1.83	0.03	185.8
Heating	Electric Furnace	1.0%	6.67	0.06	383.1
Heating	Electric Room Heat	18.4%	6.35	1.17	7,031.1
Heating	Air-Source Heat Pump	2.8%	5.84	0.17	997.8
Heating	Geothermal Heat Pump	1.7%	4.49	0.08	456.1
Ventilation	Ventilation	100.0%	3.21	3.21	19,290.7
Water Heating	Water Heater	45.2%	1.07	0.48	2,909.9
Interior Lighting	Screw-in	100.0%	0.35	0.35	2,114.8
Interior Lighting	High-Bay Fixtures	100.0%	1.01	1.01	6,074.5
Interior Lighting	Linear Lighting	100.0%	1.72	1.72	10,375.1
Exterior Lighting	Screw-in	100.0%	0.10	0.10	574.6
Exterior Lighting	Area Lighting	100.0%	1.28	1.28	7,686.2
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18	1,082.7
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.15	0.00	17.6
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.03	0.00	27.7
Refrigeration	Glass Door Display	77.4%	0.03	0.03	156.9
Refrigeration	Open Display Case	77.4%	0.20	0.15	930.0
Refrigeration	Icemaker	44.9%	0.06	0.02	149.1
Refrigeration	Vending Machine	44.9%	0.05	0.02	140.0
Food Preparation	Oven	66.0%	0.09	0.06	361.2
Food Preparation	Fryer	76.4%	0.13	0.10	604.7
Food Preparation	Dishwasher	43.1%	0.18	0.08	469.1
Food Preparation	Hot Food Container	43.1%	0.02	0.01	64.2
Food Preparation	Steamer	43.1%	0.13	0.06	343.9
Office Equipment	Desktop Computer	100.0%	2.42	2.42	14,543.2
Office Equipment	Laptop	100.0%	0.37	0.37	2,245.6
Office Equipment	Server	100.0%	0.24	0.24	1,425.8
Office Equipment	Monitor	100.0%	0.43	0.43	2,566.4
Office Equipment	Printer/Copier/Fax	100.0%	0.22	0.22	1,327.0
Office Equipment	POS Terminal	40.0%	0.03	0.01	76.2
Miscellaneous	Non-HVAC Motors	89.6%	0.26	0.24	1,418.7
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.07	1.07	6,427.4
Total				18.06	108,640.0

Table A-147 Wyoming Large Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	19.6%	2.38	0.47
Cooling	Water-Cooled Chiller	12.1%	2.41	0.29
Cooling	RTU	63.6%	1.99	1.26
Cooling	Room AC	3.3%	2.55	0.08
Cooling	Evaporative AC	0.1%	1.20	0.00
Cooling	Air-Source Heat Pump	3.1%	2.12	0.07
Cooling	Geothermal Heat Pump	1.9%	1.55	0.03
Heating	Electric Furnace	1.0%	6.53	0.06
Heating	Electric Room Heat	18.4%	6.22	1.15
Heating	Air-Source Heat Pump	3.1%	4.81	0.15
Heating	Geothermal Heat Pump	1.9%	3.32	0.06
Ventilation	Ventilation	100.0%	2.46	2.46
Water Heating	Water Heater	45.2%	1.07	0.48
Interior Lighting	Screw-in	100.0%	0.48	0.48
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31
Interior Lighting	Linear Lighting	100.0%	1.76	1.76
Exterior Lighting	Screw-in	100.0%	0.12	0.12
Exterior Lighting	Area Lighting	100.0%	1.39	1.39
Exterior Lighting	Linear Lighting	100.0%	0.18	0.18
Refrigeration	Walk-in Refrigerator/Freezer	2.4%	0.13	0.00
Refrigeration	Reach-in Refrigerator/Freezer	16.8%	0.03	0.00
Refrigeration	Glass Door Display	92.9%	0.03	0.03
Refrigeration	Open Display Case	92.9%	0.18	0.17
Refrigeration	Icemaker	53.9%	0.05	0.03
Refrigeration	Vending Machine	53.9%	0.05	0.03
Food Preparation	Oven	79.2%	0.09	0.07
Food Preparation	Fryer	91.7%	0.12	0.11
Food Preparation	Dishwasher	51.7%	0.16	0.08
Food Preparation	Hot Food Container	51.7%	0.02	0.01
Food Preparation	Steamer	51.7%	0.12	0.06
Office Equipment	Desktop Computer	125.0%	2.42	3.02
Office Equipment	Laptop	125.0%	0.37	0.47
Office Equipment	Server	125.0%	0.24	0.30
Office Equipment	Monitor	125.0%	0.43	0.53
Office Equipment	Printer/Copier/Fax	125.0%	0.22	0.28
Office Equipment	POS Terminal	44.0%	0.03	0.01
Miscellaneous	Non-HVAC Motors	107.5%	0.26	0.28
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.07	1.07
Total				18.37

Table A-148 Wyoming Small Office Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.30	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.41	0.00	0.0
Cooling	RTU	83.2%	3.68	3.06	61,642.1
Cooling	Room AC	2.9%	4.65	0.14	2,747.7
Cooling	Evaporative AC	0.1%	1.47	0.00	17.5
Cooling	Air-Source Heat Pump	3.2%	3.68	0.12	2,403.8
Cooling	Geothermal Heat Pump	1.6%	2.24	0.04	739.3
Heating	Electric Furnace	0.8%	8.99	0.07	1,496.4
Heating	Electric Room Heat	15.9%	8.56	1.36	27,460.5
Heating	Air-Source Heat Pump	3.2%	7.95	0.26	5,199.0
Heating	Geothermal Heat Pump	1.6%	5.65	0.09	1,863.1
Ventilation	Ventilation	100.0%	1.42	1.42	28,618.4
Water Heating	Water Heater	35.1%	1.07	0.37	7,553.5
Interior Lighting	Screw-in	100.0%	0.38	0.38	7,643.1
Interior Lighting	High-Bay Fixtures	100.0%	1.51	1.51	30,427.0
Interior Lighting	Linear Lighting	100.0%	1.54	1.54	31,068.4
Exterior Lighting	Screw-in	100.0%	0.16	0.16	3,273.6
Exterior Lighting	Area Lighting	100.0%	1.58	1.58	31,789.3
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07	1,465.5
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.46	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	11.3%	0.10	0.01	233.2
Refrigeration	Glass Door Display	1.6%	0.11	0.00	34.2
Refrigeration	Open Display Case	1.6%	0.62	0.01	202.7
Refrigeration	Icemaker	5.1%	0.17	0.01	177.1
Refrigeration	Vending Machine	5.1%	0.08	0.00	83.2
Food Preparation	Oven	3.6%	0.21	0.01	156.7
Food Preparation	Fryer	3.6%	0.31	0.01	226.6
Food Preparation	Dishwasher	3.6%	0.42	0.02	311.8
Food Preparation	Hot Food Container	3.6%	0.06	0.00	42.7
Food Preparation	Steamer	3.6%	0.31	0.01	228.6
Office Equipment	Desktop Computer	100.0%	1.41	1.41	28,510.7
Office Equipment	Laptop	100.0%	0.22	0.22	4,402.4
Office Equipment	Server	100.0%	0.42	0.42	8,385.5
Office Equipment	Monitor	100.0%	0.25	0.25	5,031.3
Office Equipment	Printer/Copier/Fax	100.0%	0.19	0.19	3,902.1
Office Equipment	POS Terminal	20.0%	0.11	0.02	447.9
Miscellaneous	Non-HVAC Motors	22.0%	0.25	0.05	1,104.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.07	1.07	21,557.1
Total				15.90	320,446.7

Table A-149 Wyoming Small Office New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.76	0.00
Cooling	Water-Cooled Chiller	0.0%	2.79	0.00
Cooling	RTU	99.6%	2.35	2.34
Cooling	Room AC	3.5%	3.12	0.11
Cooling	Evaporative AC	0.1%	1.47	0.00
Cooling	Air-Source Heat Pump	3.9%	2.60	0.10
Cooling	Geothermal Heat Pump	2.0%	1.83	0.04
Heating	Electric Furnace	0.8%	8.81	0.07
Heating	Electric Room Heat	15.9%	8.39	1.34
Heating	Air-Source Heat Pump	3.9%	6.55	0.25
Heating	Geothermal Heat Pump	2.0%	4.57	0.09
Ventilation	Ventilation	100.0%	1.05	1.05
Water Heating	Water Heater	35.1%	1.06	0.37
Interior Lighting	Screw-in	100.0%	0.53	0.53
Interior Lighting	High-Bay Fixtures	100.0%	1.96	1.96
Interior Lighting	Linear Lighting	100.0%	1.52	1.52
Exterior Lighting	Screw-in	100.0%	0.23	0.23
Exterior Lighting	Area Lighting	100.0%	1.66	1.66
Exterior Lighting	Linear Lighting	100.0%	0.07	0.07
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.41	0.00
Refrigeration	Reach-in Refrigerator/Freezer	13.5%	0.09	0.01
Refrigeration	Glass Door Display	1.9%	0.09	0.00
Refrigeration	Open Display Case	1.9%	0.56	0.01
Refrigeration	Icemaker	6.1%	0.14	0.01
Refrigeration	Vending Machine	6.1%	0.07	0.00
Food Preparation	Oven	4.6%	0.22	0.01
Food Preparation	Fryer	4.6%	0.28	0.01
Food Preparation	Dishwasher	4.6%	0.38	0.02
Food Preparation	Hot Food Container	4.6%	0.05	0.00
Food Preparation	Steamer	4.6%	0.28	0.01
Office Equipment	Desktop Computer	125.0%	1.41	1.77
Office Equipment	Laptop	125.0%	0.22	0.27
Office Equipment	Server	125.0%	0.42	0.52
Office Equipment	Monitor	125.0%	0.25	0.31
Office Equipment	Printer/Copier/Fax	125.0%	0.19	0.24
Office Equipment	POS Terminal	22.0%	0.11	0.02
Miscellaneous	Non-HVAC Motors	24.2%	0.25	0.06
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.07	1.07
Total			16.08	

Table A-150 Wyoming Large Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	1.1%	2.98	0.03	98.5
Cooling	Water-Cooled Chiller	0.7%	3.09	0.02	62.7
Cooling	RTU	76.7%	3.33	2.55	7,688.4
Cooling	Room AC	3.4%	4.20	0.14	425.2
Cooling	Evaporative AC	3.9%	1.33	0.05	157.3
Cooling	Air-Source Heat Pump	2.0%	3.33	0.07	202.2
Cooling	Geothermal Heat Pump	1.0%	2.03	0.02	61.1
Heating	Electric Furnace	1.5%	7.13	0.11	328.6
Heating	Electric Room Heat	17.9%	6.79	1.21	3,659.7
Heating	Air-Source Heat Pump	2.0%	6.23	0.13	378.9
Heating	Geothermal Heat Pump	1.0%	4.54	0.05	136.9
Ventilation	Ventilation	100.0%	3.52	3.52	10,606.0
Water Heating	Water Heater	51.9%	1.17	0.61	1,836.6
Interior Lighting	Screw-in	100.0%	0.97	0.97	2,928.6
Interior Lighting	High-Bay Fixtures	100.0%	1.99	1.99	6,001.8
Interior Lighting	Linear Lighting	100.0%	3.00	3.00	9,054.3
Exterior Lighting	Screw-in	100.0%	0.24	0.24	717.3
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	2,545.9
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	240.8
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.39	0.01	23.4
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.09	0.01	36.8
Refrigeration	Glass Door Display	81.7%	0.09	0.07	220.4
Refrigeration	Open Display Case	81.7%	0.53	0.43	1,306.4
Refrigeration	Icemaker	52.4%	0.29	0.15	463.1
Refrigeration	Vending Machine	52.4%	0.14	0.07	217.5
Food Preparation	Oven	48.9%	0.18	0.09	269.6
Food Preparation	Fryer	45.2%	0.26	0.12	360.4
Food Preparation	Dishwasher	39.6%	0.36	0.14	434.2
Food Preparation	Hot Food Container	39.6%	0.05	0.02	59.4
Food Preparation	Steamer	39.6%	0.27	0.11	318.4
Office Equipment	Desktop Computer	100.0%	0.34	0.34	1,033.3
Office Equipment	Laptop	100.0%	0.05	0.05	159.6
Office Equipment	Server	82.0%	0.05	0.04	124.6
Office Equipment	Monitor	100.0%	0.06	0.06	182.3
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05	141.4
Office Equipment	POS Terminal	100.0%	0.01	0.01	24.4
Miscellaneous	Non-HVAC Motors	40.2%	0.29	0.12	356.8
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.22	1.22	3,670.0
Total				18.75	56,533.1

Table A-151 Wyoming Large Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	1.4%	2.45	0.03
Cooling	Water-Cooled Chiller	0.9%	2.45	0.02
Cooling	RTU	99.7%	2.76	2.75
Cooling	Room AC	4.4%	2.82	0.12
Cooling	Evaporative AC	5.1%	1.33	0.07
Cooling	Air-Source Heat Pump	2.6%	2.70	0.07
Cooling	Geothermal Heat Pump	1.3%	1.30	0.02
Heating	Electric Furnace	1.5%	6.99	0.11
Heating	Electric Room Heat	17.9%	6.65	1.19
Heating	Air-Source Heat Pump	2.6%	5.13	0.13
Heating	Geothermal Heat Pump	1.3%	2.39	0.03
Ventilation	Ventilation	100.0%	2.66	2.66
Water Heating	Water Heater	51.9%	1.17	0.61
Interior Lighting	Screw-in	100.0%	0.61	0.61
Interior Lighting	High-Bay Fixtures	100.0%	2.33	2.33
Interior Lighting	Linear Lighting	100.0%	3.04	3.04
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.35	0.01
Refrigeration	Reach-in Refrigerator/Freezer	21.0%	0.08	0.02
Refrigeration	Glass Door Display	122.6%	0.08	0.10
Refrigeration	Open Display Case	122.6%	0.48	0.58
Refrigeration	Icemaker	78.6%	0.25	0.20
Refrigeration	Vending Machine	78.6%	0.12	0.10
Food Preparation	Oven	68.5%	0.14	0.10
Food Preparation	Fryer	63.3%	0.24	0.15
Food Preparation	Dishwasher	55.4%	0.33	0.18
Food Preparation	Hot Food Container	55.4%	0.04	0.02
Food Preparation	Steamer	55.4%	0.24	0.13
Office Equipment	Desktop Computer	110.0%	0.34	0.38
Office Equipment	Laptop	110.0%	0.05	0.06
Office Equipment	Server	98.4%	0.05	0.05
Office Equipment	Monitor	110.0%	0.06	0.07
Office Equipment	Printer/Copier/Fax	110.0%	0.05	0.05
Office Equipment	POS Terminal	125.0%	0.01	0.01
Miscellaneous	Non-HVAC Motors	48.2%	0.29	0.14
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.22	1.22
Total				18.67

Table A-152 Wyoming Small Retail Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.01	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.11	0.00	0.0
Cooling	RTU	80.5%	3.35	2.70	31,491.6
Cooling	Room AC	2.5%	3.44	0.09	1,004.2
Cooling	Evaporative AC	0.1%	1.34	0.00	7.8
Cooling	Air-Source Heat Pump	2.9%	3.35	0.10	1,117.1
Cooling	Geothermal Heat Pump	1.4%	2.04	0.03	331.2
Heating	Electric Furnace	0.8%	8.16	0.06	753.9
Heating	Electric Room Heat	15.2%	7.77	1.18	13,835.1
Heating	Air-Source Heat Pump	2.9%	6.65	0.19	2,220.0
Heating	Geothermal Heat Pump	1.4%	4.19	0.06	680.7
Ventilation	Ventilation	100.0%	1.40	1.40	16,294.4
Water Heating	Water Heater	44.3%	1.05	0.46	5,420.8
Interior Lighting	Screw-in	100.0%	0.64	0.64	7,488.5
Interior Lighting	High-Bay Fixtures	100.0%	1.31	1.31	15,346.5
Interior Lighting	Linear Lighting	100.0%	1.98	1.98	23,151.7
Exterior Lighting	Screw-in	100.0%	0.24	0.24	2,779.1
Exterior Lighting	Area Lighting	100.0%	0.84	0.84	9,863.4
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	932.9
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.31	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	13.8%	0.07	0.01	111.9
Refrigeration	Glass Door Display	1.7%	0.07	0.00	14.4
Refrigeration	Open Display Case	1.7%	0.42	0.01	85.1
Refrigeration	Icemaker	5.1%	0.23	0.01	139.1
Refrigeration	Vending Machine	5.1%	0.11	0.01	65.3
Food Preparation	Oven	3.6%	0.21	0.01	89.2
Food Preparation	Fryer	3.6%	0.30	0.01	129.0
Food Preparation	Dishwasher	3.6%	0.42	0.02	177.5
Food Preparation	Hot Food Container	3.6%	0.06	0.00	24.3
Food Preparation	Steamer	3.6%	0.31	0.01	130.2
Office Equipment	Desktop Computer	100.0%	0.12	0.12	1,344.4
Office Equipment	Laptop	100.0%	0.02	0.02	207.6
Office Equipment	Server	100.0%	0.14	0.14	1,581.6
Office Equipment	Monitor	100.0%	0.02	0.02	237.2
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	147.2
Office Equipment	POS Terminal	100.0%	0.04	0.04	422.4
Miscellaneous	Non-HVAC Motors	22.0%	0.20	0.04	522.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.87	0.87	10,186.7
Total				12.70	148,334.3

Table A-153 Wyoming Small Retail New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	2.46	0.00
Cooling	Water-Cooled Chiller	0.0%	2.47	0.00
Cooling	RTU	104.6%	2.47	2.58
Cooling	Room AC	3.2%	2.31	0.08
Cooling	Evaporative AC	0.1%	1.34	0.00
Cooling	Air-Source Heat Pump	3.7%	2.37	0.09
Cooling	Geothermal Heat Pump	1.8%	1.31	0.02
Heating	Electric Furnace	0.8%	7.99	0.06
Heating	Electric Room Heat	15.2%	7.61	1.16
Heating	Air-Source Heat Pump	3.7%	5.48	0.20
Heating	Geothermal Heat Pump	1.8%	2.54	0.05
Ventilation	Ventilation	100.0%	1.10	1.10
Water Heating	Water Heater	44.3%	1.04	0.46
Interior Lighting	Screw-in	100.0%	0.40	0.40
Interior Lighting	High-Bay Fixtures	100.0%	1.54	1.54
Interior Lighting	Linear Lighting	100.0%	2.00	2.00
Exterior Lighting	Screw-in	100.0%	0.22	0.22
Exterior Lighting	Area Lighting	100.0%	1.03	1.03
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	0.0%	0.28	0.00
Refrigeration	Reach-in Refrigerator/Freezer	20.7%	0.06	0.01
Refrigeration	Glass Door Display	2.6%	0.06	0.00
Refrigeration	Open Display Case	2.6%	0.38	0.01
Refrigeration	Icemaker	7.7%	0.20	0.02
Refrigeration	Vending Machine	7.7%	0.10	0.01
Food Preparation	Oven	5.1%	0.16	0.01
Food Preparation	Fryer	5.1%	0.27	0.01
Food Preparation	Dishwasher	5.1%	0.38	0.02
Food Preparation	Hot Food Container	5.1%	0.05	0.00
Food Preparation	Steamer	5.1%	0.28	0.01
Office Equipment	Desktop Computer	110.0%	0.12	0.13
Office Equipment	Laptop	110.0%	0.02	0.02
Office Equipment	Server	120.0%	0.14	0.16
Office Equipment	Monitor	110.0%	0.02	0.02
Office Equipment	Printer/Copier/Fax	110.0%	0.01	0.01
Office Equipment	POS Terminal	125.0%	0.04	0.05
Miscellaneous	Non-HVAC Motors	26.4%	0.20	0.05
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.87	0.87
Total			12.49	

Table A-154 Wyoming Restaurant Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	3.41	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	3.45	0.00	0.0
Cooling	RTU	76.4%	4.20	3.20	6,788.6
Cooling	Room AC	2.8%	5.30	0.15	314.0
Cooling	Evaporative AC	3.4%	1.68	0.06	122.6
Cooling	Air-Source Heat Pump	4.4%	4.20	0.18	391.3
Cooling	Geothermal Heat Pump	2.0%	2.56	0.05	108.3
Heating	Electric Furnace	7.1%	7.70	0.55	1,160.2
Heating	Electric Room Heat	0.6%	7.34	0.05	100.1
Heating	Air-Source Heat Pump	4.4%	5.87	0.26	547.7
Heating	Geothermal Heat Pump	2.0%	3.84	0.08	162.9
Ventilation	Ventilation	100.0%	2.61	2.61	5,539.5
Water Heating	Water Heater	19.0%	9.30	1.77	3,752.6
Interior Lighting	Screw-in	100.0%	2.28	2.28	4,829.5
Interior Lighting	High-Bay Fixtures	100.0%	2.92	2.92	6,184.3
Interior Lighting	Linear Lighting	100.0%	1.87	1.87	3,956.5
Exterior Lighting	Screw-in	100.0%	0.28	0.28	585.1
Exterior Lighting	Area Lighting	100.0%	2.14	2.14	4,536.1
Exterior Lighting	Linear Lighting	100.0%	0.40	0.40	855.1
Refrigeration	Walk-in Refrigerator/Freezer	74.0%	7.91	5.85	12,397.7
Refrigeration	Reach-in Refrigerator/Freezer	7.0%	3.55	0.25	526.4
Refrigeration	Glass Door Display	5.2%	1.82	0.09	200.7
Refrigeration	Open Display Case	5.2%	10.80	0.56	1,189.5
Refrigeration	Icemaker	97.3%	2.98	2.90	6,150.3
Refrigeration	Vending Machine	97.3%	1.40	1.36	2,888.4
Food Preparation	Oven	21.0%	4.74	0.99	2,107.3
Food Preparation	Fryer	82.0%	6.85	5.62	11,899.8
Food Preparation	Dishwasher	52.5%	4.71	2.48	5,243.8
Food Preparation	Hot Food Container	84.0%	0.65	0.54	1,148.1
Food Preparation	Steamer	16.0%	3.46	0.55	1,171.6
Office Equipment	Desktop Computer	100.0%	0.35	0.35	742.9
Office Equipment	Laptop	100.0%	0.04	0.04	91.8
Office Equipment	Server	50.0%	0.41	0.21	437.0
Office Equipment	Monitor	100.0%	0.06	0.06	131.1
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08	162.7
Office Equipment	POS Terminal	100.0%	0.11	0.11	233.4
Miscellaneous	Non-HVAC Motors	20.0%	0.88	0.18	372.3
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.02	3.02	6,404.3
Total				44.10	93,433.7

Table A-155 Wyoming Restaurant New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	3.22	0.00
Cooling	Water-Cooled Chiller	0.0%	3.07	0.00
Cooling	RTU	91.4%	3.14	2.88
Cooling	Room AC	3.3%	3.56	0.12
Cooling	Evaporative AC	4.1%	1.68	0.07
Cooling	Air-Source Heat Pump	5.3%	3.11	0.16
Cooling	Geothermal Heat Pump	2.4%	2.46	0.06
Heating	Electric Furnace	7.1%	7.55	0.54
Heating	Electric Room Heat	0.6%	7.19	0.05
Heating	Air-Source Heat Pump	5.3%	5.26	0.28
Heating	Geothermal Heat Pump	2.4%	3.96	0.10
Ventilation	Ventilation	100.0%	2.05	2.05
Water Heating	Water Heater	20.0%	9.26	1.85
Interior Lighting	Screw-in	100.0%	1.93	1.93
Interior Lighting	High-Bay Fixtures	100.0%	4.18	4.18
Interior Lighting	Linear Lighting	100.0%	1.91	1.91
Exterior Lighting	Screw-in	100.0%	0.33	0.33
Exterior Lighting	Area Lighting	100.0%	2.49	2.49
Exterior Lighting	Linear Lighting	100.0%	0.41	0.41
Refrigeration	Walk-in Refrigerator/Freezer	76.1%	7.12	5.41
Refrigeration	Reach-in Refrigerator/Freezer	7.2%	3.19	0.23
Refrigeration	Glass Door Display	5.3%	1.64	0.09
Refrigeration	Open Display Case	5.3%	9.72	0.52
Refrigeration	Icemaker	100.0%	2.66	2.66
Refrigeration	Vending Machine	100.0%	1.27	1.27
Food Preparation	Oven	29.4%	3.68	1.08
Food Preparation	Fryer	114.8%	6.16	7.08
Food Preparation	Dishwasher	73.5%	4.24	3.12
Food Preparation	Hot Food Container	117.6%	0.58	0.68
Food Preparation	Steamer	22.4%	3.11	0.70
Office Equipment	Desktop Computer	110.0%	0.35	0.39
Office Equipment	Laptop	110.0%	0.04	0.05
Office Equipment	Server	55.0%	0.41	0.23
Office Equipment	Monitor	110.0%	0.06	0.07
Office Equipment	Printer/Copier/Fax	110.0%	0.08	0.08
Office Equipment	POS Terminal	120.0%	0.11	0.13
Miscellaneous	Non-HVAC Motors	24.0%	0.88	0.21
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.02	3.02
Total				46.42

Table A-156 Wyoming Grocery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.6%	4.23	0.02	28.3
Cooling	Water-Cooled Chiller	0.3%	4.38	0.01	18.0
Cooling	RTU	76.6%	4.72	3.62	4,370.0
Cooling	Room AC	2.3%	5.96	0.14	164.8
Cooling	Evaporative AC	1.3%	1.89	0.02	28.8
Cooling	Air-Source Heat Pump	2.3%	4.42	0.10	122.1
Cooling	Geothermal Heat Pump	0.0%	1.57	0.00	0.0
Heating	Electric Furnace	11.1%	8.31	0.92	1,112.9
Heating	Electric Room Heat	2.0%	7.91	0.16	195.2
Heating	Air-Source Heat Pump	2.3%	4.79	0.11	132.4
Heating	Geothermal Heat Pump	0.0%	3.14	0.00	0.0
Ventilation	Ventilation	100.0%	2.53	2.53	3,057.0
Water Heating	Water Heater	50.0%	2.66	1.33	1,605.3
Interior Lighting	Screw-in	100.0%	0.68	0.68	818.1
Interior Lighting	High-Bay Fixtures	100.0%	2.02	2.02	2,442.0
Interior Lighting	Linear Lighting	100.0%	5.01	5.01	6,056.6
Exterior Lighting	Screw-in	100.0%	0.36	0.36	437.5
Exterior Lighting	Area Lighting	100.0%	1.78	1.78	2,155.7
Exterior Lighting	Linear Lighting	100.0%	0.38	0.38	461.2
Refrigeration	Walk-in Refrigerator/Freezer	16.0%	6.24	1.00	1,206.1
Refrigeration	Reach-in Refrigerator/Freezer	83.1%	0.40	0.33	401.5
Refrigeration	Glass Door Display	94.9%	4.10	3.89	4,707.9
Refrigeration	Open Display Case	94.9%	24.33	23.09	27,906.0
Refrigeration	Icemaker	98.9%	0.34	0.33	401.8
Refrigeration	Vending Machine	98.9%	0.32	0.31	377.4
Food Preparation	Oven	11.0%	0.74	0.08	98.2
Food Preparation	Fryer	87.0%	1.07	0.93	1,123.2
Food Preparation	Dishwasher	54.9%	1.47	0.81	974.9
Food Preparation	Hot Food Container	73.0%	0.20	0.15	177.5
Food Preparation	Steamer	20.0%	1.08	0.22	260.6
Office Equipment	Desktop Computer	100.0%	0.19	0.19	224.2
Office Equipment	Laptop	64.0%	0.03	0.02	22.2
Office Equipment	Server	100.0%	0.11	0.11	131.9
Office Equipment	Monitor	100.0%	0.03	0.03	39.6
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	24.6
Office Equipment	POS Terminal	100.0%	0.07	0.07	88.1
Miscellaneous	Non-HVAC Motors	34.6%	0.82	0.28	342.0
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.54	3.54	4,283.7
Total				54.60	65,997.2

Table A-157 Wyoming Grocery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.6%	3.47	0.02
Cooling	Water-Cooled Chiller	0.4%	3.48	0.01
Cooling	RTU	80.4%	4.18	3.37
Cooling	Room AC	2.3%	4.01	0.09
Cooling	Evaporative AC	1.3%	1.89	0.02
Cooling	Air-Source Heat Pump	2.3%	2.93	0.07
Cooling	Geothermal Heat Pump	0.0%	1.29	0.00
Heating	Electric Furnace	11.1%	8.14	0.90
Heating	Electric Room Heat	2.0%	7.75	0.16
Heating	Air-Source Heat Pump	2.3%	3.95	0.09
Heating	Geothermal Heat Pump	0.0%	4.65	0.00
Ventilation	Ventilation	100.0%	2.19	2.19
Water Heating	Water Heater	50.0%	2.64	1.32
Interior Lighting	Screw-in	100.0%	0.51	0.51
Interior Lighting	High-Bay Fixtures	100.0%	2.22	2.22
Interior Lighting	Linear Lighting	100.0%	5.20	5.20
Exterior Lighting	Screw-in	100.0%	0.30	0.30
Exterior Lighting	Area Lighting	100.0%	1.98	1.98
Exterior Lighting	Linear Lighting	100.0%	0.39	0.39
Refrigeration	Walk-in Refrigerator/Freezer	16.2%	5.61	0.91
Refrigeration	Reach-in Refrigerator/Freezer	84.0%	0.36	0.30
Refrigeration	Glass Door Display	96.0%	3.69	3.54
Refrigeration	Open Display Case	96.0%	21.89	21.01
Refrigeration	Icemaker	100.0%	0.33	0.33
Refrigeration	Vending Machine	100.0%	0.29	0.29
Food Preparation	Oven	15.4%	0.75	0.12
Food Preparation	Fryer	121.8%	0.96	1.17
Food Preparation	Dishwasher	76.8%	1.32	1.02
Food Preparation	Hot Food Container	102.2%	0.18	0.19
Food Preparation	Steamer	28.0%	0.97	0.27
Office Equipment	Desktop Computer	110.0%	0.19	0.20
Office Equipment	Laptop	70.4%	0.03	0.02
Office Equipment	Server	110.0%	0.11	0.12
Office Equipment	Monitor	110.0%	0.03	0.04
Office Equipment	Printer/Copier/Fax	110.0%	0.02	0.02
Office Equipment	POS Terminal	110.0%	0.07	0.08
Miscellaneous	Non-HVAC Motors	41.6%	0.82	0.34
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.54	3.54
Total				52.36

Table A-158 Wyoming Health Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	16.6%	4.99	0.83	3,198.0
Cooling	Water-Cooled Chiller	66.4%	5.88	3.90	15,061.3
Cooling	RTU	10.9%	4.90	0.53	2,063.3
Cooling	Room AC	0.4%	6.19	0.02	91.5
Cooling	Evaporative AC	0.0%	1.96	0.00	0.0
Cooling	Air-Source Heat Pump	1.1%	4.89	0.05	203.4
Cooling	Geothermal Heat Pump	0.9%	2.98	0.03	99.5
Heating	Electric Furnace	3.2%	18.78	0.60	2,314.0
Heating	Electric Room Heat	0.1%	17.89	0.01	45.4
Heating	Air-Source Heat Pump	1.1%	13.61	0.15	566.2
Heating	Geothermal Heat Pump	0.9%	9.10	0.08	304.3
Ventilation	Ventilation	100.0%	4.29	4.29	16,560.5
Water Heating	Water Heater	25.2%	4.28	1.08	4,166.5
Interior Lighting	Screw-in	100.0%	0.78	0.78	3,000.6
Interior Lighting	High-Bay Fixtures	100.0%	2.59	2.59	10,013.7
Interior Lighting	Linear Lighting	100.0%	4.04	4.04	15,587.9
Exterior Lighting	Screw-in	100.0%	0.04	0.04	170.3
Exterior Lighting	Area Lighting	100.0%	0.66	0.66	2,564.8
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	316.2
Refrigeration	Walk-in Refrigerator/Freezer	33.0%	0.26	0.09	329.0
Refrigeration	Reach-in Refrigerator/Freezer	50.0%	0.06	0.03	111.9
Refrigeration	Glass Door Display	90.4%	0.06	0.05	207.6
Refrigeration	Open Display Case	90.4%	0.35	0.32	1,230.6
Refrigeration	Icemaker	90.4%	0.19	0.18	680.1
Refrigeration	Vending Machine	90.4%	0.09	0.08	319.4
Food Preparation	Oven	69.7%	0.60	0.42	1,620.6
Food Preparation	Fryer	80.7%	0.87	0.70	2,713.5
Food Preparation	Dishwasher	53.5%	1.20	0.64	2,474.3
Food Preparation	Hot Food Container	53.5%	0.16	0.09	338.7
Food Preparation	Steamer	53.5%	0.88	0.47	1,814.3
Office Equipment	Desktop Computer	100.0%	0.52	0.52	2,022.8
Office Equipment	Laptop	100.0%	0.03	0.03	124.9
Office Equipment	Server	100.0%	0.06	0.06	238.0
Office Equipment	Monitor	100.0%	0.09	0.09	357.0
Office Equipment	Printer/Copier/Fax	100.0%	0.06	0.06	221.5
Office Equipment	POS Terminal	100.0%	0.04	0.04	158.9
Miscellaneous	Non-HVAC Motors	74.1%	0.50	0.37	1,430.1
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	3.68	3.68	14,224.5
Total				27.70	106,945.0

Table A-159 Wyoming Health New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	16.6%	3.53	0.59
Cooling	Water-Cooled Chiller	66.4%	4.06	2.70
Cooling	RTU	10.9%	3.66	0.40
Cooling	Room AC	0.4%	4.16	0.02
Cooling	Evaporative AC	0.0%	1.96	0.00
Cooling	Air-Source Heat Pump	1.1%	3.46	0.04
Cooling	Geothermal Heat Pump	0.9%	2.85	0.02
Heating	Electric Furnace	3.2%	18.40	0.59
Heating	Electric Room Heat	0.1%	17.53	0.01
Heating	Air-Source Heat Pump	1.1%	11.22	0.12
Heating	Geothermal Heat Pump	0.9%	4.43	0.04
Ventilation	Ventilation	100.0%	2.95	2.95
Water Heating	Water Heater	25.2%	4.26	1.07
Interior Lighting	Screw-in	100.0%	0.92	0.92
Interior Lighting	High-Bay Fixtures	100.0%	3.10	3.10
Interior Lighting	Linear Lighting	100.0%	4.11	4.11
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	0.71	0.71
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	36.3%	0.23	0.08
Refrigeration	Reach-in Refrigerator/Freezer	55.0%	0.05	0.03
Refrigeration	Glass Door Display	99.4%	0.05	0.05
Refrigeration	Open Display Case	99.4%	0.32	0.32
Refrigeration	Icemaker	99.4%	0.17	0.17
Refrigeration	Vending Machine	99.4%	0.08	0.08
Food Preparation	Oven	97.6%	0.61	0.60
Food Preparation	Fryer	113.0%	0.78	0.89
Food Preparation	Dishwasher	74.9%	1.08	0.81
Food Preparation	Hot Food Container	74.9%	0.15	0.11
Food Preparation	Steamer	74.9%	0.79	0.59
Office Equipment	Desktop Computer	125.0%	0.52	0.65
Office Equipment	Laptop	125.0%	0.03	0.04
Office Equipment	Server	125.0%	0.06	0.08
Office Equipment	Monitor	125.0%	0.09	0.12
Office Equipment	Printer/Copier/Fax	125.0%	0.06	0.07
Office Equipment	POS Terminal	110.0%	0.04	0.05
Miscellaneous	Non-HVAC Motors	88.9%	0.50	0.44
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	3.68	3.68
Total			26.38	

Table A-160 Wyoming College Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	30.9%	4.79	1.48	12,026.8
Cooling	Water-Cooled Chiller	0.0%	6.23	0.00	0.0
Cooling	RTU	50.7%	2.62	1.33	10,822.3
Cooling	Room AC	3.3%	3.32	0.11	887.8
Cooling	Evaporative AC	0.0%	1.05	0.00	0.4
Cooling	Air-Source Heat Pump	3.7%	2.62	0.10	782.3
Cooling	Geothermal Heat Pump	0.6%	1.59	0.01	71.9
Heating	Electric Furnace	0.0%	14.08	0.00	0.0
Heating	Electric Room Heat	19.6%	13.41	2.63	21,396.7
Heating	Air-Source Heat Pump	3.7%	10.28	0.38	3,071.1
Heating	Geothermal Heat Pump	0.6%	7.33	0.04	330.7
Ventilation	Ventilation	100.0%	1.98	1.98	16,127.5
Water Heating	Water Heater	15.8%	2.71	0.43	3,478.3
Interior Lighting	Screw-in	100.0%	0.13	0.13	1,097.8
Interior Lighting	High-Bay Fixtures	100.0%	1.42	1.42	11,578.5
Interior Lighting	Linear Lighting	100.0%	2.19	2.19	17,795.2
Exterior Lighting	Screw-in	100.0%	0.02	0.02	162.8
Exterior Lighting	Area Lighting	100.0%	0.29	0.29	2,337.6
Exterior Lighting	Linear Lighting	100.0%	0.75	0.75	6,095.5
Refrigeration	Walk-in Refrigerator/Freezer	7.7%	0.21	0.02	132.3
Refrigeration	Reach-in Refrigerator/Freezer	13.4%	0.09	0.01	103.2
Refrigeration	Glass Door Display	26.6%	0.05	0.01	105.4
Refrigeration	Open Display Case	26.6%	0.29	0.08	624.8
Refrigeration	Icemaker	26.6%	0.16	0.04	345.3
Refrigeration	Vending Machine	26.6%	0.07	0.02	162.2
Food Preparation	Oven	21.0%	0.31	0.06	527.0
Food Preparation	Fryer	21.0%	0.45	0.09	762.2
Food Preparation	Dishwasher	21.0%	0.61	0.13	1,049.0
Food Preparation	Hot Food Container	21.0%	0.08	0.02	143.6
Food Preparation	Steamer	21.0%	0.45	0.09	769.1
Office Equipment	Desktop Computer	100.0%	0.62	0.62	5,021.8
Office Equipment	Laptop	100.0%	0.03	0.03	232.6
Office Equipment	Server	100.0%	0.07	0.07	590.8
Office Equipment	Monitor	100.0%	0.11	0.11	886.2
Office Equipment	Printer/Copier/Fax	100.0%	0.08	0.08	687.3
Office Equipment	POS Terminal	100.0%	0.02	0.02	197.2
Miscellaneous	Non-HVAC Motors	88.8%	0.14	0.12	991.9
Miscellaneous	Pool Pump	90.3%	0.04	0.04	305.4
Miscellaneous	Pool Heater	36.2%	0.05	0.02	158.7
Miscellaneous	Other Miscellaneous	100.0%	0.97	0.97	7,895.8
Total				15.95	129,755.0

Table A-161 Wyoming College New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	35.0%	4.01	1.40
Cooling	Water-Cooled Chiller	0.0%	5.08	0.00
Cooling	RTU	57.4%	1.88	1.08
Cooling	Room AC	3.3%	2.32	0.08
Cooling	Evaporative AC	0.0%	1.05	0.00
Cooling	Air-Source Heat Pump	4.2%	1.85	0.08
Cooling	Geothermal Heat Pump	0.6%	1.46	0.01
Heating	Electric Furnace	0.0%	13.79	0.00
Heating	Electric Room Heat	19.6%	13.13	2.58
Heating	Air-Source Heat Pump	4.2%	8.47	0.35
Heating	Geothermal Heat Pump	0.6%	7.08	0.04
Ventilation	Ventilation	100.0%	1.84	1.84
Water Heating	Water Heater	15.8%	2.69	0.43
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.62	1.62
Interior Lighting	Linear Lighting	100.0%	2.15	2.15
Exterior Lighting	Screw-in	100.0%	0.02	0.02
Exterior Lighting	Area Lighting	100.0%	0.29	0.29
Exterior Lighting	Linear Lighting	100.0%	0.74	0.74
Refrigeration	Walk-in Refrigerator/Freezer	10.8%	0.19	0.02
Refrigeration	Reach-in Refrigerator/Freezer	18.7%	0.09	0.02
Refrigeration	Glass Door Display	37.2%	0.04	0.02
Refrigeration	Open Display Case	37.2%	0.26	0.10
Refrigeration	Icemaker	37.2%	0.13	0.05
Refrigeration	Vending Machine	37.2%	0.07	0.03
Food Preparation	Oven	29.5%	0.31	0.09
Food Preparation	Fryer	29.5%	0.40	0.12
Food Preparation	Dishwasher	29.5%	0.55	0.16
Food Preparation	Hot Food Container	29.5%	0.08	0.02
Food Preparation	Steamer	29.5%	0.40	0.12
Office Equipment	Desktop Computer	125.0%	0.62	0.77
Office Equipment	Laptop	125.0%	0.03	0.04
Office Equipment	Server	125.0%	0.07	0.09
Office Equipment	Monitor	125.0%	0.11	0.14
Office Equipment	Printer/Copier/Fax	125.0%	0.08	0.11
Office Equipment	POS Terminal	110.0%	0.02	0.03
Miscellaneous	Non-HVAC Motors	106.6%	0.14	0.15
Miscellaneous	Pool Pump	108.4%	0.04	0.05
Miscellaneous	Pool Heater	43.4%	0.05	0.02
Miscellaneous	Other Miscellaneous	100.0%	0.97	0.97
Total				15.94

Table A-162 Wyoming School Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	23.5%	2.50	0.59	5,489.1
Cooling	Water-Cooled Chiller	0.0%	3.25	0.00	0.0
Cooling	RTU	38.6%	1.37	0.53	4,939.3
Cooling	Room AC	2.5%	1.73	0.04	405.2
Cooling	Evaporative AC	0.0%	0.55	0.00	0.2
Cooling	Air-Source Heat Pump	4.8%	1.37	0.07	610.3
Cooling	Geothermal Heat Pump	3.5%	0.83	0.03	275.5
Heating	Electric Furnace	0.0%	8.94	0.00	0.0
Heating	Electric Room Heat	11.7%	8.51	0.99	9,284.6
Heating	Air-Source Heat Pump	4.8%	6.52	0.31	2,912.6
Heating	Geothermal Heat Pump	3.5%	4.65	0.16	1,540.1
Ventilation	Ventilation	100.0%	1.01	1.01	9,437.9
Water Heating	Water Heater	14.3%	1.41	0.20	1,877.3
Interior Lighting	Screw-in	100.0%	0.34	0.34	3,219.1
Interior Lighting	High-Bay Fixtures	100.0%	0.81	0.81	7,573.1
Interior Lighting	Linear Lighting	100.0%	1.51	1.51	14,140.5
Exterior Lighting	Screw-in	100.0%	0.00	0.00	37.3
Exterior Lighting	Area Lighting	100.0%	0.12	0.12	1,122.2
Exterior Lighting	Linear Lighting	100.0%	0.66	0.66	6,142.4
Refrigeration	Walk-in Refrigerator/Freezer	19.0%	0.24	0.05	422.0
Refrigeration	Reach-in Refrigerator/Freezer	33.0%	0.11	0.04	329.0
Refrigeration	Glass Door Display	65.7%	0.05	0.04	336.2
Refrigeration	Open Display Case	65.7%	0.32	0.21	1,992.5
Refrigeration	Icemaker	65.7%	0.18	0.12	1,101.2
Refrigeration	Vending Machine	65.7%	0.08	0.06	517.2
Food Preparation	Oven	64.8%	0.16	0.10	955.8
Food Preparation	Fryer	58.6%	0.23	0.13	1,249.9
Food Preparation	Dishwasher	52.3%	0.31	0.16	1,536.0
Food Preparation	Hot Food Container	52.3%	0.04	0.02	210.2
Food Preparation	Steamer	52.3%	0.23	0.12	1,126.3
Office Equipment	Desktop Computer	100.0%	0.41	0.41	3,850.8
Office Equipment	Laptop	100.0%	0.03	0.03	237.8
Office Equipment	Server	100.0%	0.10	0.10	906.1
Office Equipment	Monitor	100.0%	0.07	0.07	679.6
Office Equipment	Printer/Copier/Fax	100.0%	0.05	0.05	421.6
Office Equipment	POS Terminal	36.0%	0.01	0.00	43.6
Miscellaneous	Non-HVAC Motors	43.7%	0.09	0.04	370.3
Miscellaneous	Pool Pump	6.0%	0.05	0.00	25.7
Miscellaneous	Pool Heater	1.0%	0.03	0.00	2.8
Miscellaneous	Other Miscellaneous	100.0%	0.64	0.64	6,007.2
Total				9.77	91,328.4

Table A-163 Wyoming School New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	24.7%	2.09	0.52
Cooling	Water-Cooled Chiller	0.0%	2.65	0.00
Cooling	RTU	42.4%	0.98	0.42
Cooling	Room AC	2.5%	1.21	0.03
Cooling	Evaporative AC	0.0%	0.55	0.00
Cooling	Air-Source Heat Pump	5.7%	0.97	0.06
Cooling	Geothermal Heat Pump	4.3%	0.76	0.03
Heating	Electric Furnace	0.0%	8.76	0.00
Heating	Electric Room Heat	11.7%	8.34	0.97
Heating	Air-Source Heat Pump	5.7%	5.38	0.31
Heating	Geothermal Heat Pump	4.3%	4.49	0.19
Ventilation	Ventilation	100.0%	0.94	0.94
Water Heating	Water Heater	14.3%	1.40	0.20
Interior Lighting	Screw-in	100.0%	0.17	0.17
Interior Lighting	High-Bay Fixtures	100.0%	0.95	0.95
Interior Lighting	Linear Lighting	100.0%	1.48	1.48
Exterior Lighting	Screw-in	100.0%	0.01	0.01
Exterior Lighting	Area Lighting	100.0%	0.12	0.12
Exterior Lighting	Linear Lighting	100.0%	0.64	0.64
Refrigeration	Walk-in Refrigerator/Freezer	26.6%	0.21	0.06
Refrigeration	Reach-in Refrigerator/Freezer	46.2%	0.10	0.04
Refrigeration	Glass Door Display	92.0%	0.05	0.05
Refrigeration	Open Display Case	92.0%	0.29	0.27
Refrigeration	Icemaker	92.0%	0.14	0.13
Refrigeration	Vending Machine	92.0%	0.08	0.07
Food Preparation	Oven	90.7%	0.16	0.15
Food Preparation	Fryer	82.0%	0.21	0.17
Food Preparation	Dishwasher	73.3%	0.28	0.21
Food Preparation	Hot Food Container	73.3%	0.04	0.03
Food Preparation	Steamer	73.3%	0.21	0.15
Office Equipment	Desktop Computer	125.0%	0.41	0.51
Office Equipment	Laptop	125.0%	0.03	0.03
Office Equipment	Server	125.0%	0.10	0.12
Office Equipment	Monitor	125.0%	0.07	0.09
Office Equipment	Printer/Copier/Fax	125.0%	0.05	0.06
Office Equipment	POS Terminal	36.0%	0.01	0.00
Miscellaneous	Non-HVAC Motors	48.0%	0.09	0.04
Miscellaneous	Pool Pump	7.2%	0.05	0.00
Miscellaneous	Pool Heater	1.2%	0.03	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.64	0.64
Total				9.85

Table A-164 Wyoming Lodging Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	2.6%	0.55	0.01	106.3
Cooling	Water-Cooled Chiller	9.5%	0.69	0.07	487.6
Cooling	RTU	20.5%	1.66	0.34	2,535.7
Cooling	Room AC	50.3%	2.10	1.06	7,876.9
Cooling	Evaporative AC	0.6%	0.66	0.00	30.5
Cooling	Air-Source Heat Pump	3.0%	1.66	0.05	369.5
Cooling	Geothermal Heat Pump	1.4%	1.56	0.02	164.8
Heating	Electric Furnace	1.0%	4.42	0.05	342.9
Heating	Electric Room Heat	36.9%	4.21	1.55	11,586.9
Heating	Air-Source Heat Pump	3.0%	4.06	0.12	903.8
Heating	Geothermal Heat Pump	1.4%	2.73	0.04	287.7
Ventilation	Ventilation	100.0%	1.84	1.84	13,746.8
Water Heating	Water Heater	16.7%	6.25	1.04	7,768.1
Interior Lighting	Screw-in	100.0%	1.24	1.24	9,227.3
Interior Lighting	High-Bay Fixtures	100.0%	1.29	1.29	9,596.9
Interior Lighting	Linear Lighting	100.0%	0.46	0.46	3,401.0
Exterior Lighting	Screw-in	100.0%	0.04	0.04	284.1
Exterior Lighting	Area Lighting	100.0%	1.73	1.73	12,908.6
Exterior Lighting	Linear Lighting	100.0%	0.03	0.03	190.9
Refrigeration	Walk-in Refrigerator/Freezer	3.0%	0.77	0.02	171.8
Refrigeration	Reach-in Refrigerator/Freezer	19.0%	0.17	0.03	244.2
Refrigeration	Glass Door Display	58.9%	0.18	0.10	777.1
Refrigeration	Open Display Case	58.9%	1.05	0.62	4,606.1
Refrigeration	Icemaker	58.9%	0.29	0.17	1,272.8
Refrigeration	Vending Machine	58.9%	0.27	0.16	1,195.5
Food Preparation	Oven	13.8%	0.50	0.07	517.3
Food Preparation	Fryer	21.0%	0.73	0.15	1,138.4
Food Preparation	Dishwasher	30.0%	1.00	0.30	2,240.1
Food Preparation	Hot Food Container	30.0%	0.14	0.04	306.6
Food Preparation	Steamer	30.0%	0.73	0.22	1,642.6
Office Equipment	Desktop Computer	100.0%	0.16	0.16	1,214.3
Office Equipment	Laptop	100.0%	0.03	0.03	187.5
Office Equipment	Server	100.0%	0.10	0.10	714.3
Office Equipment	Monitor	100.0%	0.03	0.03	214.3
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	133.0
Office Equipment	POS Terminal	58.0%	0.03	0.01	110.6
Miscellaneous	Non-HVAC Motors	91.3%	0.20	0.18	1,328.7
Miscellaneous	Pool Pump	76.0%	0.02	0.02	134.0
Miscellaneous	Pool Heater	27.0%	0.03	0.01	61.7
Miscellaneous	Other Miscellaneous	100.0%	0.89	0.89	6,663.4
Total				14.30	106,691.0

Table A-165 Wyoming Lodging New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	3.1%	0.51	0.02
Cooling	Water-Cooled Chiller	11.3%	0.59	0.07
Cooling	RTU	24.5%	1.66	0.41
Cooling	Room AC	60.3%	1.41	0.85
Cooling	Evaporative AC	0.7%	0.66	0.00
Cooling	Air-Source Heat Pump	3.5%	1.66	0.06
Cooling	Geothermal Heat Pump	1.6%	1.58	0.03
Heating	Electric Furnace	1.0%	4.33	0.05
Heating	Electric Room Heat	36.9%	4.13	1.52
Heating	Air-Source Heat Pump	3.5%	3.44	0.12
Heating	Geothermal Heat Pump	1.6%	2.37	0.04
Ventilation	Ventilation	100.0%	1.60	1.60
Water Heating	Water Heater	16.7%	6.22	1.04
Interior Lighting	Screw-in	100.0%	1.41	1.41
Interior Lighting	High-Bay Fixtures	100.0%	1.93	1.93
Interior Lighting	Linear Lighting	100.0%	0.44	0.44
Exterior Lighting	Screw-in	100.0%	0.06	0.06
Exterior Lighting	Area Lighting	100.0%	1.89	1.89
Exterior Lighting	Linear Lighting	100.0%	0.02	0.02
Refrigeration	Walk-in Refrigerator/Freezer	3.9%	0.69	0.03
Refrigeration	Reach-in Refrigerator/Freezer	24.7%	0.16	0.04
Refrigeration	Glass Door Display	76.6%	0.16	0.12
Refrigeration	Open Display Case	76.6%	0.94	0.72
Refrigeration	Icemaker	76.6%	0.25	0.19
Refrigeration	Vending Machine	76.6%	0.25	0.19
Food Preparation	Oven	17.9%	0.41	0.07
Food Preparation	Fryer	27.3%	0.65	0.18
Food Preparation	Dishwasher	39.0%	0.90	0.35
Food Preparation	Hot Food Container	39.0%	0.12	0.05
Food Preparation	Steamer	39.0%	0.66	0.26
Office Equipment	Desktop Computer	125.0%	0.16	0.20
Office Equipment	Laptop	125.0%	0.03	0.03
Office Equipment	Server	125.0%	0.10	0.12
Office Equipment	Monitor	125.0%	0.03	0.04
Office Equipment	Printer/Copier/Fax	125.0%	0.02	0.02
Office Equipment	POS Terminal	63.8%	0.03	0.02
Miscellaneous	Non-HVAC Motors	109.5%	0.20	0.21
Miscellaneous	Pool Pump	91.2%	0.02	0.02
Miscellaneous	Pool Heater	32.4%	0.03	0.01
Miscellaneous	Other Miscellaneous	100.0%	0.89	0.89
Total			15.30	

Table A-166 Wyoming Warehouse Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	0.0%	1.38	0.00	0.0
Cooling	Water-Cooled Chiller	0.0%	1.42	0.00	0.0
Cooling	RTU	15.3%	1.47	0.23	4,394.7
Cooling	Room AC	1.0%	1.86	0.02	364.4
Cooling	Evaporative AC	0.0%	0.59	0.00	0.0
Cooling	Air-Source Heat Pump	2.7%	1.47	0.04	779.2
Cooling	Geothermal Heat Pump	0.0%	0.89	0.00	0.0
Heating	Electric Furnace	2.7%	8.58	0.23	4,555.1
Heating	Electric Room Heat	14.7%	8.18	1.20	23,465.5
Heating	Air-Source Heat Pump	2.7%	7.77	0.21	4,121.3
Heating	Geothermal Heat Pump	0.0%	6.41	0.00	0.0
Ventilation	Ventilation	100.0%	0.16	0.16	3,036.0
Water Heating	Water Heater	38.3%	0.16	0.06	1,179.3
Interior Lighting	Screw-in	100.0%	0.11	0.11	2,112.9
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	33,055.0
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	5,494.8
Exterior Lighting	Screw-in	100.0%	0.02	0.02	389.0
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	7,369.6
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	1,509.8
Refrigeration	Walk-in Refrigerator/Freezer	1.1%	0.30	0.00	63.6
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.07	0.00	26.0
Refrigeration	Glass Door Display	10.1%	0.07	0.01	134.6
Refrigeration	Open Display Case	10.1%	0.40	0.04	797.9
Refrigeration	Icemaker	10.1%	0.11	0.01	220.5
Refrigeration	Vending Machine	10.1%	0.05	0.01	103.5
Food Preparation	Oven	2.3%	0.02	0.00	9.3
Food Preparation	Fryer	2.3%	0.03	0.00	13.4
Food Preparation	Dishwasher	2.3%	0.04	0.00	18.5
Food Preparation	Hot Food Container	2.3%	0.01	0.00	2.5
Food Preparation	Steamer	2.3%	0.03	0.00	13.6
Office Equipment	Desktop Computer	100.0%	0.05	0.05	1,035.6
Office Equipment	Laptop	100.0%	0.01	0.01	127.9
Office Equipment	Server	89.0%	0.06	0.06	1,084.3
Office Equipment	Monitor	100.0%	0.01	0.01	182.8
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	113.4
Office Equipment	POS Terminal	77.0%	0.02	0.01	250.6
Miscellaneous	Non-HVAC Motors	49.9%	0.13	0.07	1,288.3
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	0.47	0.47	9,256.6
Total				5.46	106,569.4

Table A-167 Wyoming Warehouse New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	0.0%	1.13	0.00
Cooling	Water-Cooled Chiller	0.0%	1.13	0.00
Cooling	RTU	15.3%	1.22	0.19
Cooling	Room AC	1.0%	1.25	0.01
Cooling	Evaporative AC	0.0%	0.59	0.00
Cooling	Air-Source Heat Pump	2.7%	1.19	0.03
Cooling	Geothermal Heat Pump	0.0%	0.68	0.00
Heating	Electric Furnace	2.7%	8.41	0.23
Heating	Electric Room Heat	14.7%	8.01	1.18
Heating	Air-Source Heat Pump	2.7%	6.40	0.17
Heating	Geothermal Heat Pump	0.0%	4.00	0.00
Ventilation	Ventilation	100.0%	0.13	0.13
Water Heating	Water Heater	38.3%	0.16	0.06
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	1.3%	0.27	0.00
Refrigeration	Reach-in Refrigerator/Freezer	2.4%	0.06	0.00
Refrigeration	Glass Door Display	12.1%	0.06	0.01
Refrigeration	Open Display Case	12.1%	0.36	0.04
Refrigeration	Icemaker	12.1%	0.11	0.01
Refrigeration	Vending Machine	12.1%	0.05	0.01
Food Preparation	Oven	2.7%	0.02	0.00
Food Preparation	Fryer	2.5%	0.03	0.00
Food Preparation	Dishwasher	2.7%	0.04	0.00
Food Preparation	Hot Food Container	2.5%	0.01	0.00
Food Preparation	Steamer	2.5%	0.03	0.00
Office Equipment	Desktop Computer	125.0%	0.05	0.07
Office Equipment	Laptop	125.0%	0.01	0.01
Office Equipment	Server	111.3%	0.06	0.07
Office Equipment	Monitor	125.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	125.0%	0.01	0.01
Office Equipment	POS Terminal	84.7%	0.02	0.01
Miscellaneous	Non-HVAC Motors	59.8%	0.13	0.08
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.47	0.47
Total				5.57

Table A-168 Wyoming Warehouse, Controlled Atmosphere Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	15.0%	1.09	0.16	23.9
Cooling	Water-Cooled Chiller	1.7%	1.12	0.02	2.7
Cooling	RTU	19.7%	1.16	0.23	33.5
Cooling	Room AC	1.2%	1.47	0.02	2.5
Cooling	Evaporative AC	0.1%	0.46	0.00	0.1
Cooling	Air-Source Heat Pump	1.9%	1.16	0.02	3.2
Cooling	Geothermal Heat Pump	0.0%	0.71	0.00	0.0
Heating	Electric Furnace	2.0%	7.02	0.14	21.0
Heating	Electric Room Heat	11.1%	6.69	0.74	108.0
Heating	Air-Source Heat Pump	1.9%	6.35	0.12	17.3
Heating	Geothermal Heat Pump	0.0%	5.24	0.00	0.0
Ventilation	Ventilation	100.0%	0.68	0.68	99.3
Water Heating	Water Heater	46.7%	0.39	0.18	26.6
Interior Lighting	Screw-in	100.0%	0.11	0.11	15.8
Interior Lighting	High-Bay Fixtures	100.0%	1.69	1.69	247.4
Interior Lighting	Linear Lighting	100.0%	0.28	0.28	41.1
Exterior Lighting	Screw-in	100.0%	0.02	0.02	2.9
Exterior Lighting	Area Lighting	100.0%	0.38	0.38	55.2
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08	11.3
Refrigeration	Walk-in Refrigerator/Freezer	91.7%	14.44	13.25	1,935.4
Refrigeration	Reach-in Refrigerator/Freezer	2.0%	0.65	0.01	1.9
Refrigeration	Glass Door Display	10.1%	0.67	0.07	9.8
Refrigeration	Open Display Case	10.1%	3.94	0.40	58.2
Refrigeration	Icemaker	91.7%	1.09	1.00	146.0
Refrigeration	Vending Machine	91.7%	0.51	0.47	68.6
Food Preparation	Oven	40.8%	0.05	0.02	3.2
Food Preparation	Fryer	40.8%	0.08	0.03	4.6
Food Preparation	Dishwasher	40.8%	0.11	0.04	6.3
Food Preparation	Hot Food Container	40.8%	0.01	0.01	0.9
Food Preparation	Steamer	40.8%	0.08	0.03	4.6
Office Equipment	Desktop Computer	100.0%	0.06	0.06	8.8
Office Equipment	Laptop	100.0%	0.01	0.01	1.1
Office Equipment	Server	89.0%	0.07	0.06	9.2
Office Equipment	Monitor	100.0%	0.01	0.01	1.6
Office Equipment	Printer/Copier/Fax	100.0%	0.01	0.01	1.0
Office Equipment	POS Terminal	77.0%	0.02	0.01	2.1
Miscellaneous	Non-HVAC Motors	79.5%	0.45	0.36	51.9
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	1.90	1.90	278.2
Total				22.62	3,305.0

Table A-169 Wyoming Warehouse, Controlled Atmosphere New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	15.0%	0.89	0.13
Cooling	Water-Cooled Chiller	1.7%	0.89	0.01
Cooling	RTU	19.7%	0.96	0.19
Cooling	Room AC	1.2%	0.99	0.01
Cooling	Evaporative AC	0.1%	0.46	0.00
Cooling	Air-Source Heat Pump	1.9%	0.94	0.02
Cooling	Geothermal Heat Pump	0.0%	0.54	0.00
Heating	Electric Furnace	2.0%	6.88	0.14
Heating	Electric Room Heat	11.1%	6.55	0.72
Heating	Air-Source Heat Pump	1.9%	5.24	0.10
Heating	Geothermal Heat Pump	0.0%	3.27	0.00
Ventilation	Ventilation	100.0%	0.59	0.59
Water Heating	Water Heater	46.7%	0.39	0.18
Interior Lighting	Screw-in	100.0%	0.15	0.15
Interior Lighting	High-Bay Fixtures	100.0%	1.78	1.78
Interior Lighting	Linear Lighting	100.0%	0.28	0.28
Exterior Lighting	Screw-in	100.0%	0.05	0.05
Exterior Lighting	Area Lighting	100.0%	0.42	0.42
Exterior Lighting	Linear Lighting	100.0%	0.08	0.08
Refrigeration	Walk-in Refrigerator/Freezer	110.0%	13.00	14.31
Refrigeration	Reach-in Refrigerator/Freezer	2.4%	0.58	0.01
Refrigeration	Glass Door Display	12.1%	0.60	0.07
Refrigeration	Open Display Case	12.1%	3.55	0.43
Refrigeration	Icemaker	110.0%	1.06	1.17
Refrigeration	Vending Machine	110.0%	0.46	0.51
Food Preparation	Oven	49.0%	0.05	0.03
Food Preparation	Fryer	44.9%	0.07	0.03
Food Preparation	Dishwasher	49.0%	0.09	0.05
Food Preparation	Hot Food Container	44.9%	0.01	0.01
Food Preparation	Steamer	44.9%	0.07	0.03
Office Equipment	Desktop Computer	125.0%	0.06	0.08
Office Equipment	Laptop	125.0%	0.01	0.01
Office Equipment	Server	111.3%	0.07	0.08
Office Equipment	Monitor	125.0%	0.01	0.01
Office Equipment	Printer/Copier/Fax	125.0%	0.01	0.01
Office Equipment	POS Terminal	84.7%	0.02	0.02
Miscellaneous	Non-HVAC Motors	95.4%	0.45	0.43
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	1.90	1.90
Total			24.03	

Table A-170 Wyoming Data Center Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	18.8%	34.90	6.55	1.5
Cooling	Water-Cooled Chiller	11.6%	36.33	4.20	0.9
Cooling	RTU	60.8%	36.88	22.43	5.0
Cooling	Room AC	3.2%	46.60	1.50	0.3
Cooling	Evaporative AC	0.1%	14.75	0.01	0.0
Cooling	Air-Source Heat Pump	2.3%	36.88	0.86	0.2
Cooling	Geothermal Heat Pump	1.2%	22.47	0.27	0.1
Heating	Electric Furnace	1.0%	3.44	0.03	0.0
Heating	Electric Room Heat	19.3%	3.28	0.63	0.1
Heating	Air-Source Heat Pump	2.3%	3.01	0.07	0.0
Heating	Geothermal Heat Pump	1.2%	2.32	0.03	0.0
Ventilation	Ventilation	100.0%	26.31	26.31	5.8
Water Heating	Water Heater	45.2%	0.68	0.31	0.1
Interior Lighting	Screw-in	100.0%	0.74	0.74	0.2
Interior Lighting	High-Bay Fixtures	100.0%	2.74	2.74	0.6
Interior Lighting	Linear Lighting	100.0%	3.91	3.91	0.9
Exterior Lighting	Screw-in	100.0%	0.11	0.11	0.0
Exterior Lighting	Area Lighting	100.0%	1.12	1.12	0.2
Exterior Lighting	Linear Lighting	100.0%	0.24	0.24	0.1
Refrigeration	Walk-in Refrigerator/Freezer	2.0%	0.11	0.00	0.0
Refrigeration	Reach-in Refrigerator/Freezer	14.0%	0.02	0.00	0.0
Refrigeration	Glass Door Display	5.1%	0.02	0.00	0.0
Refrigeration	Open Display Case	5.1%	0.14	0.01	0.0
Refrigeration	Icemaker	5.1%	0.04	0.00	0.0
Refrigeration	Vending Machine	5.1%	0.02	0.00	0.0
Food Preparation	Oven	3.6%	0.07	0.00	0.0
Food Preparation	Fryer	3.6%	0.11	0.00	0.0
Food Preparation	Dishwasher	3.6%	0.14	0.01	0.0
Food Preparation	Hot Food Container	3.6%	0.02	0.00	0.0
Food Preparation	Steamer	3.6%	0.11	0.00	0.0
Office Equipment	Desktop Computer	100.0%	5.32	5.32	1.2
Office Equipment	Laptop	100.0%	0.33	0.33	0.1
Office Equipment	Server	100.0%	62.58	62.58	13.9
Office Equipment	Monitor	100.0%	0.94	0.94	0.2
Office Equipment	Printer/Copier/Fax	100.0%	0.58	0.58	0.1
Office Equipment	POS Terminal	40.0%	0.17	0.07	0.0
Miscellaneous	Non-HVAC Motors	89.6%	4.84	4.33	1.0
Miscellaneous	Pool Pump	0.0%	0.00	0.00	0.0
Miscellaneous	Pool Heater	0.0%	0.00	0.00	0.0
Miscellaneous	Other Miscellaneous	100.0%	19.63	19.63	4.4
Total				165.88	36.8

Table A-171 Wyoming Data Center New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	17.6%	28.61	5.03
Cooling	Water-Cooled Chiller	13.0%	28.89	3.77
Cooling	RTU	56.9%	30.56	17.39
Cooling	Room AC	3.0%	31.31	0.94
Cooling	Evaporative AC	0.1%	14.75	0.01
Cooling	Air-Source Heat Pump	2.7%	30.00	0.82
Cooling	Geothermal Heat Pump	1.4%	17.14	0.25
Heating	Electric Furnace	1.0%	3.37	0.03
Heating	Electric Room Heat	19.3%	3.21	0.62
Heating	Air-Source Heat Pump	2.7%	2.48	0.07
Heating	Geothermal Heat Pump	1.4%	1.44	0.02
Ventilation	Ventilation	100.0%	22.82	22.82
Water Heating	Water Heater	45.2%	0.67	0.30
Interior Lighting	Screw-in	100.0%	1.00	1.00
Interior Lighting	High-Bay Fixtures	100.0%	3.35	3.35
Interior Lighting	Linear Lighting	100.0%	3.99	3.99
Exterior Lighting	Screw-in	100.0%	0.14	0.14
Exterior Lighting	Area Lighting	100.0%	1.21	1.21
Exterior Lighting	Linear Lighting	100.0%	0.25	0.25
Refrigeration	Walk-in Refrigerator/Freezer	2.2%	0.09	0.00
Refrigeration	Reach-in Refrigerator/Freezer	15.4%	0.02	0.00
Refrigeration	Glass Door Display	5.6%	0.02	0.00
Refrigeration	Open Display Case	5.6%	0.13	0.01
Refrigeration	Icemaker	5.6%	0.04	0.00
Refrigeration	Vending Machine	5.6%	0.02	0.00
Food Preparation	Oven	4.0%	0.07	0.00
Food Preparation	Fryer	4.0%	0.09	0.00
Food Preparation	Dishwasher	4.0%	0.13	0.01
Food Preparation	Hot Food Container	4.0%	0.02	0.00
Food Preparation	Steamer	4.0%	0.10	0.00
Office Equipment	Desktop Computer	125.0%	5.32	6.65
Office Equipment	Laptop	125.0%	0.33	0.41
Office Equipment	Server	125.0%	62.58	78.22
Office Equipment	Monitor	125.0%	0.94	1.17
Office Equipment	Printer/Copier/Fax	125.0%	0.58	0.73
Office Equipment	POS Terminal	44.0%	0.17	0.07
Miscellaneous	Non-HVAC Motors	107.5%	4.84	5.20
Miscellaneous	Pool Pump	0.0%	0.01	0.00
Miscellaneous	Pool Heater	0.0%	0.01	0.00
Miscellaneous	Other Miscellaneous	100.0%	19.63	19.63
Total				174.13

Table A-172 Wyoming Miscellaneous Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Sqft)	(MWh)
Cooling	Air-Cooled Chiller	9.1%	2.34	0.21	3,121.1
Cooling	Water-Cooled Chiller	4.7%	2.42	0.11	1,671.2
Cooling	RTU	53.6%	2.60	1.40	20,471.1
Cooling	Room AC	4.8%	3.29	0.16	2,311.9
Cooling	Evaporative AC	0.0%	1.04	0.00	1.3
Cooling	Air-Source Heat Pump	3.1%	2.60	0.08	1,186.2
Cooling	Geothermal Heat Pump	2.0%	1.59	0.03	459.6
Heating	Electric Furnace	8.6%	8.79	0.76	11,072.1
Heating	Electric Room Heat	10.2%	8.37	0.85	12,520.8
Heating	Air-Source Heat Pump	3.1%	7.69	0.24	3,500.2
Heating	Geothermal Heat Pump	2.0%	5.60	0.11	1,621.3
Ventilation	Ventilation	100.0%	0.84	0.84	12,320.5
Water Heating	Water Heater	44.1%	1.60	0.71	10,332.8
Interior Lighting	Screw-in	100.0%	0.61	0.61	8,866.9
Interior Lighting	High-Bay Fixtures	100.0%	1.56	1.56	22,856.6
Interior Lighting	Linear Lighting	100.0%	1.46	1.46	21,454.7
Exterior Lighting	Screw-in	100.0%	0.09	0.09	1,360.9
Exterior Lighting	Area Lighting	100.0%	0.64	0.64	9,352.6
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06	864.7
Refrigeration	Walk-in Refrigerator/Freezer	7.3%	0.77	0.06	816.8
Refrigeration	Reach-in Refrigerator/Freezer	16.4%	0.17	0.03	412.5
Refrigeration	Glass Door Display	1.8%	0.18	0.00	47.0
Refrigeration	Open Display Case	1.8%	1.05	0.02	278.8
Refrigeration	Icemaker	21.6%	0.29	0.06	915.3
Refrigeration	Vending Machine	21.6%	0.27	0.06	859.7
Food Preparation	Oven	58.9%	0.10	0.06	827.5
Food Preparation	Fryer	29.9%	0.14	0.04	607.5
Food Preparation	Dishwasher	15.4%	0.19	0.03	430.9
Food Preparation	Hot Food Container	15.4%	0.03	0.00	59.0
Food Preparation	Steamer	15.4%	0.14	0.02	315.9
Office Equipment	Desktop Computer	100.0%	0.23	0.23	3,328.8
Office Equipment	Laptop	100.0%	0.04	0.04	514.0
Office Equipment	Server	66.0%	0.13	0.09	1,292.3
Office Equipment	Monitor	100.0%	0.04	0.04	587.4
Office Equipment	Printer/Copier/Fax	100.0%	0.02	0.02	364.5
Office Equipment	POS Terminal	28.0%	0.04	0.01	146.4
Miscellaneous	Non-HVAC Motors	59.9%	0.16	0.10	1,413.8
Miscellaneous	Pool Pump	4.0%	0.02	0.00	10.2
Miscellaneous	Pool Heater	1.0%	0.02	0.00	3.3
Miscellaneous	Other Miscellaneous	100.0%	0.78	0.78	11,398.2
Total				11.60	169,976.3

Table A-173 Wyoming Miscellaneous New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Sqft)
Cooling	Air-Cooled Chiller	12.4%	1.92	0.24
Cooling	Water-Cooled Chiller	6.4%	1.92	0.12
Cooling	RTU	72.8%	1.92	1.40
Cooling	Room AC	6.5%	2.21	0.14
Cooling	Evaporative AC	0.0%	1.04	0.00
Cooling	Air-Source Heat Pump	4.2%	1.84	0.08
Cooling	Geothermal Heat Pump	2.7%	1.50	0.04
Heating	Electric Furnace	8.6%	8.62	0.74
Heating	Electric Room Heat	10.2%	8.21	0.84
Heating	Air-Source Heat Pump	4.2%	6.33	0.27
Heating	Geothermal Heat Pump	2.7%	3.87	0.10
Ventilation	Ventilation	100.0%	0.69	0.69
Water Heating	Water Heater	44.1%	1.59	0.70
Interior Lighting	Screw-in	100.0%	0.75	0.75
Interior Lighting	High-Bay Fixtures	100.0%	1.73	1.73
Interior Lighting	Linear Lighting	100.0%	1.46	1.46
Exterior Lighting	Screw-in	100.0%	0.15	0.15
Exterior Lighting	Area Lighting	100.0%	0.78	0.78
Exterior Lighting	Linear Lighting	100.0%	0.06	0.06
Refrigeration	Walk-in Refrigerator/Freezer	10.2%	0.69	0.07
Refrigeration	Reach-in Refrigerator/Freezer	22.9%	0.15	0.04
Refrigeration	Glass Door Display	2.5%	0.16	0.00
Refrigeration	Open Display Case	2.5%	0.94	0.02
Refrigeration	Icemaker	30.2%	0.28	0.09
Refrigeration	Vending Machine	30.2%	0.25	0.07
Food Preparation	Oven	82.5%	0.10	0.08
Food Preparation	Fryer	41.9%	0.12	0.05
Food Preparation	Dishwasher	21.6%	0.17	0.04
Food Preparation	Hot Food Container	21.6%	0.02	0.01
Food Preparation	Steamer	21.6%	0.13	0.03
Office Equipment	Desktop Computer	125.0%	0.23	0.28
Office Equipment	Laptop	125.0%	0.04	0.04
Office Equipment	Server	82.5%	0.13	0.11
Office Equipment	Monitor	125.0%	0.04	0.05
Office Equipment	Printer/Copier/Fax	125.0%	0.02	0.03
Office Equipment	POS Terminal	33.6%	0.04	0.01
Miscellaneous	Non-HVAC Motors	71.9%	0.16	0.12
Miscellaneous	Pool Pump	4.6%	0.02	0.00
Miscellaneous	Pool Heater	1.2%	0.02	0.00
Miscellaneous	Other Miscellaneous	100.0%	0.78	0.78
Total				12.20

INDUSTRIAL MARKET PROFILES

Table A-174 California Agriculture Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,502	138	25.61
Cooling	Water-Cooled Chiller	2.5%	5,188	130	24.14
Cooling	RTU	11.0%	6,122	671	124.88
Cooling	Air-Source Heat Pump	2.7%	6,120	166	30.96
Cooling	Geothermal Heat Pump	0.0%	4,082	0	0.00
Heating	Electric Furnace	2.7%	11,767	320	59.55
Heating	Electric Room Heat	14.7%	11,207	1,648	306.79
Heating	Air-Source Heat Pump	2.7%	10,559	287	53.42
Heating	Geothermal Heat Pump	0.0%	7,043	0	0.00
Ventilation	Ventilation	100.0%	724	724	134.74
Interior Lighting	Screw-in	100.0%	146	146	27.16
Interior Lighting	High-Bay Fixtures	100.0%	2,282	2,282	424.86
Interior Lighting	Linear Lighting	100.0%	379	379	70.63
Exterior Lighting	Screw-in	100.0%	27	27	5.00
Exterior Lighting	Area Lighting	100.0%	509	509	94.72
Exterior Lighting	Linear Lighting	100.0%	104	104	19.41
Motors	Pumps	100.0%	1,354	1,354	252.00
Motors	Fans & Blowers	100.0%	8,432	8,432	1,569.74
Motors	Compressed Air	100.0%	1,790	1,790	333.29
Motors	Material Handling	100.0%	10,363	10,363	1,929.18
Motors	Other Motors	0.0%	2,389	0	0.00
Process	Process Heating	100.0%	3,613	3,613	672.66
Process	Process Cooling	100.0%	6,080	6,080	1,131.91
Process	Process Refrigeration	100.0%	6,080	6,080	1,131.91
Process	Process Electrochemical	100.0%	116	116	21.67
Process	Process Other	100.0%	452	452	84.15
Miscellaneous	Miscellaneous	100.0%	2,389	2,389	444.75
Total				48,201	8,973.13

Table A-175 California Agriculture New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,590	115
Cooling	Water-Cooled Chiller	2.5%	4,217	105
Cooling	RTU	11.0%	5,806	636
Cooling	Air-Source Heat Pump	2.7%	5,734	156
Cooling	Geothermal Heat Pump	0.0%	3,969	0
Heating	Electric Furnace	2.7%	11,006	299
Heating	Electric Room Heat	14.7%	10,482	1,541
Heating	Air-Source Heat Pump	2.7%	9,590	261
Heating	Geothermal Heat Pump	0.0%	3,671	0
Ventilation	Ventilation	100.0%	578	578
Interior Lighting	Screw-in	100.0%	158	158
Interior Lighting	High-Bay Fixtures	100.0%	2,393	2,393
Interior Lighting	Linear Lighting	100.0%	380	380
Exterior Lighting	Screw-in	100.0%	48	48
Exterior Lighting	Area Lighting	100.0%	560	560
Exterior Lighting	Linear Lighting	100.0%	103	103
Motors	Pumps	100.0%	1,354	1,354
Motors	Fans & Blowers	100.0%	8,432	8,432
Motors	Compressed Air	100.0%	1,790	1,790
Motors	Material Handling	100.0%	10,363	10,363
Motors	Other Motors	0.0%	2,389	0
Process	Process Heating	100.0%	3,613	3,613
Process	Process Cooling	100.0%	6,080	6,080
Process	Process Refrigeration	100.0%	6,080	6,080
Process	Process Electrochemical	100.0%	116	116
Process	Process Other	100.0%	452	452
Miscellaneous	Miscellaneous	100.0%	2,389	2,389
Total			48,004	

Table A-176 California Mining and Extraction Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,109	103	1.54
Cooling	Water-Cooled Chiller	2.5%	3,874	97	1.45
Cooling	RTU	11.0%	4,572	501	7.51
Cooling	Air-Source Heat Pump	2.7%	4,571	124	1.86
Cooling	Geothermal Heat Pump	0.0%	3,049	0	0.00
Heating	Electric Furnace	2.7%	8,788	239	3.58
Heating	Electric Room Heat	14.7%	8,369	1,231	18.46
Heating	Air-Source Heat Pump	2.7%	7,886	214	3.21
Heating	Geothermal Heat Pump	0.0%	5,260	0	0.00
Ventilation	Ventilation	100.0%	541	541	8.11
Interior Lighting	Screw-in	100.0%	166	166	2.49
Interior Lighting	High-Bay Fixtures	100.0%	2,595	2,595	38.93
Interior Lighting	Linear Lighting	100.0%	431	431	6.47
Exterior Lighting	Screw-in	100.0%	31	31	0.46
Exterior Lighting	Area Lighting	100.0%	579	579	8.68
Exterior Lighting	Linear Lighting	100.0%	119	119	1.78
Motors	Pumps	100.0%	29,795	29,795	446.93
Motors	Fans & Blowers	100.0%	8,276	8,276	124.15
Motors	Compressed Air	100.0%	12,415	12,415	186.22
Motors	Material Handling	100.0%	8,690	8,690	130.35
Motors	Other Motors	100.0%	23,588	23,588	353.82
Process	Process Heating	100.0%	871	871	13.07
Process	Process Cooling	0.0%	871	0	0.00
Process	Process Refrigeration	0.0%	871	0	0.00
Process	Process Electrochemical	100.0%	871	871	13.07
Process	Process Other	100.0%	4,792	4,792	71.87
Miscellaneous	Miscellaneous	100.0%	871	871	13.07
Total				97,139	1,457.09

Table A-177 California Mining and Extraction New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,428	86
Cooling	Water-Cooled Chiller	2.5%	3,149	79
Cooling	RTU	11.0%	4,336	475
Cooling	Air-Source Heat Pump	2.7%	4,282	116
Cooling	Geothermal Heat Pump	0.0%	2,964	0
Heating	Electric Furnace	2.7%	8,219	223
Heating	Electric Room Heat	14.7%	7,828	1,151
Heating	Air-Source Heat Pump	2.7%	7,162	195
Heating	Geothermal Heat Pump	0.0%	2,742	0
Ventilation	Ventilation	100.0%	432	432
Interior Lighting	Screw-in	100.0%	179	179
Interior Lighting	High-Bay Fixtures	100.0%	2,721	2,721
Interior Lighting	Linear Lighting	100.0%	432	432
Exterior Lighting	Screw-in	100.0%	55	55
Exterior Lighting	Area Lighting	100.0%	637	637
Exterior Lighting	Linear Lighting	100.0%	117	117
Motors	Pumps	100.0%	29,795	29,795
Motors	Fans & Blowers	100.0%	8,276	8,276
Motors	Compressed Air	100.0%	12,415	12,415
Motors	Material Handling	100.0%	8,690	8,690
Motors	Other Motors	100.0%	23,588	23,588
Process	Process Heating	100.0%	871	871
Process	Process Cooling	0.0%	871	0
Process	Process Refrigeration	0.0%	871	0
Process	Process Electrochemical	100.0%	871	871
Process	Process Other	100.0%	4,792	4,792
Miscellaneous	Miscellaneous	100.0%	871	871
Total			97,068	

Table A-178 California Food Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	11,341	284	70.88
Cooling	Water-Cooled Chiller	2.5%	10,693	267	66.83
Cooling	RTU	11.0%	12,618	1,383	345.67
Cooling	Air-Source Heat Pump	2.7%	12,615	343	85.71
Cooling	Geothermal Heat Pump	0.0%	8,414	0	0.00
Heating	Electric Furnace	2.7%	24,254	659	164.85
Heating	Electric Room Heat	14.7%	23,099	3,397	849.22
Heating	Air-Source Heat Pump	2.7%	21,765	591	147.87
Heating	Geothermal Heat Pump	0.0%	14,517	0	0.00
Ventilation	Ventilation	100.0%	1,492	1,492	372.98
Interior Lighting	Screw-in	100.0%	301	301	75.17
Interior Lighting	High-Bay Fixtures	100.0%	4,704	4,704	1,176.05
Interior Lighting	Linear Lighting	100.0%	782	782	195.50
Exterior Lighting	Screw-in	100.0%	55	55	13.84
Exterior Lighting	Area Lighting	100.0%	1,049	1,049	262.20
Exterior Lighting	Linear Lighting	100.0%	215	215	53.72
Motors	Pumps	100.0%	6,690	6,690	1,672.52
Motors	Fans & Blowers	100.0%	11,123	11,123	2,780.80
Motors	Compressed Air	100.0%	4,278	4,278	1,069.50
Motors	Material Handling	100.0%	20,984	20,984	5,246.01
Motors	Other Motors	100.0%	2,147	2,147	536.65
Process	Process Heating	100.0%	7,448	7,448	1,861.99
Process	Process Cooling	100.0%	12,533	12,533	3,133.23
Process	Process Refrigeration	100.0%	12,533	12,533	3,133.23
Process	Process Electrochemical	100.0%	240	240	59.98
Process	Process Other	100.0%	932	932	232.93
Miscellaneous	Miscellaneous	100.0%	4,924	4,924	1,231.10
Total				99,354	24,838.43

Table A-179 California Food Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	9,461	237
Cooling	Water-Cooled Chiller	2.5%	8,693	217
Cooling	RTU	11.0%	11,967	1,311
Cooling	Air-Source Heat Pump	2.7%	11,820	321
Cooling	Geothermal Heat Pump	0.0%	8,181	0
Heating	Electric Furnace	2.7%	22,685	617
Heating	Electric Room Heat	14.7%	21,605	3,177
Heating	Air-Source Heat Pump	2.7%	19,768	537
Heating	Geothermal Heat Pump	0.0%	7,567	0
Ventilation	Ventilation	100.0%	1,192	1,192
Interior Lighting	Screw-in	100.0%	325	325
Interior Lighting	High-Bay Fixtures	100.0%	4,933	4,933
Interior Lighting	Linear Lighting	100.0%	784	784
Exterior Lighting	Screw-in	100.0%	99	99
Exterior Lighting	Area Lighting	100.0%	1,154	1,154
Exterior Lighting	Linear Lighting	100.0%	212	212
Motors	Pumps	100.0%	6,690	6,690
Motors	Fans & Blowers	100.0%	11,123	11,123
Motors	Compressed Air	100.0%	4,278	4,278
Motors	Material Handling	100.0%	20,984	20,984
Motors	Other Motors	100.0%	2,147	2,147
Process	Process Heating	100.0%	7,448	7,448
Process	Process Cooling	100.0%	12,533	12,533
Process	Process Refrigeration	100.0%	12,533	12,533
Process	Process Electrochemical	100.0%	240	240
Process	Process Other	100.0%	932	932
Miscellaneous	Miscellaneous	100.0%	4,924	4,924
Total			98,948	

Table A-180 California Paper Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	42	1	0.01
Cooling	Water-Cooled Chiller	2.5%	40	1	0.00
Cooling	RTU	11.0%	47	5	0.03
Cooling	Air-Source Heat Pump	2.7%	47	1	0.01
Cooling	Geothermal Heat Pump	0.0%	31	0	0.00
Heating	Electric Furnace	2.7%	90	2	0.01
Heating	Electric Room Heat	14.7%	86	13	0.06
Heating	Air-Source Heat Pump	2.7%	81	2	0.01
Heating	Geothermal Heat Pump	0.0%	54	0	0.00
Ventilation	Ventilation	100.0%	6	6	0.03
Interior Lighting	Screw-in	100.0%	1	1	0.01
Interior Lighting	High-Bay Fixtures	100.0%	19	19	0.10
Interior Lighting	Linear Lighting	100.0%	3	3	0.02
Exterior Lighting	Screw-in	100.0%	0	0	0.00
Exterior Lighting	Area Lighting	100.0%	4	4	0.02
Exterior Lighting	Linear Lighting	100.0%	1	1	0.00
Motors	Pumps	100.0%	110	110	0.55
Motors	Fans & Blowers	100.0%	107	107	0.53
Motors	Compressed Air	100.0%	60	60	0.30
Motors	Material Handling	100.0%	254	254	1.27
Motors	Other Motors	100.0%	7	7	0.03
Process	Process Heating	100.0%	53	53	0.26
Process	Process Cooling	100.0%	5	5	0.03
Process	Process Refrigeration	100.0%	5	5	0.03
Process	Process Electrochemical	100.0%	9	9	0.05
Process	Process Other	100.0%	10	10	0.05
Miscellaneous	Miscellaneous	100.0%	18	18	0.09
Total				699	3.49

Table A-181 California Paper Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	35	1
Cooling	Water-Cooled Chiller	2.5%	32	1
Cooling	RTU	11.0%	44	5
Cooling	Air-Source Heat Pump	2.7%	44	1
Cooling	Geothermal Heat Pump	0.0%	30	0
Heating	Electric Furnace	2.7%	84	2
Heating	Electric Room Heat	14.7%	80	12
Heating	Air-Source Heat Pump	2.7%	73	2
Heating	Geothermal Heat Pump	0.0%	28	0
Ventilation	Ventilation	100.0%	4	4
Interior Lighting	Screw-in	100.0%	1	1
Interior Lighting	High-Bay Fixtures	100.0%	20	20
Interior Lighting	Linear Lighting	100.0%	3	3
Exterior Lighting	Screw-in	100.0%	0	0
Exterior Lighting	Area Lighting	100.0%	5	5
Exterior Lighting	Linear Lighting	100.0%	1	1
Motors	Pumps	100.0%	110	110
Motors	Fans & Blowers	100.0%	107	107
Motors	Compressed Air	100.0%	60	60
Motors	Material Handling	100.0%	254	254
Motors	Other Motors	100.0%	7	7
Process	Process Heating	100.0%	53	53
Process	Process Cooling	100.0%	5	5
Process	Process Refrigeration	100.0%	5	5
Process	Process Electrochemical	100.0%	9	9
Process	Process Other	100.0%	10	10
Miscellaneous	Miscellaneous	100.0%	18	18
Total			697	

Table A-182 California Petroleum Refining Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	631	16	0.16
Cooling	Water-Cooled Chiller	2.5%	595	15	0.15
Cooling	RTU	11.0%	702	77	0.77
Cooling	Air-Source Heat Pump	2.7%	702	19	0.19
Cooling	Geothermal Heat Pump	0.0%	468	0	0.00
Heating	Electric Furnace	2.7%	1,349	37	0.37
Heating	Electric Room Heat	14.7%	1,285	189	1.89
Heating	Air-Source Heat Pump	2.7%	1,211	33	0.33
Heating	Geothermal Heat Pump	0.0%	808	0	0.00
Ventilation	Ventilation	100.0%	83	83	0.83
Interior Lighting	Screw-in	100.0%	13	13	0.13
Interior Lighting	High-Bay Fixtures	100.0%	206	206	2.06
Interior Lighting	Linear Lighting	100.0%	34	34	0.34
Exterior Lighting	Screw-in	100.0%	2	2	0.02
Exterior Lighting	Area Lighting	100.0%	46	46	0.46
Exterior Lighting	Linear Lighting	100.0%	9	9	0.09
Motors	Pumps	100.0%	6,133	6,133	61.33
Motors	Fans & Blowers	100.0%	1,005	1,005	10.05
Motors	Compressed Air	100.0%	1,609	1,609	16.09
Motors	Material Handling	100.0%	1,441	1,441	14.41
Motors	Other Motors	100.0%	563	563	5.63
Process	Process Heating	100.0%	538	538	5.38
Process	Process Cooling	100.0%	328	328	3.28
Process	Process Refrigeration	100.0%	328	328	3.28
Process	Process Electrochemical	100.0%	13	13	0.13
Process	Process Other	100.0%	100	100	1.00
Miscellaneous	Miscellaneous	100.0%	140	140	1.40
Total				12,978	129.78

Table A-183 California Petroleum Refining New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	526	13
Cooling	Water-Cooled Chiller	2.5%	484	12
Cooling	RTU	11.0%	666	73
Cooling	Air-Source Heat Pump	2.7%	658	18
Cooling	Geothermal Heat Pump	0.0%	455	0
Heating	Electric Furnace	2.7%	1,262	34
Heating	Electric Room Heat	14.7%	1,202	177
Heating	Air-Source Heat Pump	2.7%	1,100	30
Heating	Geothermal Heat Pump	0.0%	421	0
Ventilation	Ventilation	100.0%	66	66
Interior Lighting	Screw-in	100.0%	14	14
Interior Lighting	High-Bay Fixtures	100.0%	216	216
Interior Lighting	Linear Lighting	100.0%	34	34
Exterior Lighting	Screw-in	100.0%	4	4
Exterior Lighting	Area Lighting	100.0%	50	50
Exterior Lighting	Linear Lighting	100.0%	9	9
Motors	Pumps	100.0%	6,133	6,133
Motors	Fans & Blowers	100.0%	1,005	1,005
Motors	Compressed Air	100.0%	1,609	1,609
Motors	Material Handling	100.0%	1,441	1,441
Motors	Other Motors	100.0%	563	563
Process	Process Heating	100.0%	538	538
Process	Process Cooling	100.0%	328	328
Process	Process Refrigeration	100.0%	328	328
Process	Process Electrochemical	100.0%	13	13
Process	Process Other	100.0%	100	100
Miscellaneous	Miscellaneous	100.0%	140	140
Total			12,951	

Table A-184 California Stone Clay Glass Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,016	25	0.36
Cooling	Water-Cooled Chiller	2.5%	958	24	0.34
Cooling	RTU	11.0%	1,130	124	1.78
Cooling	Air-Source Heat Pump	2.7%	1,130	31	0.44
Cooling	Geothermal Heat Pump	0.0%	754	0	0.00
Heating	Electric Furnace	2.7%	2,173	59	0.85
Heating	Electric Room Heat	14.7%	2,069	304	4.37
Heating	Air-Source Heat Pump	2.7%	1,950	53	0.76
Heating	Geothermal Heat Pump	0.0%	1,300	0	0.00
Ventilation	Ventilation	100.0%	134	134	1.92
Interior Lighting	Screw-in	100.0%	26	26	0.37
Interior Lighting	High-Bay Fixtures	100.0%	405	405	5.82
Interior Lighting	Linear Lighting	100.0%	67	67	0.97
Exterior Lighting	Screw-in	100.0%	5	5	0.07
Exterior Lighting	Area Lighting	100.0%	90	90	1.30
Exterior Lighting	Linear Lighting	100.0%	19	19	0.27
Motors	Pumps	100.0%	795	795	11.42
Motors	Fans & Blowers	100.0%	1,119	1,119	16.07
Motors	Compressed Air	100.0%	201	201	2.89
Motors	Material Handling	100.0%	4,634	4,634	66.51
Motors	Other Motors	100.0%	72	72	1.04
Process	Process Heating	100.0%	2,440	2,440	35.03
Process	Process Cooling	100.0%	150	150	2.15
Process	Process Refrigeration	100.0%	150	150	2.15
Process	Process Electrochemical	100.0%	42	42	0.60
Process	Process Other	100.0%	498	498	7.14
Miscellaneous	Miscellaneous	100.0%	388	388	5.58
Total				11,857	170.18

Table A-185 California Stone Clay Glass Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	847	21
Cooling	Water-Cooled Chiller	2.5%	779	19
Cooling	RTU	11.0%	1,072	117
Cooling	Air-Source Heat Pump	2.7%	1,059	29
Cooling	Geothermal Heat Pump	0.0%	733	0
Heating	Electric Furnace	2.7%	2,032	55
Heating	Electric Room Heat	14.7%	1,935	285
Heating	Air-Source Heat Pump	2.7%	1,771	48
Heating	Geothermal Heat Pump	0.0%	678	0
Ventilation	Ventilation	100.0%	107	107
Interior Lighting	Screw-in	100.0%	28	28
Interior Lighting	High-Bay Fixtures	100.0%	425	425
Interior Lighting	Linear Lighting	100.0%	68	68
Exterior Lighting	Screw-in	100.0%	9	9
Exterior Lighting	Area Lighting	100.0%	99	99
Exterior Lighting	Linear Lighting	100.0%	18	18
Motors	Pumps	100.0%	795	795
Motors	Fans & Blowers	100.0%	1,119	1,119
Motors	Compressed Air	100.0%	201	201
Motors	Material Handling	100.0%	4,634	4,634
Motors	Other Motors	100.0%	72	72
Process	Process Heating	100.0%	2,440	2,440
Process	Process Cooling	100.0%	150	150
Process	Process Refrigeration	100.0%	150	150
Process	Process Electrochemical	100.0%	42	42
Process	Process Other	100.0%	498	498
Miscellaneous	Miscellaneous	100.0%	388	388
Total			11,819	

Table A-186 California Transportation Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,492	62	0.83
Cooling	Water-Cooled Chiller	2.5%	2,349	59	0.78
Cooling	RTU	11.0%	2,772	304	4.04
Cooling	Air-Source Heat Pump	2.7%	2,772	75	1.00
Cooling	Geothermal Heat Pump	0.0%	1,849	0	0.00
Heating	Electric Furnace	2.7%	5,329	145	1.93
Heating	Electric Room Heat	14.7%	5,075	746	9.93
Heating	Air-Source Heat Pump	2.7%	4,782	130	1.73
Heating	Geothermal Heat Pump	0.0%	3,190	0	0.00
Ventilation	Ventilation	100.0%	328	328	4.36
Interior Lighting	Screw-in	100.0%	56	56	0.75
Interior Lighting	High-Bay Fixtures	100.0%	881	881	11.72
Interior Lighting	Linear Lighting	100.0%	146	146	1.95
Exterior Lighting	Screw-in	100.0%	10	10	0.14
Exterior Lighting	Area Lighting	100.0%	196	196	2.61
Exterior Lighting	Linear Lighting	100.0%	40	40	0.54
Motors	Pumps	100.0%	447	447	5.95
Motors	Fans & Blowers	100.0%	214	214	2.84
Motors	Compressed Air	100.0%	452	452	6.01
Motors	Material Handling	100.0%	2,182	2,182	29.03
Motors	Other Motors	100.0%	56	56	0.74
Process	Process Heating	100.0%	1,246	1,246	16.58
Process	Process Cooling	100.0%	275	275	3.66
Process	Process Refrigeration	100.0%	275	275	3.66
Process	Process Electrochemical	100.0%	150	150	1.99
Process	Process Other	100.0%	336	336	4.47
Miscellaneous	Miscellaneous	100.0%	548	548	7.29
Total				9,360	124.51

Table A-187 California Transportation Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,079	52
Cooling	Water-Cooled Chiller	2.5%	1,910	48
Cooling	RTU	11.0%	2,629	288
Cooling	Air-Source Heat Pump	2.7%	2,597	71
Cooling	Geothermal Heat Pump	0.0%	1,797	0
Heating	Electric Furnace	2.7%	4,984	136
Heating	Electric Room Heat	14.7%	4,747	698
Heating	Air-Source Heat Pump	2.7%	4,343	118
Heating	Geothermal Heat Pump	0.0%	1,663	0
Ventilation	Ventilation	100.0%	262	262
Interior Lighting	Screw-in	100.0%	61	61
Interior Lighting	High-Bay Fixtures	100.0%	924	924
Interior Lighting	Linear Lighting	100.0%	147	147
Exterior Lighting	Screw-in	100.0%	19	19
Exterior Lighting	Area Lighting	100.0%	216	216
Exterior Lighting	Linear Lighting	100.0%	40	40
Motors	Pumps	100.0%	447	447
Motors	Fans & Blowers	100.0%	214	214
Motors	Compressed Air	100.0%	452	452
Motors	Material Handling	100.0%	2,182	2,182
Motors	Other Motors	100.0%	56	56
Process	Process Heating	100.0%	1,246	1,246
Process	Process Cooling	100.0%	275	275
Process	Process Refrigeration	100.0%	275	275
Process	Process Electrochemical	100.0%	150	150
Process	Process Other	100.0%	336	336
Miscellaneous	Miscellaneous	100.0%	548	548
Total			9,258	

Table A-188 California Wastewater Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,112	128	2.19
Cooling	Water-Cooled Chiller	2.5%	4,819	120	2.07
Cooling	RTU	11.0%	5,687	623	10.70
Cooling	Air-Source Heat Pump	2.7%	5,686	155	2.65
Cooling	Geothermal Heat Pump	0.0%	3,792	0	0.00
Heating	Electric Furnace	2.7%	10,932	297	5.10
Heating	Electric Room Heat	14.7%	10,411	1,531	26.28
Heating	Air-Source Heat Pump	2.7%	9,810	267	4.58
Heating	Geothermal Heat Pump	0.0%	6,543	0	0.00
Ventilation	Ventilation	100.0%	672	672	11.54
Interior Lighting	Screw-in	100.0%	148	148	2.54
Interior Lighting	High-Bay Fixtures	100.0%	2,313	2,313	39.71
Interior Lighting	Linear Lighting	100.0%	384	384	6.60
Exterior Lighting	Screw-in	100.0%	27	27	0.47
Exterior Lighting	Area Lighting	100.0%	516	516	8.85
Exterior Lighting	Linear Lighting	100.0%	106	106	1.81
Motors	Pumps	100.0%	18,756	18,756	322.01
Motors	Fans & Blowers	100.0%	46,178	46,178	792.78
Motors	Compressed Air	100.0%	988	988	16.96
Motors	Material Handling	100.0%	4,413	4,413	75.76
Motors	Other Motors	100.0%	1,383	1,383	23.74
Process	Process Heating	0.0%	2,161	0	0.00
Process	Process Cooling	0.0%	2,161	0	0.00
Process	Process Refrigeration	0.0%	2,161	0	0.00
Process	Process Electrochemical	0.0%	2,161	0	0.00
Process	Process Other	100.0%	3,657	3,657	62.78
Miscellaneous	Miscellaneous	100.0%	2,161	2,161	37.10
Total				84,823	1,456.23

Table A-189 California Wastewater New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,264	107
Cooling	Water-Cooled Chiller	2.5%	3,918	98
Cooling	RTU	11.0%	5,393	591
Cooling	Air-Source Heat Pump	2.7%	5,327	145
Cooling	Geothermal Heat Pump	0.0%	3,687	0
Heating	Electric Furnace	2.7%	10,224	278
Heating	Electric Room Heat	14.7%	9,738	1,432
Heating	Air-Source Heat Pump	2.7%	8,910	242
Heating	Geothermal Heat Pump	0.0%	3,411	0
Ventilation	Ventilation	100.0%	537	537
Interior Lighting	Screw-in	100.0%	160	160
Interior Lighting	High-Bay Fixtures	100.0%	2,425	2,425
Interior Lighting	Linear Lighting	100.0%	385	385
Exterior Lighting	Screw-in	100.0%	49	49
Exterior Lighting	Area Lighting	100.0%	568	568
Exterior Lighting	Linear Lighting	100.0%	104	104
Motors	Pumps	100.0%	18,756	18,756
Motors	Fans & Blowers	100.0%	46,178	46,178
Motors	Compressed Air	100.0%	988	988
Motors	Material Handling	100.0%	4,413	4,413
Motors	Other Motors	100.0%	1,383	1,383
Process	Process Heating	0.0%	2,161	0
Process	Process Cooling	0.0%	2,161	0
Process	Process Refrigeration	0.0%	2,161	0
Process	Process Electrochemical	0.0%	2,161	0
Process	Process Other	100.0%	3,657	3,657
Miscellaneous	Miscellaneous	100.0%	2,161	2,161
Total			84,657	

Table A-190 California Water Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,191	55	3.48
Cooling	Water-Cooled Chiller	2.5%	2,065	52	3.28
Cooling	RTU	11.0%	2,437	267	16.96
Cooling	Air-Source Heat Pump	2.7%	2,437	66	4.21
Cooling	Geothermal Heat Pump	0.0%	1,625	0	0.00
Heating	Electric Furnace	2.7%	4,685	127	8.09
Heating	Electric Room Heat	14.7%	4,462	656	41.68
Heating	Air-Source Heat Pump	2.7%	4,204	114	7.26
Heating	Geothermal Heat Pump	0.0%	2,804	0	0.00
Ventilation	Ventilation	100.0%	288	288	18.30
Interior Lighting	Screw-in	100.0%	63	63	4.02
Interior Lighting	High-Bay Fixtures	100.0%	991	991	62.96
Interior Lighting	Linear Lighting	100.0%	165	165	10.47
Exterior Lighting	Screw-in	100.0%	12	12	0.74
Exterior Lighting	Area Lighting	100.0%	221	221	14.04
Exterior Lighting	Linear Lighting	100.0%	45	45	2.88
Motors	Pumps	100.0%	29,037	29,037	1,844.45
Motors	Fans & Blowers	0.0%	926	0	0.00
Motors	Compressed Air	100.0%	423	423	26.89
Motors	Material Handling	100.0%	1,260	1,260	80.02
Motors	Other Motors	100.0%	14	14	0.90
Process	Process Heating	0.0%	926	0	0.00
Process	Process Cooling	0.0%	926	0	0.00
Process	Process Refrigeration	0.0%	926	0	0.00
Process	Process Electrochemical	0.0%	926	0	0.00
Process	Process Other	100.0%	1,567	1,567	99.54
Miscellaneous	Miscellaneous	100.0%	926	926	58.82
Total				36,350	2,308.98

Table A-191 California Water New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,827	46
Cooling	Water-Cooled Chiller	2.5%	1,679	42
Cooling	RTU	11.0%	2,311	253
Cooling	Air-Source Heat Pump	2.7%	2,283	62
Cooling	Geothermal Heat Pump	0.0%	1,580	0
Heating	Electric Furnace	2.7%	4,382	119
Heating	Electric Room Heat	14.7%	4,173	614
Heating	Air-Source Heat Pump	2.7%	3,818	104
Heating	Geothermal Heat Pump	0.0%	1,462	0
Ventilation	Ventilation	100.0%	230	230
Interior Lighting	Screw-in	100.0%	68	68
Interior Lighting	High-Bay Fixtures	100.0%	1,039	1,039
Interior Lighting	Linear Lighting	100.0%	165	165
Exterior Lighting	Screw-in	100.0%	21	21
Exterior Lighting	Area Lighting	100.0%	243	243
Exterior Lighting	Linear Lighting	100.0%	45	45
Motors	Pumps	100.0%	29,037	29,037
Motors	Fans & Blowers	0.0%	926	0
Motors	Compressed Air	100.0%	423	423
Motors	Material Handling	100.0%	1,260	1,260
Motors	Other Motors	100.0%	14	14
Process	Process Heating	0.0%	926	0
Process	Process Cooling	0.0%	926	0
Process	Process Refrigeration	0.0%	926	0
Process	Process Electrochemical	0.0%	926	0
Process	Process Other	100.0%	1,567	1,567
Miscellaneous	Miscellaneous	100.0%	926	926
Total			36,278	

Table A-192 California Chemical Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	656	16	0.16
Cooling	Water-Cooled Chiller	2.5%	619	15	0.15
Cooling	RTU	11.0%	730	80	0.80
Cooling	Air-Source Heat Pump	2.7%	730	20	0.20
Cooling	Geothermal Heat Pump	0.0%	487	0	0.00
Heating	Electric Furnace	2.7%	1,403	38	0.38
Heating	Electric Room Heat	14.7%	1,336	196	1.96
Heating	Air-Source Heat Pump	2.7%	1,259	34	0.34
Heating	Geothermal Heat Pump	0.0%	840	0	0.00
Ventilation	Ventilation	100.0%	86	86	0.86
Interior Lighting	Screw-in	100.0%	13	13	0.13
Interior Lighting	High-Bay Fixtures	100.0%	203	203	2.03
Interior Lighting	Linear Lighting	100.0%	34	34	0.34
Exterior Lighting	Screw-in	100.0%	2	2	0.02
Exterior Lighting	Area Lighting	100.0%	45	45	0.45
Exterior Lighting	Linear Lighting	100.0%	9	9	0.09
Motors	Pumps	100.0%	1,264	1,264	12.64
Motors	Fans & Blowers	100.0%	578	578	5.78
Motors	Compressed Air	100.0%	1,339	1,339	13.39
Motors	Material Handling	100.0%	1,214	1,214	12.14
Motors	Other Motors	100.0%	159	159	1.59
Process	Process Heating	100.0%	532	532	5.32
Process	Process Cooling	100.0%	299	299	2.99
Process	Process Refrigeration	100.0%	299	299	2.99
Process	Process Electrochemical	100.0%	1,529	1,529	15.29
Process	Process Other	100.0%	95	95	0.95
Miscellaneous	Miscellaneous	100.0%	235	235	2.35
Total				8,335	83.35

Table A-193 California Chemical Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	547	14	
Cooling	Water-Cooled Chiller	2.5%	503	13	
Cooling	RTU	11.0%	692	76	
Cooling	Air-Source Heat Pump	2.7%	684	19	
Cooling	Geothermal Heat Pump	0.0%	473	0	
Heating	Electric Furnace	2.7%	1,312	36	
Heating	Electric Room Heat	14.7%	1,250	184	
Heating	Air-Source Heat Pump	2.7%	1,143	31	
Heating	Geothermal Heat Pump	0.0%	438	0	
Ventilation	Ventilation	100.0%	69	69	
Interior Lighting	Screw-in	100.0%	14	14	
Interior Lighting	High-Bay Fixtures	100.0%	212	212	
Interior Lighting	Linear Lighting	100.0%	34	34	
Exterior Lighting	Screw-in	100.0%	4	4	
Exterior Lighting	Area Lighting	100.0%	50	50	
Exterior Lighting	Linear Lighting	100.0%	9	9	
Motors	Pumps	100.0%	1,264	1,264	
Motors	Fans & Blowers	100.0%	578	578	
Motors	Compressed Air	100.0%	1,339	1,339	
Motors	Material Handling	100.0%	1,214	1,214	
Motors	Other Motors	100.0%	159	159	
Process	Process Heating	100.0%	532	532	
Process	Process Cooling	100.0%	299	299	
Process	Process Refrigeration	100.0%	299	299	
Process	Process Electrochemical	100.0%	1,529	1,529	
Process	Process Other	100.0%	95	95	
Miscellaneous	Miscellaneous	100.0%	235	235	
Total				8,306	

Table A-194 California Electronic Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	33,071	827	12.73
Cooling	Water-Cooled Chiller	2.5%	31,181	780	12.01
Cooling	RTU	11.0%	36,794	4,032	62.10
Cooling	Air-Source Heat Pump	2.7%	36,786	1,000	15.40
Cooling	Geothermal Heat Pump	0.0%	24,536	0	0.00
Heating	Electric Furnace	2.7%	70,726	1,923	29.62
Heating	Electric Room Heat	14.7%	67,358	9,905	152.57
Heating	Air-Source Heat Pump	2.7%	63,467	1,725	26.57
Heating	Geothermal Heat Pump	0.0%	42,332	0	0.00
Ventilation	Ventilation	100.0%	4,350	4,350	67.01
Interior Lighting	Screw-in	100.0%	423	423	6.52
Interior Lighting	High-Bay Fixtures	100.0%	6,617	6,617	101.93
Interior Lighting	Linear Lighting	100.0%	1,100	1,100	16.94
Exterior Lighting	Screw-in	100.0%	78	78	1.20
Exterior Lighting	Area Lighting	100.0%	1,475	1,475	22.72
Exterior Lighting	Linear Lighting	100.0%	302	302	4.66
Motors	Pumps	100.0%	1,247	1,247	19.20
Motors	Fans & Blowers	100.0%	1,995	1,995	30.73
Motors	Compressed Air	100.0%	3,609	3,609	55.59
Motors	Material Handling	100.0%	11,284	11,284	173.80
Motors	Other Motors	0.0%	7,416	0	0.00
Process	Process Heating	100.0%	9,415	9,415	145.02
Process	Process Cooling	100.0%	4,372	4,372	67.34
Process	Process Refrigeration	100.0%	4,372	4,372	67.34
Process	Process Electrochemical	100.0%	1,643	1,643	25.31
Process	Process Other	100.0%	8,266	8,266	127.33
Miscellaneous	Miscellaneous	100.0%	7,416	7,416	114.22
Total				88,157	1,357.85

Table A-195 California Electronic Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	27,587	690
Cooling	Water-Cooled Chiller	2.5%	25,348	634
Cooling	RTU	11.0%	34,894	3,824
Cooling	Air-Source Heat Pump	2.7%	34,467	937
Cooling	Geothermal Heat Pump	0.0%	23,855	0
Heating	Electric Furnace	2.7%	66,150	1,798
Heating	Electric Room Heat	14.7%	63,000	9,264
Heating	Air-Source Heat Pump	2.7%	57,643	1,567
Heating	Geothermal Heat Pump	0.0%	22,065	0
Ventilation	Ventilation	100.0%	3,475	3,475
Interior Lighting	Screw-in	100.0%	457	457
Interior Lighting	High-Bay Fixtures	100.0%	6,939	6,939
Interior Lighting	Linear Lighting	100.0%	1,103	1,103
Exterior Lighting	Screw-in	100.0%	140	140
Exterior Lighting	Area Lighting	100.0%	1,624	1,624
Exterior Lighting	Linear Lighting	100.0%	298	298
Motors	Pumps	100.0%	1,247	1,247
Motors	Fans & Blowers	100.0%	1,995	1,995
Motors	Compressed Air	100.0%	3,609	3,609
Motors	Material Handling	100.0%	11,284	11,284
Motors	Other Motors	0.0%	7,416	0
Process	Process Heating	100.0%	9,415	9,415
Process	Process Cooling	100.0%	4,372	4,372
Process	Process Refrigeration	100.0%	4,372	4,372
Process	Process Electrochemical	100.0%	1,643	1,643
Process	Process Other	100.0%	8,266	8,266
Miscellaneous	Miscellaneous	100.0%	7,416	7,416
Total			86,368	

Table A-196 California Industrial Machinery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,041	51	1.48
Cooling	Water-Cooled Chiller	2.5%	1,924	48	1.40
Cooling	RTU	11.0%	2,270	249	7.23
Cooling	Air-Source Heat Pump	2.7%	2,270	62	1.79
Cooling	Geothermal Heat Pump	0.0%	1,514	0	0.00
Heating	Electric Furnace	2.7%	4,364	119	3.45
Heating	Electric Room Heat	14.7%	4,156	611	17.76
Heating	Air-Source Heat Pump	2.7%	3,916	106	3.09
Heating	Geothermal Heat Pump	0.0%	2,612	0	0.00
Ventilation	Ventilation	100.0%	268	268	7.80
Interior Lighting	Screw-in	100.0%	39	39	1.13
Interior Lighting	High-Bay Fixtures	100.0%	609	609	17.70
Interior Lighting	Linear Lighting	100.0%	101	101	2.94
Exterior Lighting	Screw-in	100.0%	7	7	0.21
Exterior Lighting	Area Lighting	100.0%	136	136	3.95
Exterior Lighting	Linear Lighting	100.0%	28	28	0.81
Motors	Pumps	100.0%	335	335	9.72
Motors	Fans & Blowers	100.0%	779	779	22.63
Motors	Compressed Air	100.0%	663	663	19.27
Motors	Material Handling	100.0%	1,074	1,074	31.20
Motors	Other Motors	0.0%	465	0	0.00
Process	Process Heating	100.0%	444	444	12.89
Process	Process Cooling	100.0%	87	87	2.53
Process	Process Refrigeration	100.0%	87	87	2.53
Process	Process Electrochemical	100.0%	59	59	1.71
Process	Process Other	100.0%	198	198	5.75
Miscellaneous	Miscellaneous	100.0%	465	465	13.51
Total				6,624	192.47

Table A-197 California Industrial Machinery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,702	43
Cooling	Water-Cooled Chiller	2.5%	1,564	39
Cooling	RTU	11.0%	2,153	236
Cooling	Air-Source Heat Pump	2.7%	2,127	58
Cooling	Geothermal Heat Pump	0.0%	1,472	0
Heating	Electric Furnace	2.7%	4,081	111
Heating	Electric Room Heat	14.7%	3,887	572
Heating	Air-Source Heat Pump	2.7%	3,557	97
Heating	Geothermal Heat Pump	0.0%	1,361	0
Ventilation	Ventilation	100.0%	214	214
Interior Lighting	Screw-in	100.0%	42	42
Interior Lighting	High-Bay Fixtures	100.0%	639	639
Interior Lighting	Linear Lighting	100.0%	102	102
Exterior Lighting	Screw-in	100.0%	13	13
Exterior Lighting	Area Lighting	100.0%	149	149
Exterior Lighting	Linear Lighting	100.0%	27	27
Motors	Pumps	100.0%	335	335
Motors	Fans & Blowers	100.0%	779	779
Motors	Compressed Air	100.0%	663	663
Motors	Material Handling	100.0%	1,074	1,074
Motors	Other Motors	0.0%	465	0
Process	Process Heating	100.0%	444	444
Process	Process Cooling	100.0%	87	87
Process	Process Refrigeration	100.0%	87	87
Process	Process Electrochemical	100.0%	59	59
Process	Process Other	100.0%	198	198
Miscellaneous	Miscellaneous	100.0%	465	465
Total			6,531	

Table A-198 California Lumber & Wood Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,847	146	20.57
Cooling	Water-Cooled Chiller	2.5%	5,513	138	19.39
Cooling	RTU	11.0%	6,505	713	100.31
Cooling	Air-Source Heat Pump	2.7%	6,504	177	24.87
Cooling	Geothermal Heat Pump	0.0%	4,338	0	0.00
Heating	Electric Furnace	2.7%	12,504	340	47.84
Heating	Electric Room Heat	14.7%	11,909	1,751	246.44
Heating	Air-Source Heat Pump	2.7%	11,221	305	42.91
Heating	Geothermal Heat Pump	0.0%	7,484	0	0.00
Ventilation	Ventilation	100.0%	769	769	108.24
Interior Lighting	Screw-in	100.0%	266	266	37.40
Interior Lighting	High-Bay Fixtures	100.0%	4,157	4,157	585.05
Interior Lighting	Linear Lighting	100.0%	691	691	97.25
Exterior Lighting	Screw-in	100.0%	49	49	6.88
Exterior Lighting	Area Lighting	100.0%	927	927	130.44
Exterior Lighting	Linear Lighting	100.0%	190	190	26.72
Motors	Pumps	100.0%	9,249	9,249	1,301.50
Motors	Fans & Blowers	100.0%	6,815	6,815	959.04
Motors	Compressed Air	100.0%	3,507	3,507	493.51
Motors	Material Handling	100.0%	47,177	47,177	6,638.97
Motors	Other Motors	100.0%	715	715	100.67
Process	Process Heating	100.0%	7,709	7,709	1,084.83
Process	Process Cooling	100.0%	572	572	80.48
Process	Process Refrigeration	100.0%	572	572	80.48
Process	Process Electrochemical	100.0%	665	665	93.55
Process	Process Other	100.0%	480	480	67.49
Miscellaneous	Miscellaneous	100.0%	4,062	4,062	571.62
Total				92,141	12,966.49

Table A-199 California Lumber & Wood Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,877	122
Cooling	Water-Cooled Chiller	2.5%	4,482	112
Cooling	RTU	11.0%	6,169	676
Cooling	Air-Source Heat Pump	2.7%	6,094	166
Cooling	Geothermal Heat Pump	0.0%	4,217	0
Heating	Electric Furnace	2.7%	11,695	318
Heating	Electric Room Heat	14.7%	11,138	1,638
Heating	Air-Source Heat Pump	2.7%	10,191	277
Heating	Geothermal Heat Pump	0.0%	3,901	0
Ventilation	Ventilation	100.0%	614	614
Interior Lighting	Screw-in	100.0%	287	287
Interior Lighting	High-Bay Fixtures	100.0%	4,359	4,359
Interior Lighting	Linear Lighting	100.0%	693	693
Exterior Lighting	Screw-in	100.0%	88	88
Exterior Lighting	Area Lighting	100.0%	1,020	1,020
Exterior Lighting	Linear Lighting	100.0%	187	187
Motors	Pumps	100.0%	9,249	9,249
Motors	Fans & Blowers	100.0%	6,815	6,815
Motors	Compressed Air	100.0%	3,507	3,507
Motors	Material Handling	100.0%	47,177	47,177
Motors	Other Motors	100.0%	715	715
Process	Process Heating	100.0%	7,709	7,709
Process	Process Cooling	100.0%	572	572
Process	Process Refrigeration	100.0%	572	572
Process	Process Electrochemical	100.0%	665	665
Process	Process Other	100.0%	480	480
Miscellaneous	Miscellaneous	100.0%	4,062	4,062
Total			92,079	

Table A-200 California Metal Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,543	64	3.14
Cooling	Water-Cooled Chiller	2.5%	2,397	60	2.96
Cooling	RTU	11.0%	2,829	310	15.30
Cooling	Air-Source Heat Pump	2.7%	2,828	77	3.79
Cooling	Geothermal Heat Pump	0.0%	1,886	0	0.00
Heating	Electric Furnace	2.7%	5,438	148	7.30
Heating	Electric Room Heat	14.7%	5,179	762	37.59
Heating	Air-Source Heat Pump	2.7%	4,880	133	6.55
Heating	Geothermal Heat Pump	0.0%	3,255	0	0.00
Ventilation	Ventilation	100.0%	334	334	16.51
Interior Lighting	Screw-in	100.0%	72	72	3.54
Interior Lighting	High-Bay Fixtures	100.0%	1,123	1,123	55.41
Interior Lighting	Linear Lighting	100.0%	187	187	9.21
Exterior Lighting	Screw-in	100.0%	13	13	0.65
Exterior Lighting	Area Lighting	100.0%	250	250	12.35
Exterior Lighting	Linear Lighting	100.0%	51	51	2.53
Motors	Pumps	100.0%	1,179	1,179	58.22
Motors	Fans & Blowers	100.0%	563	563	27.80
Motors	Compressed Air	100.0%	1,191	1,191	58.81
Motors	Material Handling	100.0%	5,755	5,755	284.04
Motors	Other Motors	100.0%	147	147	7.25
Process	Process Heating	100.0%	3,429	3,429	169.25
Process	Process Cooling	100.0%	303	303	14.97
Process	Process Refrigeration	100.0%	303	303	14.97
Process	Process Electrochemical	100.0%	577	577	28.50
Process	Process Other	100.0%	740	740	36.53
Miscellaneous	Miscellaneous	100.0%	700	700	34.53
Total				18,471	911.68

Table A-201 California Metal Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,121	53
Cooling	Water-Cooled Chiller	2.5%	1,949	49
Cooling	RTU	11.0%	2,683	294
Cooling	Air-Source Heat Pump	2.7%	2,650	72
Cooling	Geothermal Heat Pump	0.0%	1,834	0
Heating	Electric Furnace	2.7%	5,086	138
Heating	Electric Room Heat	14.7%	4,844	712
Heating	Air-Source Heat Pump	2.7%	4,432	120
Heating	Geothermal Heat Pump	0.0%	1,696	0
Ventilation	Ventilation	100.0%	267	267
Interior Lighting	Screw-in	100.0%	77	77
Interior Lighting	High-Bay Fixtures	100.0%	1,177	1,177
Interior Lighting	Linear Lighting	100.0%	187	187
Exterior Lighting	Screw-in	100.0%	24	24
Exterior Lighting	Area Lighting	100.0%	275	275
Exterior Lighting	Linear Lighting	100.0%	51	51
Motors	Pumps	100.0%	1,179	1,179
Motors	Fans & Blowers	100.0%	563	563
Motors	Compressed Air	100.0%	1,191	1,191
Motors	Material Handling	100.0%	5,755	5,755
Motors	Other Motors	100.0%	147	147
Process	Process Heating	100.0%	3,429	3,429
Process	Process Cooling	100.0%	303	303
Process	Process Refrigeration	100.0%	303	303
Process	Process Electrochemical	100.0%	577	577
Process	Process Other	100.0%	740	740
Miscellaneous	Miscellaneous	100.0%	700	700
Total			18,385	

Table A-202 California Miscellaneous Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,077	77	6.26
Cooling	Water-Cooled Chiller	2.5%	2,901	73	5.90
Cooling	RTU	11.0%	3,424	375	30.54
Cooling	Air-Source Heat Pump	2.7%	3,423	93	7.57
Cooling	Geothermal Heat Pump	0.0%	2,283	0	0.00
Heating	Electric Furnace	2.7%	6,581	179	14.56
Heating	Electric Room Heat	14.7%	6,268	922	75.02
Heating	Air-Source Heat Pump	2.7%	5,906	160	13.06
Heating	Geothermal Heat Pump	0.0%	3,939	0	0.00
Ventilation	Ventilation	100.0%	405	405	32.95
Interior Lighting	Screw-in	100.0%	63	63	5.14
Interior Lighting	High-Bay Fixtures	100.0%	989	989	80.49
Interior Lighting	Linear Lighting	100.0%	164	164	13.38
Exterior Lighting	Screw-in	100.0%	12	12	0.95
Exterior Lighting	Area Lighting	100.0%	220	220	17.95
Exterior Lighting	Linear Lighting	100.0%	45	45	3.68
Motors	Pumps	100.0%	678	678	55.21
Motors	Fans & Blowers	100.0%	450	450	36.60
Motors	Compressed Air	100.0%	475	475	38.69
Motors	Material Handling	100.0%	1,268	1,268	103.21
Motors	Other Motors	100.0%	184	184	14.99
Process	Process Heating	100.0%	982	982	79.95
Process	Process Cooling	100.0%	258	258	20.99
Process	Process Refrigeration	100.0%	258	258	20.99
Process	Process Electrochemical	100.0%	99	99	8.08
Process	Process Other	100.0%	108	108	8.77
Miscellaneous	Miscellaneous	100.0%	593	593	48.24
Total				9,131	743.16

Table A-203 California Miscellaneous Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,567	64
Cooling	Water-Cooled Chiller	2.5%	2,359	59
Cooling	RTU	11.0%	3,247	356
Cooling	Air-Source Heat Pump	2.7%	3,207	87
Cooling	Geothermal Heat Pump	0.0%	2,220	0
Heating	Electric Furnace	2.7%	6,155	167
Heating	Electric Room Heat	14.7%	5,862	862
Heating	Air-Source Heat Pump	2.7%	5,364	146
Heating	Geothermal Heat Pump	0.0%	2,053	0
Ventilation	Ventilation	100.0%	323	323
Interior Lighting	Screw-in	100.0%	68	68
Interior Lighting	High-Bay Fixtures	100.0%	1,037	1,037
Interior Lighting	Linear Lighting	100.0%	165	165
Exterior Lighting	Screw-in	100.0%	21	21
Exterior Lighting	Area Lighting	100.0%	243	243
Exterior Lighting	Linear Lighting	100.0%	45	45
Motors	Pumps	100.0%	678	678
Motors	Fans & Blowers	100.0%	450	450
Motors	Compressed Air	100.0%	475	475
Motors	Material Handling	100.0%	1,268	1,268
Motors	Other Motors	100.0%	184	184
Process	Process Heating	100.0%	982	982
Process	Process Cooling	100.0%	258	258
Process	Process Refrigeration	100.0%	258	258
Process	Process Electrochemical	100.0%	99	99
Process	Process Other	100.0%	108	108
Miscellaneous	Miscellaneous	100.0%	593	593
Total			8,996	

Table A-204 Idaho Agriculture Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,078	77	91.31
Cooling	Water-Cooled Chiller	2.5%	3,117	78	92.45
Cooling	RTU	10.6%	3,306	352	417.42
Cooling	Air-Source Heat Pump	2.7%	3,306	90	106.60
Cooling	Geothermal Heat Pump	0.0%	2,205	0	0.00
Heating	Electric Furnace	2.7%	14,439	393	465.79
Heating	Electric Room Heat	14.7%	13,752	2,022	2,399.50
Heating	Air-Source Heat Pump	2.7%	13,143	357	423.82
Heating	Geothermal Heat Pump	0.0%	8,766	0	0.00
Ventilation	Ventilation	100.0%	480	480	569.58
Interior Lighting	Screw-in	100.0%	138	138	163.16
Interior Lighting	High-Bay Fixtures	100.0%	2,151	2,151	2,552.45
Interior Lighting	Linear Lighting	100.0%	358	358	424.30
Exterior Lighting	Screw-in	100.0%	25	25	30.04
Exterior Lighting	Area Lighting	100.0%	480	480	569.07
Exterior Lighting	Linear Lighting	100.0%	98	98	116.58
Motors	Pumps	100.0%	1,276	1,276	1,513.96
Motors	Fans & Blowers	100.0%	7,948	7,948	9,430.59
Motors	Compressed Air	100.0%	1,688	1,688	2,002.35
Motors	Material Handling	100.0%	9,768	9,768	11,590.01
Motors	Other Motors	0.0%	2,252	0	0.00
Process	Process Heating	100.0%	3,406	3,406	4,041.18
Process	Process Cooling	100.0%	5,731	5,731	6,800.21
Process	Process Refrigeration	100.0%	5,731	5,731	6,800.21
Process	Process Electrochemical	100.0%	110	110	130.17
Process	Process Other	100.0%	426	426	505.54
Miscellaneous	Miscellaneous	100.0%	2,252	2,252	2,671.92
Total				45,432	53,908.18

Table A-205 Idaho Agriculture New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,568	64
Cooling	Water-Cooled Chiller	2.5%	2,534	63
Cooling	RTU	10.6%	3,136	334
Cooling	Air-Source Heat Pump	2.7%	3,097	84
Cooling	Geothermal Heat Pump	0.0%	2,144	0
Heating	Electric Furnace	2.7%	13,505	367
Heating	Electric Room Heat	14.7%	12,862	1,891
Heating	Air-Source Heat Pump	2.7%	11,937	324
Heating	Geothermal Heat Pump	0.0%	4,569	0
Ventilation	Ventilation	100.0%	382	382
Interior Lighting	Screw-in	100.0%	194	194
Interior Lighting	High-Bay Fixtures	100.0%	2,256	2,256
Interior Lighting	Linear Lighting	100.0%	358	358
Exterior Lighting	Screw-in	100.0%	59	59
Exterior Lighting	Area Lighting	100.0%	528	528
Exterior Lighting	Linear Lighting	100.0%	97	97
Motors	Pumps	100.0%	1,276	1,276
Motors	Fans & Blowers	100.0%	7,948	7,948
Motors	Compressed Air	100.0%	1,688	1,688
Motors	Material Handling	100.0%	9,768	9,768
Motors	Other Motors	0.0%	2,252	0
Process	Process Heating	100.0%	3,406	3,406
Process	Process Cooling	100.0%	5,731	5,731
Process	Process Refrigeration	100.0%	5,731	5,731
Process	Process Electrochemical	100.0%	110	110
Process	Process Other	100.0%	426	426
Miscellaneous	Miscellaneous	100.0%	2,252	2,252
Total			45,337	

Table A-206 Idaho Mining and Extraction Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	11,969	299	14.96
Cooling	Water-Cooled Chiller	2.5%	12,120	303	15.15
Cooling	RTU	10.6%	12,857	1,368	68.40
Cooling	Air-Source Heat Pump	2.7%	12,854	349	17.47
Cooling	Geothermal Heat Pump	0.0%	8,574	0	0.00
Heating	Electric Furnace	2.7%	56,149	1,527	76.33
Heating	Electric Room Heat	14.7%	53,475	7,864	393.18
Heating	Air-Source Heat Pump	2.7%	51,108	1,389	69.45
Heating	Geothermal Heat Pump	0.0%	34,089	0	0.00
Ventilation	Ventilation	100.0%	1,867	1,867	93.33
Interior Lighting	Screw-in	100.0%	814	814	40.71
Interior Lighting	High-Bay Fixtures	100.0%	12,738	12,738	636.89
Interior Lighting	Linear Lighting	100.0%	2,117	2,117	105.87
Exterior Lighting	Screw-in	100.0%	150	150	7.49
Exterior Lighting	Area Lighting	100.0%	2,840	2,840	141.99
Exterior Lighting	Linear Lighting	100.0%	582	582	29.09
Motors	Pumps	100.0%	146,232	146,232	7,311.62
Motors	Fans & Blowers	100.0%	40,620	40,620	2,031.01
Motors	Compressed Air	100.0%	60,930	60,930	3,046.51
Motors	Material Handling	100.0%	42,651	42,651	2,132.56
Motors	Other Motors	100.0%	115,767	115,767	5,788.37
Process	Process Heating	100.0%	4,276	4,276	213.79
Process	Process Cooling	0.0%	4,276	0	0.00
Process	Process Refrigeration	0.0%	4,276	0	0.00
Process	Process Electrochemical	100.0%	4,276	4,276	213.79
Process	Process Other	100.0%	23,517	23,517	1,175.85
Miscellaneous	Miscellaneous	100.0%	4,276	4,276	213.79
Total				476,752	23,837.59

Table A-207 Idaho Mining and Extraction New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	9,984	250
Cooling	Water-Cooled Chiller	2.5%	9,853	246
Cooling	RTU	10.6%	12,193	1,297
Cooling	Air-Source Heat Pump	2.7%	12,044	327
Cooling	Geothermal Heat Pump	0.0%	8,336	0
Heating	Electric Furnace	2.7%	52,515	1,428
Heating	Electric Room Heat	14.7%	50,015	7,355
Heating	Air-Source Heat Pump	2.7%	46,418	1,261
Heating	Geothermal Heat Pump	0.0%	17,769	0
Ventilation	Ventilation	100.0%	1,484	1,484
Interior Lighting	Screw-in	100.0%	1,150	1,150
Interior Lighting	High-Bay Fixtures	100.0%	13,357	13,357
Interior Lighting	Linear Lighting	100.0%	2,122	2,122
Exterior Lighting	Screw-in	100.0%	352	352
Exterior Lighting	Area Lighting	100.0%	3,125	3,125
Exterior Lighting	Linear Lighting	100.0%	574	574
Motors	Pumps	100.0%	146,232	146,232
Motors	Fans & Blowers	100.0%	40,620	40,620
Motors	Compressed Air	100.0%	60,930	60,930
Motors	Material Handling	100.0%	42,651	42,651
Motors	Other Motors	100.0%	115,767	115,767
Process	Process Heating	100.0%	4,276	4,276
Process	Process Cooling	0.0%	4,276	0
Process	Process Refrigeration	0.0%	4,276	0
Process	Process Electrochemical	100.0%	4,276	4,276
Process	Process Other	100.0%	23,517	23,517
Miscellaneous	Miscellaneous	100.0%	4,276	4,276
Total			476,874	

Table A-208 Idaho Food Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	6,680	167	192.22
Cooling	Water-Cooled Chiller	2.5%	6,764	169	194.64
Cooling	RTU	10.6%	7,176	764	878.77
Cooling	Air-Source Heat Pump	2.7%	7,174	195	224.41
Cooling	Geothermal Heat Pump	0.0%	4,785	0	0.00
Heating	Electric Furnace	2.7%	31,338	852	980.62
Heating	Electric Room Heat	14.7%	29,846	4,389	5,051.57
Heating	Air-Source Heat Pump	2.7%	28,525	775	892.25
Heating	Geothermal Heat Pump	0.0%	19,026	0	0.00
Ventilation	Ventilation	100.0%	1,042	1,042	1,199.11
Interior Lighting	Screw-in	100.0%	298	298	343.48
Interior Lighting	High-Bay Fixtures	100.0%	4,669	4,669	5,373.58
Interior Lighting	Linear Lighting	100.0%	776	776	893.26
Exterior Lighting	Screw-in	100.0%	55	55	63.23
Exterior Lighting	Area Lighting	100.0%	1,041	1,041	1,198.03
Exterior Lighting	Linear Lighting	100.0%	213	213	245.44
Motors	Pumps	100.0%	6,640	6,640	7,642.03
Motors	Fans & Blowers	100.0%	11,039	11,039	12,705.91
Motors	Compressed Air	100.0%	4,246	4,246	4,886.72
Motors	Material Handling	100.0%	20,826	20,826	23,969.83
Motors	Other Motors	100.0%	2,130	2,130	2,452.05
Process	Process Heating	100.0%	7,392	7,392	8,507.73
Process	Process Cooling	100.0%	12,438	12,438	14,316.20
Process	Process Refrigeration	100.0%	12,438	12,438	14,316.20
Process	Process Electrochemical	100.0%	238	238	274.04
Process	Process Other	100.0%	925	925	1,064.28
Miscellaneous	Miscellaneous	100.0%	4,887	4,887	5,625.08
Total				98,605	113,490.68

Table A-209 Idaho Food Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	5,573	139
Cooling	Water-Cooled Chiller	2.5%	5,499	137
Cooling	RTU	10.6%	6,805	724
Cooling	Air-Source Heat Pump	2.7%	6,722	183
Cooling	Geothermal Heat Pump	0.0%	4,652	0
Heating	Electric Furnace	2.7%	29,311	797
Heating	Electric Room Heat	14.7%	27,915	4,105
Heating	Air-Source Heat Pump	2.7%	25,908	704
Heating	Geothermal Heat Pump	0.0%	9,917	0
Ventilation	Ventilation	100.0%	828	828
Interior Lighting	Screw-in	100.0%	421	421
Interior Lighting	High-Bay Fixtures	100.0%	4,896	4,896
Interior Lighting	Linear Lighting	100.0%	778	778
Exterior Lighting	Screw-in	100.0%	129	129
Exterior Lighting	Area Lighting	100.0%	1,146	1,146
Exterior Lighting	Linear Lighting	100.0%	210	210
Motors	Pumps	100.0%	6,640	6,640
Motors	Fans & Blowers	100.0%	11,039	11,039
Motors	Compressed Air	100.0%	4,246	4,246
Motors	Material Handling	100.0%	20,826	20,826
Motors	Other Motors	100.0%	2,130	2,130
Process	Process Heating	100.0%	7,392	7,392
Process	Process Cooling	100.0%	12,438	12,438
Process	Process Refrigeration	100.0%	12,438	12,438
Process	Process Electrochemical	100.0%	238	238
Process	Process Other	100.0%	925	925
Miscellaneous	Miscellaneous	100.0%	4,887	4,887
Total			98,397	

Table A-210 Idaho Paper Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	91	2	0.05
Cooling	Water-Cooled Chiller	2.5%	92	2	0.05
Cooling	RTU	10.6%	98	10	0.21
Cooling	Air-Source Heat Pump	2.7%	98	3	0.05
Cooling	Geothermal Heat Pump	0.0%	65	0	0.00
Heating	Electric Furnace	2.7%	428	12	0.23
Heating	Electric Room Heat	14.7%	407	60	1.20
Heating	Air-Source Heat Pump	2.7%	389	11	0.21
Heating	Geothermal Heat Pump	0.0%	260	0	0.00
Ventilation	Ventilation	100.0%	14	14	0.28
Interior Lighting	Screw-in	100.0%	4	4	0.09
Interior Lighting	High-Bay Fixtures	100.0%	69	69	1.39
Interior Lighting	Linear Lighting	100.0%	12	12	0.23
Exterior Lighting	Screw-in	100.0%	1	1	0.02
Exterior Lighting	Area Lighting	100.0%	15	15	0.31
Exterior Lighting	Linear Lighting	100.0%	3	3	0.06
Motors	Pumps	100.0%	402	402	8.05
Motors	Fans & Blowers	100.0%	389	389	7.78
Motors	Compressed Air	100.0%	219	219	4.37
Motors	Material Handling	100.0%	928	928	18.55
Motors	Other Motors	100.0%	25	25	0.49
Process	Process Heating	100.0%	193	193	3.85
Process	Process Cooling	100.0%	19	19	0.38
Process	Process Refrigeration	100.0%	19	19	0.38
Process	Process Electrochemical	100.0%	34	34	0.68
Process	Process Other	100.0%	37	37	0.74
Miscellaneous	Miscellaneous	100.0%	65	65	1.30
Total				2,548	50.96

Table A-211 Idaho Paper Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	76	2
Cooling	Water-Cooled Chiller	2.5%	75	2
Cooling	RTU	10.6%	93	10
Cooling	Air-Source Heat Pump	2.7%	92	2
Cooling	Geothermal Heat Pump	0.0%	63	0
Heating	Electric Furnace	2.7%	400	11
Heating	Electric Room Heat	14.7%	381	56
Heating	Air-Source Heat Pump	2.7%	353	10
Heating	Geothermal Heat Pump	0.0%	135	0
Ventilation	Ventilation	100.0%	11	11
Interior Lighting	Screw-in	100.0%	6	6
Interior Lighting	High-Bay Fixtures	100.0%	73	73
Interior Lighting	Linear Lighting	100.0%	12	12
Exterior Lighting	Screw-in	100.0%	2	2
Exterior Lighting	Area Lighting	100.0%	17	17
Exterior Lighting	Linear Lighting	100.0%	3	3
Motors	Pumps	100.0%	402	402
Motors	Fans & Blowers	100.0%	389	389
Motors	Compressed Air	100.0%	219	219
Motors	Material Handling	100.0%	928	928
Motors	Other Motors	100.0%	25	25
Process	Process Heating	100.0%	193	193
Process	Process Cooling	100.0%	19	19
Process	Process Refrigeration	100.0%	19	19
Process	Process Electrochemical	100.0%	34	34
Process	Process Other	100.0%	37	37
Miscellaneous	Miscellaneous	100.0%	65	65
Total			2,546	

Table A-212 Idaho Petroleum Refining Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	722	18	0.18
Cooling	Water-Cooled Chiller	2.5%	731	18	0.18
Cooling	RTU	10.6%	776	83	0.83
Cooling	Air-Source Heat Pump	2.7%	776	21	0.21
Cooling	Geothermal Heat Pump	0.0%	517	0	0.00
Heating	Electric Furnace	2.7%	3,388	92	0.92
Heating	Electric Room Heat	14.7%	3,226	474	4.74
Heating	Air-Source Heat Pump	2.7%	3,084	84	0.84
Heating	Geothermal Heat Pump	0.0%	2,057	0	0.00
Ventilation	Ventilation	100.0%	113	113	1.13
Interior Lighting	Screw-in	100.0%	25	25	0.25
Interior Lighting	High-Bay Fixtures	100.0%	397	397	3.97
Interior Lighting	Linear Lighting	100.0%	66	66	0.66
Exterior Lighting	Screw-in	100.0%	5	5	0.05
Exterior Lighting	Area Lighting	100.0%	88	88	0.88
Exterior Lighting	Linear Lighting	100.0%	18	18	0.18
Motors	Pumps	100.0%	11,827	11,827	118.27
Motors	Fans & Blowers	100.0%	1,939	1,939	19.39
Motors	Compressed Air	100.0%	3,102	3,102	31.02
Motors	Material Handling	100.0%	2,779	2,779	27.79
Motors	Other Motors	100.0%	1,086	1,086	10.86
Process	Process Heating	100.0%	1,038	1,038	10.38
Process	Process Cooling	100.0%	633	633	6.33
Process	Process Refrigeration	100.0%	633	633	6.33
Process	Process Electrochemical	100.0%	25	25	0.25
Process	Process Other	100.0%	193	193	1.93
Miscellaneous	Miscellaneous	100.0%	270	270	2.70
Total				25,027	250.27

Table A-213 Idaho Petroleum Refining New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	602	15
Cooling	Water-Cooled Chiller	2.5%	594	15
Cooling	RTU	10.6%	736	78
Cooling	Air-Source Heat Pump	2.7%	727	20
Cooling	Geothermal Heat Pump	0.0%	503	0
Heating	Electric Furnace	2.7%	3,168	86
Heating	Electric Room Heat	14.7%	3,018	444
Heating	Air-Source Heat Pump	2.7%	2,801	76
Heating	Geothermal Heat Pump	0.0%	1,072	0
Ventilation	Ventilation	100.0%	90	90
Interior Lighting	Screw-in	100.0%	36	36
Interior Lighting	High-Bay Fixtures	100.0%	416	416
Interior Lighting	Linear Lighting	100.0%	66	66
Exterior Lighting	Screw-in	100.0%	11	11
Exterior Lighting	Area Lighting	100.0%	97	97
Exterior Lighting	Linear Lighting	100.0%	18	18
Motors	Pumps	100.0%	11,827	11,827
Motors	Fans & Blowers	100.0%	1,939	1,939
Motors	Compressed Air	100.0%	3,102	3,102
Motors	Material Handling	100.0%	2,779	2,779
Motors	Other Motors	100.0%	1,086	1,086
Process	Process Heating	100.0%	1,038	1,038
Process	Process Cooling	100.0%	633	633
Process	Process Refrigeration	100.0%	633	633
Process	Process Electrochemical	100.0%	25	25
Process	Process Other	100.0%	193	193
Miscellaneous	Miscellaneous	100.0%	270	270
Total			24,993	

Table A-214 Idaho Stone Clay Glass Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,007	75	11.28
Cooling	Water-Cooled Chiller	2.5%	3,045	76	11.42
Cooling	RTU	10.6%	3,230	344	51.55
Cooling	Air-Source Heat Pump	2.7%	3,229	88	13.16
Cooling	Geothermal Heat Pump	0.0%	2,154	0	0.00
Heating	Electric Furnace	2.7%	14,106	384	57.53
Heating	Electric Room Heat	14.7%	13,435	1,976	296.34
Heating	Air-Source Heat Pump	2.7%	12,840	349	52.34
Heating	Geothermal Heat Pump	0.0%	8,564	0	0.00
Ventilation	Ventilation	100.0%	469	469	70.34
Interior Lighting	Screw-in	100.0%	129	129	19.38
Interior Lighting	High-Bay Fixtures	100.0%	2,021	2,021	303.16
Interior Lighting	Linear Lighting	100.0%	336	336	50.40
Exterior Lighting	Screw-in	100.0%	24	24	3.57
Exterior Lighting	Area Lighting	100.0%	451	451	67.59
Exterior Lighting	Linear Lighting	100.0%	92	92	13.85
Motors	Pumps	100.0%	3,967	3,967	595.04
Motors	Fans & Blowers	100.0%	5,582	5,582	837.37
Motors	Compressed Air	100.0%	1,005	1,005	150.73
Motors	Material Handling	100.0%	23,111	23,111	3,466.72
Motors	Other Motors	100.0%	361	361	54.09
Process	Process Heating	100.0%	12,171	12,171	1,825.64
Process	Process Cooling	100.0%	747	747	112.03
Process	Process Refrigeration	100.0%	747	747	112.03
Process	Process Electrochemical	100.0%	209	209	31.42
Process	Process Other	100.0%	2,483	2,483	372.40
Miscellaneous	Miscellaneous	100.0%	1,938	1,938	290.63
Total				59,133	8,870

Table A-215 Idaho Stone Clay Glass Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,508	63
Cooling	Water-Cooled Chiller	2.5%	2,475	62
Cooling	RTU	10.6%	3,063	326
Cooling	Air-Source Heat Pump	2.7%	3,026	82
Cooling	Geothermal Heat Pump	0.0%	2,094	0
Heating	Electric Furnace	2.7%	13,194	359
Heating	Electric Room Heat	14.7%	12,565	1,848
Heating	Air-Source Heat Pump	2.7%	11,662	317
Heating	Geothermal Heat Pump	0.0%	4,464	0
Ventilation	Ventilation	100.0%	373	373
Interior Lighting	Screw-in	100.0%	182	182
Interior Lighting	High-Bay Fixtures	100.0%	2,119	2,119
Interior Lighting	Linear Lighting	100.0%	337	337
Exterior Lighting	Screw-in	100.0%	56	56
Exterior Lighting	Area Lighting	100.0%	496	496
Exterior Lighting	Linear Lighting	100.0%	91	91
Motors	Pumps	100.0%	3,967	3,967
Motors	Fans & Blowers	100.0%	5,582	5,582
Motors	Compressed Air	100.0%	1,005	1,005
Motors	Material Handling	100.0%	23,111	23,111
Motors	Other Motors	100.0%	361	361
Process	Process Heating	100.0%	12,171	12,171
Process	Process Cooling	100.0%	747	747
Process	Process Refrigeration	100.0%	747	747
Process	Process Electrochemical	100.0%	209	209
Process	Process Other	100.0%	2,483	2,483
Miscellaneous	Miscellaneous	100.0%	1,938	1,938
Total			59,031	

Table A-216 Idaho Transportation Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,814	120	7.15
Cooling	Water-Cooled Chiller	2.5%	4,875	122	7.24
Cooling	RTU	10.6%	5,172	550	32.67
Cooling	Air-Source Heat Pump	2.7%	5,171	141	8.34
Cooling	Geothermal Heat Pump	0.0%	3,449	0	0.00
Heating	Electric Furnace	2.7%	22,585	614	36.45
Heating	Electric Room Heat	14.7%	21,509	3,163	187.79
Heating	Air-Source Heat Pump	2.7%	20,558	559	33.17
Heating	Geothermal Heat Pump	0.0%	13,712	0	0.00
Ventilation	Ventilation	100.0%	751	751	44.58
Interior Lighting	Screw-in	100.0%	183	183	10.88
Interior Lighting	High-Bay Fixtures	100.0%	2,868	2,868	170.25
Interior Lighting	Linear Lighting	100.0%	477	477	28.30
Exterior Lighting	Screw-in	100.0%	34	34	2.00
Exterior Lighting	Area Lighting	100.0%	639	639	37.96
Exterior Lighting	Linear Lighting	100.0%	131	131	7.78
Motors	Pumps	100.0%	1,456	1,456	86.44
Motors	Fans & Blowers	100.0%	695	695	41.28
Motors	Compressed Air	100.0%	1,471	1,471	87.32
Motors	Material Handling	100.0%	7,104	7,104	421.75
Motors	Other Motors	100.0%	181	181	10.76
Process	Process Heating	100.0%	4,058	4,058	240.89
Process	Process Cooling	100.0%	896	896	53.17
Process	Process Refrigeration	100.0%	896	896	53.17
Process	Process Electrochemical	100.0%	487	487	28.90
Process	Process Other	100.0%	1,093	1,093	64.89
Miscellaneous	Miscellaneous	100.0%	1,783	1,783	105.86
Total				30,470	1,808.98

Table A-217 Idaho Transportation Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,016	100
Cooling	Water-Cooled Chiller	2.5%	3,963	99
Cooling	RTU	10.6%	4,905	522
Cooling	Air-Source Heat Pump	2.7%	4,845	132
Cooling	Geothermal Heat Pump	0.0%	3,353	0
Heating	Electric Furnace	2.7%	21,124	574
Heating	Electric Room Heat	14.7%	20,118	2,958
Heating	Air-Source Heat Pump	2.7%	18,671	507
Heating	Geothermal Heat Pump	0.0%	7,147	0
Ventilation	Ventilation	100.0%	597	597
Interior Lighting	Screw-in	100.0%	259	259
Interior Lighting	High-Bay Fixtures	100.0%	3,007	3,007
Interior Lighting	Linear Lighting	100.0%	478	478
Exterior Lighting	Screw-in	100.0%	79	79
Exterior Lighting	Area Lighting	100.0%	704	704
Exterior Lighting	Linear Lighting	100.0%	129	129
Motors	Pumps	100.0%	1,456	1,456
Motors	Fans & Blowers	100.0%	695	695
Motors	Compressed Air	100.0%	1,471	1,471
Motors	Material Handling	100.0%	7,104	7,104
Motors	Other Motors	100.0%	181	181
Process	Process Heating	100.0%	4,058	4,058
Process	Process Cooling	100.0%	896	896
Process	Process Refrigeration	100.0%	896	896
Process	Process Electrochemical	100.0%	487	487
Process	Process Other	100.0%	1,093	1,093
Miscellaneous	Miscellaneous	100.0%	1,783	1,783
Total			30,265	

Table A-218 Idaho Wastewater Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,779	119	5.97
Cooling	Water-Cooled Chiller	2.5%	4,839	121	6.05
Cooling	RTU	10.6%	5,133	546	27.31
Cooling	Air-Source Heat Pump	2.7%	5,132	139	6.97
Cooling	Geothermal Heat Pump	0.0%	3,423	0	0.00
Heating	Electric Furnace	2.7%	22,418	609	30.47
Heating	Electric Room Heat	14.7%	21,350	3,140	156.98
Heating	Air-Source Heat Pump	2.7%	20,405	555	27.73
Heating	Geothermal Heat Pump	0.0%	13,610	0	0.00
Ventilation	Ventilation	100.0%	745	745	37.26
Interior Lighting	Screw-in	100.0%	233	233	11.64
Interior Lighting	High-Bay Fixtures	100.0%	3,643	3,643	182.16
Interior Lighting	Linear Lighting	100.0%	606	606	30.28
Exterior Lighting	Screw-in	100.0%	43	43	2.14
Exterior Lighting	Area Lighting	100.0%	812	812	40.61
Exterior Lighting	Linear Lighting	100.0%	166	166	8.32
Motors	Pumps	100.0%	29,544	29,544	1,477.22
Motors	Fans & Blowers	100.0%	72,738	72,738	3,636.92
Motors	Compressed Air	100.0%	1,556	1,556	77.81
Motors	Material Handling	100.0%	6,951	6,951	347.54
Motors	Other Motors	100.0%	2,179	2,179	108.93
Process	Process Heating	0.0%	3,404	0	0.00
Process	Process Cooling	0.0%	3,404	0	0.00
Process	Process Refrigeration	0.0%	3,404	0	0.00
Process	Process Electrochemical	0.0%	3,404	0	0.00
Process	Process Other	100.0%	5,760	5,760	288.00
Miscellaneous	Miscellaneous	100.0%	3,404	3,404	170.18
Total				133,610	6,680.51

Table A-219 Idaho Wastewater New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,986	100
Cooling	Water-Cooled Chiller	2.5%	3,934	98
Cooling	RTU	10.6%	4,868	518
Cooling	Air-Source Heat Pump	2.7%	4,809	131
Cooling	Geothermal Heat Pump	0.0%	3,328	0
Heating	Electric Furnace	2.7%	20,967	570
Heating	Electric Room Heat	14.7%	19,969	2,936
Heating	Air-Source Heat Pump	2.7%	18,533	504
Heating	Geothermal Heat Pump	0.0%	7,094	0
Ventilation	Ventilation	100.0%	592	592
Interior Lighting	Screw-in	100.0%	329	329
Interior Lighting	High-Bay Fixtures	100.0%	3,820	3,820
Interior Lighting	Linear Lighting	100.0%	607	607
Exterior Lighting	Screw-in	100.0%	101	101
Exterior Lighting	Area Lighting	100.0%	894	894
Exterior Lighting	Linear Lighting	100.0%	164	164
Motors	Pumps	100.0%	29,544	29,544
Motors	Fans & Blowers	100.0%	72,738	72,738
Motors	Compressed Air	100.0%	1,556	1,556
Motors	Material Handling	100.0%	6,951	6,951
Motors	Other Motors	100.0%	2,179	2,179
Process	Process Heating	0.0%	3,404	0
Process	Process Cooling	0.0%	3,404	0
Process	Process Refrigeration	0.0%	3,404	0
Process	Process Electrochemical	0.0%	3,404	0
Process	Process Other	100.0%	5,760	5,760
Miscellaneous	Miscellaneous	100.0%	3,404	3,404
Total			133,496	

Table A-220 Idaho Water Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,123	78	9.95
Cooling	Water-Cooled Chiller	2.5%	3,163	79	10.08
Cooling	RTU	10.6%	3,355	357	45.50
Cooling	Air-Source Heat Pump	2.7%	3,355	91	11.62
Cooling	Geothermal Heat Pump	0.0%	2,237	0	0.00
Heating	Electric Furnace	2.7%	14,653	398	50.77
Heating	Electric Room Heat	14.7%	13,955	2,052	261.56
Heating	Air-Source Heat Pump	2.7%	13,337	362	46.20
Heating	Geothermal Heat Pump	0.0%	8,896	0	0.00
Ventilation	Ventilation	100.0%	487	487	62.09
Interior Lighting	Screw-in	100.0%	152	152	19.40
Interior Lighting	High-Bay Fixtures	100.0%	2,381	2,381	303.52
Interior Lighting	Linear Lighting	100.0%	396	396	50.45
Exterior Lighting	Screw-in	100.0%	28	28	3.57
Exterior Lighting	Area Lighting	100.0%	531	531	67.67
Exterior Lighting	Linear Lighting	100.0%	109	109	13.86
Motors	Pumps	100.0%	69,761	69,761	8,891.64
Motors	Fans & Blowers	0.0%	2,225	0	0.00
Motors	Compressed Air	100.0%	1,017	1,017	129.64
Motors	Material Handling	100.0%	3,027	3,027	385.76
Motors	Other Motors	100.0%	34	34	4.32
Process	Process Heating	0.0%	2,225	0	0.00
Process	Process Cooling	0.0%	2,225	0	0.00
Process	Process Refrigeration	0.0%	2,225	0	0.00
Process	Process Electrochemical	0.0%	2,225	0	0.00
Process	Process Other	100.0%	3,765	3,765	479.87
Miscellaneous	Miscellaneous	100.0%	2,225	2,225	283.56
Total				87,331	11,131.04

Table A-221 Idaho Water New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,605	65
Cooling	Water-Cooled Chiller	2.5%	2,571	64
Cooling	RTU	10.6%	3,182	339
Cooling	Air-Source Heat Pump	2.7%	3,143	85
Cooling	Geothermal Heat Pump	0.0%	2,175	0
Heating	Electric Furnace	2.7%	13,705	373
Heating	Electric Room Heat	14.7%	13,052	1,919
Heating	Air-Source Heat Pump	2.7%	12,113	329
Heating	Geothermal Heat Pump	0.0%	4,637	0
Ventilation	Ventilation	100.0%	387	387
Interior Lighting	Screw-in	100.0%	215	215
Interior Lighting	High-Bay Fixtures	100.0%	2,497	2,497
Interior Lighting	Linear Lighting	100.0%	397	397
Exterior Lighting	Screw-in	100.0%	66	66
Exterior Lighting	Area Lighting	100.0%	584	584
Exterior Lighting	Linear Lighting	100.0%	107	107
Motors	Pumps	100.0%	69,761	69,761
Motors	Fans & Blowers	0.0%	2,225	0
Motors	Compressed Air	100.0%	1,017	1,017
Motors	Material Handling	100.0%	3,027	3,027
Motors	Other Motors	100.0%	34	34
Process	Process Heating	0.0%	2,225	0
Process	Process Cooling	0.0%	2,225	0
Process	Process Refrigeration	0.0%	2,225	0
Process	Process Electrochemical	0.0%	2,225	0
Process	Process Other	100.0%	3,765	3,765
Miscellaneous	Miscellaneous	100.0%	2,225	2,225
Total			87,256	

Table A-222 Idaho Chemical Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,085	102	51.07
Cooling	Water-Cooled Chiller	2.5%	4,137	103	51.71
Cooling	RTU	10.6%	4,388	467	233.45
Cooling	Air-Source Heat Pump	2.7%	4,387	119	59.62
Cooling	Geothermal Heat Pump	0.0%	2,926	0	0.00
Heating	Electric Furnace	2.7%	19,164	521	260.51
Heating	Electric Room Heat	14.7%	18,252	2,684	1,341.99
Heating	Air-Source Heat Pump	2.7%	17,444	474	237.03
Heating	Geothermal Heat Pump	0.0%	11,635	0	0.00
Ventilation	Ventilation	100.0%	637	637	318.55
Interior Lighting	Screw-in	100.0%	136	136	67.95
Interior Lighting	High-Bay Fixtures	100.0%	2,126	2,126	1,062.99
Interior Lighting	Linear Lighting	100.0%	353	353	176.70
Exterior Lighting	Screw-in	100.0%	25	25	12.51
Exterior Lighting	Area Lighting	100.0%	474	474	236.99
Exterior Lighting	Linear Lighting	100.0%	97	97	48.55
Motors	Pumps	100.0%	13,263	13,263	6,631.36
Motors	Fans & Blowers	100.0%	6,060	6,060	3,030.22
Motors	Compressed Air	100.0%	14,053	14,053	7,026.60
Motors	Material Handling	100.0%	12,736	12,736	6,367.86
Motors	Other Motors	100.0%	1,670	1,670	834.77
Process	Process Heating	100.0%	5,585	5,585	2,792.58
Process	Process Cooling	100.0%	3,134	3,134	1,567.11
Process	Process Refrigeration	100.0%	3,134	3,134	1,567.11
Process	Process Electrochemical	100.0%	16,039	16,039	8,019.59
Process	Process Other	100.0%	998	998	499.03
Miscellaneous	Miscellaneous	100.0%	2,467	2,467	1,233.50
Total				87,459	43,729

Table A-223 Idaho Chemical Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,408	85
Cooling	Water-Cooled Chiller	2.5%	3,363	84
Cooling	RTU	10.6%	4,162	443
Cooling	Air-Source Heat Pump	2.7%	4,111	112
Cooling	Geothermal Heat Pump	0.0%	2,845	0
Heating	Electric Furnace	2.7%	17,924	487
Heating	Electric Room Heat	14.7%	17,071	2,510
Heating	Air-Source Heat Pump	2.7%	15,843	431
Heating	Geothermal Heat Pump	0.0%	6,065	0
Ventilation	Ventilation	100.0%	506	506
Interior Lighting	Screw-in	100.0%	192	192
Interior Lighting	High-Bay Fixtures	100.0%	2,229	2,229
Interior Lighting	Linear Lighting	100.0%	354	354
Exterior Lighting	Screw-in	100.0%	59	59
Exterior Lighting	Area Lighting	100.0%	522	522
Exterior Lighting	Linear Lighting	100.0%	96	96
Motors	Pumps	100.0%	13,263	13,263
Motors	Fans & Blowers	100.0%	6,060	6,060
Motors	Compressed Air	100.0%	14,053	14,053
Motors	Material Handling	100.0%	12,736	12,736
Motors	Other Motors	100.0%	1,670	1,670
Process	Process Heating	100.0%	5,585	5,585
Process	Process Cooling	100.0%	3,134	3,134
Process	Process Refrigeration	100.0%	3,134	3,134
Process	Process Electrochemical	100.0%	16,039	16,039
Process	Process Other	100.0%	998	998
Miscellaneous	Miscellaneous	100.0%	2,467	2,467
Total			87,249	

Table A-224 Idaho Electronic Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,343	84	4.18
Cooling	Water-Cooled Chiller	2.5%	3,385	85	4.23
Cooling	RTU	10.6%	3,591	382	19.11
Cooling	Air-Source Heat Pump	2.7%	3,591	98	4.88
Cooling	Geothermal Heat Pump	0.0%	2,395	0	0.00
Heating	Electric Furnace	2.7%	15,684	426	21.32
Heating	Electric Room Heat	14.7%	14,937	2,197	109.83
Heating	Air-Source Heat Pump	2.7%	14,276	388	19.40
Heating	Geothermal Heat Pump	0.0%	9,522	0	0.00
Ventilation	Ventilation	100.0%	521	521	26.07
Interior Lighting	Screw-in	100.0%	72	72	3.60
Interior Lighting	High-Bay Fixtures	100.0%	1,127	1,127	56.36
Interior Lighting	Linear Lighting	100.0%	187	187	9.37
Exterior Lighting	Screw-in	100.0%	13	13	0.66
Exterior Lighting	Area Lighting	100.0%	251	251	12.57
Exterior Lighting	Linear Lighting	100.0%	51	51	2.57
Motors	Pumps	100.0%	212	212	10.62
Motors	Fans & Blowers	100.0%	340	340	16.99
Motors	Compressed Air	100.0%	615	615	30.74
Motors	Material Handling	100.0%	1,922	1,922	96.10
Motors	Other Motors	0.0%	1,263	0	0.00
Process	Process Heating	100.0%	1,604	1,604	80.19
Process	Process Cooling	100.0%	745	745	37.24
Process	Process Refrigeration	100.0%	745	745	37.24
Process	Process Electrochemical	100.0%	280	280	13.99
Process	Process Other	100.0%	1,408	1,408	70.40
Miscellaneous	Miscellaneous	100.0%	1,263	1,263	63.16
Total				15,016	750.80

Table A-225 Idaho Electronic Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,789	70
Cooling	Water-Cooled Chiller	2.5%	2,752	69
Cooling	RTU	10.6%	3,406	362
Cooling	Air-Source Heat Pump	2.7%	3,364	91
Cooling	Geothermal Heat Pump	0.0%	2,328	0
Heating	Electric Furnace	2.7%	14,669	399
Heating	Electric Room Heat	14.7%	13,970	2,054
Heating	Air-Source Heat Pump	2.7%	12,966	352
Heating	Geothermal Heat Pump	0.0%	4,963	0
Ventilation	Ventilation	100.0%	415	415
Interior Lighting	Screw-in	100.0%	102	102
Interior Lighting	High-Bay Fixtures	100.0%	1,182	1,182
Interior Lighting	Linear Lighting	100.0%	188	188
Exterior Lighting	Screw-in	100.0%	31	31
Exterior Lighting	Area Lighting	100.0%	277	277
Exterior Lighting	Linear Lighting	100.0%	51	51
Motors	Pumps	100.0%	212	212
Motors	Fans & Blowers	100.0%	340	340
Motors	Compressed Air	100.0%	615	615
Motors	Material Handling	100.0%	1,922	1,922
Motors	Other Motors	0.0%	1,263	0
Process	Process Heating	100.0%	1,604	1,604
Process	Process Cooling	100.0%	745	745
Process	Process Refrigeration	100.0%	745	745
Process	Process Electrochemical	100.0%	280	280
Process	Process Other	100.0%	1,408	1,408
Miscellaneous	Miscellaneous	100.0%	1,263	1,263
Total			14,776	

Table A-226 Idaho Industrial Machinery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,850	71	18.83
Cooling	Water-Cooled Chiller	2.5%	2,886	72	19.07
Cooling	RTU	10.6%	3,061	326	86.09
Cooling	Air-Source Heat Pump	2.7%	3,060	83	21.99
Cooling	Geothermal Heat Pump	0.0%	2,041	0	0.00
Heating	Electric Furnace	2.7%	13,368	363	96.07
Heating	Electric Room Heat	14.7%	12,732	1,872	494.91
Heating	Air-Source Heat Pump	2.7%	12,168	331	87.41
Heating	Geothermal Heat Pump	0.0%	8,116	0	0.00
Ventilation	Ventilation	100.0%	444	444	117.48
Interior Lighting	Screw-in	100.0%	92	92	24.22
Interior Lighting	High-Bay Fixtures	100.0%	1,434	1,434	378.98
Interior Lighting	Linear Lighting	100.0%	238	238	63.00
Exterior Lighting	Screw-in	100.0%	17	17	4.46
Exterior Lighting	Area Lighting	100.0%	320	320	84.49
Exterior Lighting	Linear Lighting	100.0%	65	65	17.31
Motors	Pumps	100.0%	787	787	208.17
Motors	Fans & Blowers	100.0%	1,833	1,833	484.46
Motors	Compressed Air	100.0%	1,561	1,561	412.55
Motors	Material Handling	100.0%	2,527	2,527	667.91
Motors	Other Motors	0.0%	1,094	0	0.00
Process	Process Heating	100.0%	1,044	1,044	275.94
Process	Process Cooling	100.0%	204	204	54.06
Process	Process Refrigeration	100.0%	204	204	54.06
Process	Process Electrochemical	100.0%	139	139	36.62
Process	Process Other	100.0%	466	466	123.11
Miscellaneous	Miscellaneous	100.0%	1,094	1,094	289.13
Total				15,587	4,120.32

Table A-227 Idaho Industrial Machinery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,377	59
Cooling	Water-Cooled Chiller	2.5%	2,346	59
Cooling	RTU	10.6%	2,903	309
Cooling	Air-Source Heat Pump	2.7%	2,868	78
Cooling	Geothermal Heat Pump	0.0%	1,985	0
Heating	Electric Furnace	2.7%	12,503	340
Heating	Electric Room Heat	14.7%	11,908	1,751
Heating	Air-Source Heat Pump	2.7%	11,052	300
Heating	Geothermal Heat Pump	0.0%	4,230	0
Ventilation	Ventilation	100.0%	353	353
Interior Lighting	Screw-in	100.0%	129	129
Interior Lighting	High-Bay Fixtures	100.0%	1,503	1,503
Interior Lighting	Linear Lighting	100.0%	239	239
Exterior Lighting	Screw-in	100.0%	40	40
Exterior Lighting	Area Lighting	100.0%	352	352
Exterior Lighting	Linear Lighting	100.0%	65	65
Motors	Pumps	100.0%	787	787
Motors	Fans & Blowers	100.0%	1,833	1,833
Motors	Compressed Air	100.0%	1,561	1,561
Motors	Material Handling	100.0%	2,527	2,527
Motors	Other Motors	0.0%	1,094	0
Process	Process Heating	100.0%	1,044	1,044
Process	Process Cooling	100.0%	204	204
Process	Process Refrigeration	100.0%	204	204
Process	Process Electrochemical	100.0%	139	139
Process	Process Other	100.0%	466	466
Miscellaneous	Miscellaneous	100.0%	1,094	1,094
Total			15,436	

Table A-228 Idaho Lumber & Wood Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,121	53	5.30
Cooling	Water-Cooled Chiller	2.5%	2,148	54	5.37
Cooling	RTU	10.6%	2,278	242	24.24
Cooling	Air-Source Heat Pump	2.7%	2,278	62	6.19
Cooling	Geothermal Heat Pump	0.0%	1,519	0	0.00
Heating	Electric Furnace	2.7%	9,950	271	27.05
Heating	Electric Room Heat	14.7%	9,476	1,394	139.35
Heating	Air-Source Heat Pump	2.7%	9,057	246	24.61
Heating	Geothermal Heat Pump	0.0%	6,041	0	0.00
Ventilation	Ventilation	100.0%	331	331	33.08
Interior Lighting	Screw-in	100.0%	162	162	16.24
Interior Lighting	High-Bay Fixtures	100.0%	2,541	2,541	254.11
Interior Lighting	Linear Lighting	100.0%	422	422	42.24
Exterior Lighting	Screw-in	100.0%	30	30	2.99
Exterior Lighting	Area Lighting	100.0%	567	567	56.65
Exterior Lighting	Linear Lighting	100.0%	116	116	11.61
Motors	Pumps	100.0%	5,653	5,653	565.28
Motors	Fans & Blowers	100.0%	4,165	4,165	416.54
Motors	Compressed Air	100.0%	2,143	2,143	214.35
Motors	Material Handling	100.0%	28,835	28,835	2,883.53
Motors	Other Motors	100.0%	437	437	43.72
Process	Process Heating	100.0%	4,712	4,712	471.18
Process	Process Cooling	100.0%	350	350	34.96
Process	Process Refrigeration	100.0%	350	350	34.96
Process	Process Electrochemical	100.0%	406	406	40.63
Process	Process Other	100.0%	293	293	29.31
Miscellaneous	Miscellaneous	100.0%	2,483	2,483	248.28
Total				56,318	5,631.79

Table A-229 Idaho Lumber & Wood Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,769	44
Cooling	Water-Cooled Chiller	2.5%	1,746	44
Cooling	RTU	10.6%	2,161	230
Cooling	Air-Source Heat Pump	2.7%	2,134	58
Cooling	Geothermal Heat Pump	0.0%	1,477	0
Heating	Electric Furnace	2.7%	9,306	253
Heating	Electric Room Heat	14.7%	8,863	1,303
Heating	Air-Source Heat Pump	2.7%	8,226	224
Heating	Geothermal Heat Pump	0.0%	3,149	0
Ventilation	Ventilation	100.0%	263	263
Interior Lighting	Screw-in	100.0%	229	229
Interior Lighting	High-Bay Fixtures	100.0%	2,665	2,665
Interior Lighting	Linear Lighting	100.0%	423	423
Exterior Lighting	Screw-in	100.0%	70	70
Exterior Lighting	Area Lighting	100.0%	623	623
Exterior Lighting	Linear Lighting	100.0%	114	114
Motors	Pumps	100.0%	5,653	5,653
Motors	Fans & Blowers	100.0%	4,165	4,165
Motors	Compressed Air	100.0%	2,143	2,143
Motors	Material Handling	100.0%	28,835	28,835
Motors	Other Motors	100.0%	437	437
Process	Process Heating	100.0%	4,712	4,712
Process	Process Cooling	100.0%	350	350
Process	Process Refrigeration	100.0%	350	350
Process	Process Electrochemical	100.0%	406	406
Process	Process Other	100.0%	293	293
Miscellaneous	Miscellaneous	100.0%	2,483	2,483
Total			56,372	

Table A-230 Idaho Metal Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	912	23	7.09
Cooling	Water-Cooled Chiller	2.5%	923	23	7.18
Cooling	RTU	10.6%	979	104	32.42
Cooling	Air-Source Heat Pump	2.7%	979	27	8.28
Cooling	Geothermal Heat Pump	0.0%	653	0	0.00
Heating	Electric Furnace	2.7%	4,277	116	36.18
Heating	Electric Room Heat	14.7%	4,074	599	186.39
Heating	Air-Source Heat Pump	2.7%	3,893	106	32.92
Heating	Geothermal Heat Pump	0.0%	2,597	0	0.00
Ventilation	Ventilation	100.0%	142	142	44.24
Interior Lighting	Screw-in	100.0%	43	43	13.49
Interior Lighting	High-Bay Fixtures	100.0%	678	678	211.05
Interior Lighting	Linear Lighting	100.0%	113	113	35.08
Exterior Lighting	Screw-in	100.0%	8	8	2.48
Exterior Lighting	Area Lighting	100.0%	151	151	47.05
Exterior Lighting	Linear Lighting	100.0%	31	31	9.64
Motors	Pumps	100.0%	713	713	221.73
Motors	Fans & Blowers	100.0%	340	340	105.90
Motors	Compressed Air	100.0%	720	720	223.99
Motors	Material Handling	100.0%	3,477	3,477	1,081.84
Motors	Other Motors	100.0%	89	89	27.60
Process	Process Heating	100.0%	2,072	2,072	644.65
Process	Process Cooling	100.0%	183	183	57.00
Process	Process Refrigeration	100.0%	183	183	57.00
Process	Process Electrochemical	100.0%	349	349	108.54
Process	Process Other	100.0%	447	447	139.12
Miscellaneous	Miscellaneous	100.0%	423	423	131.52
Total				11,160	3,472.41

Table A-231 Idaho Metal Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	761	19
Cooling	Water-Cooled Chiller	2.5%	751	19
Cooling	RTU	10.6%	929	99
Cooling	Air-Source Heat Pump	2.7%	918	25
Cooling	Geothermal Heat Pump	0.0%	635	0
Heating	Electric Furnace	2.7%	4,001	109
Heating	Electric Room Heat	14.7%	3,810	560
Heating	Air-Source Heat Pump	2.7%	3,536	96
Heating	Geothermal Heat Pump	0.0%	1,354	0
Ventilation	Ventilation	100.0%	113	113
Interior Lighting	Screw-in	100.0%	61	61
Interior Lighting	High-Bay Fixtures	100.0%	711	711
Interior Lighting	Linear Lighting	100.0%	113	113
Exterior Lighting	Screw-in	100.0%	19	19
Exterior Lighting	Area Lighting	100.0%	166	166
Exterior Lighting	Linear Lighting	100.0%	31	31
Motors	Pumps	100.0%	713	713
Motors	Fans & Blowers	100.0%	340	340
Motors	Compressed Air	100.0%	720	720
Motors	Material Handling	100.0%	3,477	3,477
Motors	Other Motors	100.0%	89	89
Process	Process Heating	100.0%	2,072	2,072
Process	Process Cooling	100.0%	183	183
Process	Process Refrigeration	100.0%	183	183
Process	Process Electrochemical	100.0%	349	349
Process	Process Other	100.0%	447	447
Miscellaneous	Miscellaneous	100.0%	423	423
Total			11,137	

Table A-232 Idaho Miscellaneous Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	13,092	327	84.96
Cooling	Water-Cooled Chiller	2.5%	13,256	331	86.02
Cooling	RTU	10.6%	14,063	1,496	388.39
Cooling	Air-Source Heat Pump	2.7%	14,060	382	99.18
Cooling	Geothermal Heat Pump	0.0%	9,378	0	0.00
Heating	Electric Furnace	2.7%	61,414	1,670	433.40
Heating	Electric Room Heat	14.7%	58,490	8,601	2,232.64
Heating	Air-Source Heat Pump	2.7%	55,901	1,519	394.35
Heating	Geothermal Heat Pump	0.0%	37,286	0	0.00
Ventilation	Ventilation	100.0%	2,042	2,042	529.97
Interior Lighting	Screw-in	100.0%	453	453	117.62
Interior Lighting	High-Bay Fixtures	100.0%	7,089	7,089	1,840.07
Interior Lighting	Linear Lighting	100.0%	1,178	1,178	305.88
Exterior Lighting	Screw-in	100.0%	83	83	21.65
Exterior Lighting	Area Lighting	100.0%	1,580	1,580	410.24
Exterior Lighting	Linear Lighting	100.0%	324	324	84.05
Motors	Pumps	100.0%	4,863	4,863	1,262.25
Motors	Fans & Blowers	100.0%	3,224	3,224	836.82
Motors	Compressed Air	100.0%	3,407	3,407	884.40
Motors	Material Handling	100.0%	9,090	9,090	2,359.46
Motors	Other Motors	100.0%	1,320	1,320	342.74
Process	Process Heating	100.0%	7,041	7,041	1,827.63
Process	Process Cooling	100.0%	1,849	1,849	479.85
Process	Process Refrigeration	100.0%	1,849	1,849	479.85
Process	Process Electrochemical	100.0%	712	712	184.72
Process	Process Other	100.0%	772	772	200.46
Miscellaneous	Miscellaneous	100.0%	4,248	4,248	1,102.75
Total				65,451	16,989.35

Table A-233 Idaho Miscellaneous Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	10,921	273
Cooling	Water-Cooled Chiller	2.5%	10,777	269
Cooling	RTU	10.6%	13,337	1,419
Cooling	Air-Source Heat Pump	2.7%	13,174	358
Cooling	Geothermal Heat Pump	0.0%	9,118	0
Heating	Electric Furnace	2.7%	57,440	1,562
Heating	Electric Room Heat	14.7%	54,705	8,045
Heating	Air-Source Heat Pump	2.7%	50,772	1,380
Heating	Geothermal Heat Pump	0.0%	19,435	0
Ventilation	Ventilation	100.0%	1,623	1,623
Interior Lighting	Screw-in	100.0%	640	640
Interior Lighting	High-Bay Fixtures	100.0%	7,433	7,433
Interior Lighting	Linear Lighting	100.0%	1,181	1,181
Exterior Lighting	Screw-in	100.0%	196	196
Exterior Lighting	Area Lighting	100.0%	1,739	1,739
Exterior Lighting	Linear Lighting	100.0%	319	319
Motors	Pumps	100.0%	4,863	4,863
Motors	Fans & Blowers	100.0%	3,224	3,224
Motors	Compressed Air	100.0%	3,407	3,407
Motors	Material Handling	100.0%	9,090	9,090
Motors	Other Motors	100.0%	1,320	1,320
Process	Process Heating	100.0%	7,041	7,041
Process	Process Cooling	100.0%	1,849	1,849
Process	Process Refrigeration	100.0%	1,849	1,849
Process	Process Electrochemical	100.0%	712	712
Process	Process Other	100.0%	772	772
Miscellaneous	Miscellaneous	100.0%	4,248	4,248
Total			64,811	

Table A-234 Utah Agriculture Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,287	57	241.2
Cooling	Water-Cooled Chiller	2.5%	2,156	54	227.4
Cooling	RTU	11.9%	2,545	303	1,276.8
Cooling	Air-Source Heat Pump	1.7%	2,544	44	184.3
Cooling	Geothermal Heat Pump	0.0%	1,697	0	0.0
Heating	Electric Furnace	2.9%	5,504	158	667.3
Heating	Electric Room Heat	15.5%	5,241	815	3,437.5
Heating	Air-Source Heat Pump	1.7%	4,939	85	357.8
Heating	Geothermal Heat Pump	0.0%	3,294	0	0.0
Ventilation	Ventilation	100.0%	201	201	848.9
Interior Lighting	Screw-in	100.0%	61	61	258.7
Interior Lighting	High-Bay Fixtures	100.0%	960	960	4,047.4
Interior Lighting	Linear Lighting	100.0%	160	160	672.8
Exterior Lighting	Screw-in	100.0%	11	11	47.6
Exterior Lighting	Area Lighting	100.0%	214	214	902.4
Exterior Lighting	Linear Lighting	100.0%	44	44	184.9
Motors	Pumps	100.0%	569	569	2,400.7
Motors	Fans & Blowers	100.0%	3,546	3,546	14,954.1
Motors	Compressed Air	100.0%	753	753	3,175.1
Motors	Material Handling	100.0%	4,357	4,357	18,378.3
Motors	Other Motors	0.0%	1,005	0	0.0
Process	Process Heating	100.0%	1,519	1,519	6,408.1
Process	Process Cooling	100.0%	2,557	2,557	10,783.1
Process	Process Refrigeration	100.0%	2,557	2,557	10,783.1
Process	Process Electrochemical	100.0%	49	49	206.4
Process	Process Other	100.0%	190	190	801.6
Miscellaneous	Miscellaneous	100.0%	1,005	1,005	4,236.9
Total				20,267	85,482.3

Table A-235 Utah Agriculture New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,908	48
Cooling	Water-Cooled Chiller	2.5%	1,753	44
Cooling	RTU	11.9%	2,413	287
Cooling	Air-Source Heat Pump	1.7%	2,384	41
Cooling	Geothermal Heat Pump	0.0%	1,650	0
Heating	Electric Furnace	2.9%	5,147	148
Heating	Electric Room Heat	15.5%	4,902	762
Heating	Air-Source Heat Pump	1.7%	4,485	77
Heating	Geothermal Heat Pump	0.0%	1,717	0
Ventilation	Ventilation	100.0%	160	160
Interior Lighting	Screw-in	100.0%	87	87
Interior Lighting	High-Bay Fixtures	100.0%	1,006	1,006
Interior Lighting	Linear Lighting	100.0%	160	160
Exterior Lighting	Screw-in	100.0%	27	27
Exterior Lighting	Area Lighting	100.0%	235	235
Exterior Lighting	Linear Lighting	100.0%	43	43
Motors	Pumps	100.0%	569	569
Motors	Fans & Blowers	100.0%	3,546	3,546
Motors	Compressed Air	100.0%	753	753
Motors	Material Handling	100.0%	4,357	4,357
Motors	Other Motors	0.0%	1,005	0
Process	Process Heating	100.0%	1,519	1,519
Process	Process Cooling	100.0%	2,557	2,557
Process	Process Refrigeration	100.0%	2,557	2,557
Process	Process Electrochemical	100.0%	49	49
Process	Process Other	100.0%	190	190
Miscellaneous	Miscellaneous	100.0%	1,005	1,005
Total			20,226	

Table A-236 Utah Mining and Extraction Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Emp.)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	7,062	177	1,908.3
Cooling	Water-Cooled Chiller	2.5%	6,658	166	1,799.2
Cooling	RTU	11.9%	7,857	935	10,103.0
Cooling	Air-Source Heat Pump	1.7%	7,855	135	1,458.4
Cooling	Geothermal Heat Pump	0.0%	5,239	0	0.0
Heating	Electric Furnace	2.9%	16,992	488	5,280.1
Heating	Electric Room Heat	15.5%	16,183	2,516	27,200.2
Heating	Air-Source Heat Pump	1.7%	15,248	262	2,831.1
Heating	Geothermal Heat Pump	0.0%	10,170	0	0.0
Ventilation	Ventilation	100.0%	621	621	6,717.0
Interior Lighting	Screw-in	100.0%	288	288	3,117.4
Interior Lighting	High-Bay Fixtures	100.0%	4,512	4,512	48,769.2
Interior Lighting	Linear Lighting	100.0%	750	750	8,106.9
Exterior Lighting	Screw-in	100.0%	53	53	573.9
Exterior Lighting	Area Lighting	100.0%	1,006	1,006	10,873.0
Exterior Lighting	Linear Lighting	100.0%	206	206	2,227.5
Motors	Pumps	100.0%	51,795	51,795	559,876.1
Motors	Fans & Blowers	100.0%	14,387	14,387	155,521.1
Motors	Compressed Air	100.0%	21,581	21,581	233,281.7
Motors	Material Handling	100.0%	15,107	15,107	163,297.2
Motors	Other Motors	100.0%	41,004	41,004	443,235.2
Process	Process Heating	100.0%	1,514	1,514	16,370.6
Process	Process Cooling	0.0%	1,514	0	0.0
Process	Process Refrigeration	0.0%	1,514	0	0.0
Process	Process Electrochemical	100.0%	1,514	1,514	16,370.6
Process	Process Other	100.0%	8,330	8,330	90,038.6
Miscellaneous	Miscellaneous	100.0%	1,514	1,514	16,370.6
Total				168,863	1,825,327.0

Table A-237 Utah Mining and Extraction New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	5,890	147
Cooling	Water-Cooled Chiller	2.5%	5,412	135
Cooling	RTU	11.9%	7,451	886
Cooling	Air-Source Heat Pump	1.7%	7,360	126
Cooling	Geothermal Heat Pump	0.0%	5,094	0
Heating	Electric Furnace	2.9%	15,892	457
Heating	Electric Room Heat	15.5%	15,136	2,354
Heating	Air-Source Heat Pump	1.7%	13,849	238
Heating	Geothermal Heat Pump	0.0%	5,301	0
Ventilation	Ventilation	100.0%	494	494
Interior Lighting	Screw-in	100.0%	407	407
Interior Lighting	High-Bay Fixtures	100.0%	4,731	4,731
Interior Lighting	Linear Lighting	100.0%	752	752
Exterior Lighting	Screw-in	100.0%	125	125
Exterior Lighting	Area Lighting	100.0%	1,107	1,107
Exterior Lighting	Linear Lighting	100.0%	203	203
Motors	Pumps	100.0%	51,795	51,795
Motors	Fans & Blowers	100.0%	14,387	14,387
Motors	Compressed Air	100.0%	21,581	21,581
Motors	Material Handling	100.0%	15,107	15,107
Motors	Other Motors	100.0%	41,004	41,004
Process	Process Heating	100.0%	1,514	1,514
Process	Process Cooling	0.0%	1,514	0
Process	Process Refrigeration	0.0%	1,514	0
Process	Process Electrochemical	100.0%	1,514	1,514
Process	Process Other	100.0%	8,330	8,330
Miscellaneous	Miscellaneous	100.0%	1,514	1,514
Total			168,910	

Table A-238 Utah Food Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,187	30	391.8
Cooling	Water-Cooled Chiller	2.5%	1,119	28	369.4
Cooling	RTU	11.9%	1,320	157	2,074.2
Cooling	Air-Source Heat Pump	1.7%	1,320	23	299.4
Cooling	Geothermal Heat Pump	0.0%	880	0	0.0
Heating	Electric Furnace	2.9%	2,855	82	1,084.0
Heating	Electric Room Heat	15.5%	2,719	423	5,584.3
Heating	Air-Source Heat Pump	1.7%	2,562	44	581.2
Heating	Geothermal Heat Pump	0.0%	1,709	0	0.0
Ventilation	Ventilation	100.0%	104	104	1,379.0
Interior Lighting	Screw-in	100.0%	79	79	1,038.0
Interior Lighting	High-Bay Fixtures	100.0%	1,229	1,229	16,238.5
Interior Lighting	Linear Lighting	100.0%	204	204	2,699.3
Exterior Lighting	Screw-in	100.0%	14	14	191.1
Exterior Lighting	Area Lighting	100.0%	274	274	3,620.3
Exterior Lighting	Linear Lighting	100.0%	56	56	741.7
Motors	Pumps	100.0%	3,867	3,867	51,074.9
Motors	Fans & Blowers	100.0%	6,430	6,430	84,919.0
Motors	Compressed Air	100.0%	2,473	2,473	32,660.0
Motors	Material Handling	100.0%	12,129	12,129	160,200.7
Motors	Other Motors	100.0%	1,241	1,241	16,388.1
Process	Process Heating	100.0%	1,621	1,621	21,407.0
Process	Process Cooling	100.0%	2,204	2,204	29,110.2
Process	Process Refrigeration	100.0%	2,204	2,204	29,110.2
Process	Process Electrochemical	100.0%	87	87	1,149.6
Process	Process Other	100.0%	338	338	4,464.7
Miscellaneous	Miscellaneous	100.0%	705	705	9,314.4
Total				36,047	476,091.1

Table A-239 Utah Food Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	990	25
Cooling	Water-Cooled Chiller	2.5%	909	23
Cooling	RTU	11.9%	1,252	149
Cooling	Air-Source Heat Pump	1.7%	1,237	21
Cooling	Geothermal Heat Pump	0.0%	856	0
Heating	Electric Furnace	2.9%	2,670	77
Heating	Electric Room Heat	15.5%	2,543	395
Heating	Air-Source Heat Pump	1.7%	2,327	40
Heating	Geothermal Heat Pump	0.0%	891	0
Ventilation	Ventilation	100.0%	83	83
Interior Lighting	Screw-in	100.0%	111	111
Interior Lighting	High-Bay Fixtures	100.0%	1,289	1,289
Interior Lighting	Linear Lighting	100.0%	205	205
Exterior Lighting	Screw-in	100.0%	34	34
Exterior Lighting	Area Lighting	100.0%	302	302
Exterior Lighting	Linear Lighting	100.0%	55	55
Motors	Pumps	100.0%	3,867	3,867
Motors	Fans & Blowers	100.0%	6,430	6,430
Motors	Compressed Air	100.0%	2,473	2,473
Motors	Material Handling	100.0%	12,129	12,129
Motors	Other Motors	100.0%	1,241	1,241
Process	Process Heating	100.0%	1,621	1,621
Process	Process Cooling	100.0%	2,204	2,204
Process	Process Refrigeration	100.0%	2,204	2,204
Process	Process Electrochemical	100.0%	87	87
Process	Process Other	100.0%	338	338
Miscellaneous	Miscellaneous	100.0%	705	705
Total			36,108	

Table A-240 Utah Paper Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,869	47	111.4
Cooling	Water-Cooled Chiller	2.5%	1,762	44	105.0
Cooling	RTU	11.9%	2,080	247	589.7
Cooling	Air-Source Heat Pump	1.7%	2,079	36	85.1
Cooling	Geothermal Heat Pump	0.0%	1,387	0	0.0
Heating	Electric Furnace	2.9%	4,498	129	308.2
Heating	Electric Room Heat	15.5%	4,284	666	1,587.6
Heating	Air-Source Heat Pump	1.7%	4,036	69	165.2
Heating	Geothermal Heat Pump	0.0%	2,692	0	0.0
Ventilation	Ventilation	100.0%	164	164	392.1
Interior Lighting	Screw-in	100.0%	166	166	396.0
Interior Lighting	High-Bay Fixtures	100.0%	2,599	2,599	6,195.4
Interior Lighting	Linear Lighting	100.0%	432	432	1,029.9
Exterior Lighting	Screw-in	100.0%	31	31	72.9
Exterior Lighting	Area Lighting	100.0%	579	579	1,381.3
Exterior Lighting	Linear Lighting	100.0%	119	119	283.0
Motors	Pumps	100.0%	17,006	17,006	40,535.5
Motors	Fans & Blowers	100.0%	16,440	16,440	39,185.3
Motors	Compressed Air	100.0%	9,238	9,238	22,019.0
Motors	Material Handling	100.0%	39,205	39,205	93,447.0
Motors	Other Motors	100.0%	1,038	1,038	2,474.1
Process	Process Heating	100.0%	2,435	2,435	5,803.9
Process	Process Cooling	100.0%	481	481	1,147.5
Process	Process Refrigeration	100.0%	481	481	1,147.5
Process	Process Electrochemical	100.0%	802	802	1,912.4
Process	Process Other	100.0%	1,391	1,391	3,315.6
Miscellaneous	Miscellaneous	100.0%	1,475	1,475	3,515.9
Total				95,323	227,206.4

Table A-241 Utah Paper Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,559	39
Cooling	Water-Cooled Chiller	2.5%	1,433	36
Cooling	RTU	11.9%	1,972	235
Cooling	Air-Source Heat Pump	1.7%	1,948	33
Cooling	Geothermal Heat Pump	0.0%	1,348	0
Heating	Electric Furnace	2.9%	4,207	121
Heating	Electric Room Heat	15.5%	4,006	623
Heating	Air-Source Heat Pump	1.7%	3,666	63
Heating	Geothermal Heat Pump	0.0%	1,403	0
Ventilation	Ventilation	100.0%	131	131
Interior Lighting	Screw-in	100.0%	235	235
Interior Lighting	High-Bay Fixtures	100.0%	2,726	2,726
Interior Lighting	Linear Lighting	100.0%	433	433
Exterior Lighting	Screw-in	100.0%	72	72
Exterior Lighting	Area Lighting	100.0%	638	638
Exterior Lighting	Linear Lighting	100.0%	117	117
Motors	Pumps	100.0%	17,006	17,006
Motors	Fans & Blowers	100.0%	16,440	16,440
Motors	Compressed Air	100.0%	9,238	9,238
Motors	Material Handling	100.0%	39,205	39,205
Motors	Other Motors	100.0%	1,038	1,038
Process	Process Heating	100.0%	2,435	2,435
Process	Process Cooling	100.0%	481	481
Process	Process Refrigeration	100.0%	481	481
Process	Process Electrochemical	100.0%	802	802
Process	Process Other	100.0%	1,391	1,391
Miscellaneous	Miscellaneous	100.0%	1,475	1,475
Total			95,494	

Table A-242 Utah Petroleum Refining Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	15,354	384	442.2
Cooling	Water-Cooled Chiller	2.5%	14,476	362	417.0
Cooling	RTU	11.9%	17,082	2,032	2,341.4
Cooling	Air-Source Heat Pump	1.7%	17,078	293	338.0
Cooling	Geothermal Heat Pump	0.0%	11,391	0	0.0
Heating	Electric Furnace	2.9%	36,945	1,062	1,223.7
Heating	Electric Room Heat	15.5%	35,186	5,471	6,303.7
Heating	Air-Source Heat Pump	1.7%	33,153	569	656.1
Heating	Geothermal Heat Pump	0.0%	22,113	0	0.0
Ventilation	Ventilation	100.0%	1,351	1,351	1,556.7
Interior Lighting	Screw-in	100.0%	324	324	372.8
Interior Lighting	High-Bay Fixtures	100.0%	5,062	5,062	5,831.8
Interior Lighting	Linear Lighting	100.0%	841	841	969.4
Exterior Lighting	Screw-in	100.0%	60	60	68.6
Exterior Lighting	Area Lighting	100.0%	1,128	1,128	1,300.2
Exterior Lighting	Linear Lighting	100.0%	231	231	266.4
Motors	Pumps	100.0%	150,954	150,954	173,923.7
Motors	Fans & Blowers	100.0%	24,747	24,747	28,512.1
Motors	Compressed Air	100.0%	39,595	39,595	45,619.3
Motors	Material Handling	100.0%	35,470	35,470	40,867.3
Motors	Other Motors	100.0%	13,865	13,865	15,975.0
Process	Process Heating	100.0%	13,251	13,251	15,267.4
Process	Process Cooling	100.0%	8,079	8,079	9,308.1
Process	Process Refrigeration	100.0%	8,079	8,079	9,308.1
Process	Process Electrochemical	100.0%	325	325	374.6
Process	Process Other	100.0%	2,463	2,463	2,838.2
Miscellaneous	Miscellaneous	100.0%	3,451	3,451	3,976.2
Total				319,450	368,057.9

Table A-243 Utah Petroleum Refining New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	12,807	320
Cooling	Water-Cooled Chiller	2.5%	11,768	294
Cooling	RTU	11.9%	16,200	1,927
Cooling	Air-Source Heat Pump	1.7%	16,002	275
Cooling	Geothermal Heat Pump	0.0%	11,075	0
Heating	Electric Furnace	2.9%	34,554	993
Heating	Electric Room Heat	15.5%	32,909	5,117
Heating	Air-Source Heat Pump	1.7%	30,111	517
Heating	Geothermal Heat Pump	0.0%	11,526	0
Ventilation	Ventilation	100.0%	1,074	1,074
Interior Lighting	Screw-in	100.0%	457	457
Interior Lighting	High-Bay Fixtures	100.0%	5,307	5,307
Interior Lighting	Linear Lighting	100.0%	843	843
Exterior Lighting	Screw-in	100.0%	140	140
Exterior Lighting	Area Lighting	100.0%	1,242	1,242
Exterior Lighting	Linear Lighting	100.0%	228	228
Motors	Pumps	100.0%	150,954	150,954
Motors	Fans & Blowers	100.0%	24,747	24,747
Motors	Compressed Air	100.0%	39,595	39,595
Motors	Material Handling	100.0%	35,470	35,470
Motors	Other Motors	100.0%	13,865	13,865
Process	Process Heating	100.0%	13,251	13,251
Process	Process Cooling	100.0%	8,079	8,079
Process	Process Refrigeration	100.0%	8,079	8,079
Process	Process Electrochemical	100.0%	325	325
Process	Process Other	100.0%	2,463	2,463
Miscellaneous	Miscellaneous	100.0%	3,451	3,451
Total			319,014	

Table A-244 Utah Stone Clay Glass Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,869	147	606.3
Cooling	Water-Cooled Chiller	2.5%	5,533	138	571.7
Cooling	RTU	11.9%	6,530	777	3,210.1
Cooling	Air-Source Heat Pump	1.7%	6,528	112	463.4
Cooling	Geothermal Heat Pump	0.0%	4,354	0	0.0
Heating	Electric Furnace	2.9%	14,122	406	1,677.7
Heating	Electric Room Heat	15.5%	13,450	2,091	8,642.4
Heating	Air-Source Heat Pump	1.7%	12,673	218	899.5
Heating	Geothermal Heat Pump	0.0%	8,453	0	0.0
Ventilation	Ventilation	100.0%	516	516	2,134.2
Interior Lighting	Screw-in	100.0%	151	151	625.6
Interior Lighting	High-Bay Fixtures	100.0%	2,368	2,368	9,786.3
Interior Lighting	Linear Lighting	100.0%	394	394	1,626.8
Exterior Lighting	Screw-in	100.0%	28	28	115.2
Exterior Lighting	Area Lighting	100.0%	528	528	2,181.8
Exterior Lighting	Linear Lighting	100.0%	108	108	447.0
Motors	Pumps	100.0%	4,648	4,648	19,208.2
Motors	Fans & Blowers	100.0%	6,541	6,541	27,030.9
Motors	Compressed Air	100.0%	1,177	1,177	4,865.6
Motors	Material Handling	100.0%	27,080	27,080	111,908.0
Motors	Other Motors	100.0%	423	423	1,746.2
Process	Process Heating	100.0%	14,261	14,261	58,932.8
Process	Process Cooling	100.0%	875	875	3,616.4
Process	Process Refrigeration	100.0%	875	875	3,616.4
Process	Process Electrochemical	100.0%	245	245	1,014.3
Process	Process Other	100.0%	2,909	2,909	12,021.2
Miscellaneous	Miscellaneous	100.0%	2,270	2,270	9,381.6
Total				69,288	286,329.3

Table A-245 Utah Stone Clay Glass Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,896	122
Cooling	Water-Cooled Chiller	2.5%	4,498	112
Cooling	RTU	11.9%	6,192	737
Cooling	Air-Source Heat Pump	1.7%	6,117	105
Cooling	Geothermal Heat Pump	0.0%	4,233	0
Heating	Electric Furnace	2.9%	13,208	380
Heating	Electric Room Heat	15.5%	12,579	1,956
Heating	Air-Source Heat Pump	1.7%	11,510	198
Heating	Geothermal Heat Pump	0.0%	4,406	0
Ventilation	Ventilation	100.0%	411	411
Interior Lighting	Screw-in	100.0%	214	214
Interior Lighting	High-Bay Fixtures	100.0%	2,483	2,483
Interior Lighting	Linear Lighting	100.0%	395	395
Exterior Lighting	Screw-in	100.0%	65	65
Exterior Lighting	Area Lighting	100.0%	581	581
Exterior Lighting	Linear Lighting	100.0%	107	107
Motors	Pumps	100.0%	4,648	4,648
Motors	Fans & Blowers	100.0%	6,541	6,541
Motors	Compressed Air	100.0%	1,177	1,177
Motors	Material Handling	100.0%	27,080	27,080
Motors	Other Motors	100.0%	423	423
Process	Process Heating	100.0%	14,261	14,261
Process	Process Cooling	100.0%	875	875
Process	Process Refrigeration	100.0%	875	875
Process	Process Electrochemical	100.0%	245	245
Process	Process Other	100.0%	2,909	2,909
Miscellaneous	Miscellaneous	100.0%	2,270	2,270
Total			69,170	

Table A-246 Utah Transportation Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	11,538	288	2,763.5
Cooling	Water-Cooled Chiller	2.5%	10,878	272	2,605.5
Cooling	RTU	11.9%	12,837	1,527	14,630.6
Cooling	Air-Source Heat Pump	1.7%	12,833	220	2,111.9
Cooling	Geothermal Heat Pump	0.0%	8,560	0	0.0
Heating	Electric Furnace	2.9%	27,763	798	7,646.4
Heating	Electric Room Heat	15.5%	26,441	4,111	39,389.7
Heating	Air-Source Heat Pump	1.7%	24,913	428	4,099.8
Heating	Geothermal Heat Pump	0.0%	16,617	0	0.0
Ventilation	Ventilation	100.0%	1,015	1,015	9,727.1
Interior Lighting	Screw-in	100.0%	264	264	2,526.7
Interior Lighting	High-Bay Fixtures	100.0%	4,126	4,126	39,528.4
Interior Lighting	Linear Lighting	100.0%	686	686	6,570.9
Exterior Lighting	Screw-in	100.0%	49	49	465.1
Exterior Lighting	Area Lighting	100.0%	920	920	8,812.8
Exterior Lighting	Linear Lighting	100.0%	188	188	1,805.5
Motors	Pumps	100.0%	2,095	2,095	20,069.8
Motors	Fans & Blowers	100.0%	1,000	1,000	9,585.5
Motors	Compressed Air	100.0%	2,116	2,116	20,274.1
Motors	Material Handling	100.0%	10,221	10,221	97,922.1
Motors	Other Motors	100.0%	261	261	2,498.3
Process	Process Heating	100.0%	5,838	5,838	55,929.3
Process	Process Cooling	100.0%	1,289	1,289	12,344.9
Process	Process Refrigeration	100.0%	1,289	1,289	12,344.9
Process	Process Electrochemical	100.0%	700	700	6,709.7
Process	Process Other	100.0%	1,573	1,573	15,066.8
Miscellaneous	Miscellaneous	100.0%	2,565	2,565	24,577.9
Total				43,839	420,007.3

Table A-247 Utah Transportation Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	9,624	241
Cooling	Water-Cooled Chiller	2.5%	8,843	221
Cooling	RTU	11.9%	12,174	1,448
Cooling	Air-Source Heat Pump	1.7%	12,025	207
Cooling	Geothermal Heat Pump	0.0%	8,322	0
Heating	Electric Furnace	2.9%	25,966	746
Heating	Electric Room Heat	15.5%	24,730	3,845
Heating	Air-Source Heat Pump	1.7%	22,627	389
Heating	Geothermal Heat Pump	0.0%	8,662	0
Ventilation	Ventilation	100.0%	807	807
Interior Lighting	Screw-in	100.0%	372	372
Interior Lighting	High-Bay Fixtures	100.0%	4,326	4,326
Interior Lighting	Linear Lighting	100.0%	687	687
Exterior Lighting	Screw-in	100.0%	114	114
Exterior Lighting	Area Lighting	100.0%	1,012	1,012
Exterior Lighting	Linear Lighting	100.0%	186	186
Motors	Pumps	100.0%	2,095	2,095
Motors	Fans & Blowers	100.0%	1,000	1,000
Motors	Compressed Air	100.0%	2,116	2,116
Motors	Material Handling	100.0%	10,221	10,221
Motors	Other Motors	100.0%	261	261
Process	Process Heating	100.0%	5,838	5,838
Process	Process Cooling	100.0%	1,289	1,289
Process	Process Refrigeration	100.0%	1,289	1,289
Process	Process Electrochemical	100.0%	700	700
Process	Process Other	100.0%	1,573	1,573
Miscellaneous	Miscellaneous	100.0%	2,565	2,565
Total			43,548	

Table A-248 Utah Wastewater Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	10,305	258	142.2
Cooling	Water-Cooled Chiller	2.5%	9,715	243	134.1
Cooling	RTU	11.9%	11,465	1,364	752.9
Cooling	Air-Source Heat Pump	1.7%	11,462	197	108.7
Cooling	Geothermal Heat Pump	0.0%	7,645	0	0.0
Heating	Electric Furnace	2.9%	24,796	713	393.5
Heating	Electric Room Heat	15.5%	23,615	3,672	2,027.1
Heating	Air-Source Heat Pump	1.7%	22,251	382	211.0
Heating	Geothermal Heat Pump	0.0%	14,841	0	0.0
Ventilation	Ventilation	100.0%	907	907	500.6
Interior Lighting	Screw-in	100.0%	301	301	166.4
Interior Lighting	High-Bay Fixtures	100.0%	4,716	4,716	2,603.8
Interior Lighting	Linear Lighting	100.0%	784	784	432.8
Exterior Lighting	Screw-in	100.0%	55	55	30.6
Exterior Lighting	Area Lighting	100.0%	1,052	1,052	580.5
Exterior Lighting	Linear Lighting	100.0%	215	215	118.9
Motors	Pumps	100.0%	38,247	38,247	21,114.8
Motors	Fans & Blowers	100.0%	94,164	94,164	51,984.8
Motors	Compressed Air	100.0%	2,015	2,015	1,112.1
Motors	Material Handling	100.0%	8,998	8,998	4,967.6
Motors	Other Motors	100.0%	2,820	2,820	1,557.0
Process	Process Heating	0.0%	4,406	0	0.0
Process	Process Cooling	0.0%	4,406	0	0.0
Process	Process Refrigeration	0.0%	4,406	0	0.0
Process	Process Electrochemical	0.0%	4,406	0	0.0
Process	Process Other	100.0%	7,457	7,457	4,116.6
Miscellaneous	Miscellaneous	100.0%	4,406	4,406	2,432.5
Total				172,967	95,488.7

Table A-249 Utah Wastewater New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	8,596	215
Cooling	Water-Cooled Chiller	2.5%	7,898	197
Cooling	RTU	11.9%	10,873	1,293
Cooling	Air-Source Heat Pump	1.7%	10,739	184
Cooling	Geothermal Heat Pump	0.0%	7,433	0
Heating	Electric Furnace	2.9%	23,191	667
Heating	Electric Room Heat	15.5%	22,087	3,434
Heating	Air-Source Heat Pump	1.7%	20,209	347
Heating	Geothermal Heat Pump	0.0%	7,736	0
Ventilation	Ventilation	100.0%	721	721
Interior Lighting	Screw-in	100.0%	426	426
Interior Lighting	High-Bay Fixtures	100.0%	4,946	4,946
Interior Lighting	Linear Lighting	100.0%	786	786
Exterior Lighting	Screw-in	100.0%	130	130
Exterior Lighting	Area Lighting	100.0%	1,157	1,157
Exterior Lighting	Linear Lighting	100.0%	212	212
Motors	Pumps	100.0%	38,247	38,247
Motors	Fans & Blowers	100.0%	94,164	94,164
Motors	Compressed Air	100.0%	2,015	2,015
Motors	Material Handling	100.0%	8,998	8,998
Motors	Other Motors	100.0%	2,820	2,820
Process	Process Heating	0.0%	4,406	0
Process	Process Cooling	0.0%	4,406	0
Process	Process Refrigeration	0.0%	4,406	0
Process	Process Electrochemical	0.0%	4,406	0
Process	Process Other	100.0%	7,457	7,457
Miscellaneous	Miscellaneous	100.0%	4,406	4,406
Total			172,824	

Table A-250 Utah Water Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,246	81	235.8
Cooling	Water-Cooled Chiller	2.5%	3,060	77	222.4
Cooling	RTU	11.9%	3,611	430	1,248.6
Cooling	Air-Source Heat Pump	1.7%	3,611	62	180.2
Cooling	Geothermal Heat Pump	0.0%	2,408	0	0.0
Heating	Electric Furnace	2.9%	7,811	225	652.6
Heating	Electric Room Heat	15.5%	7,439	1,157	3,361.6
Heating	Air-Source Heat Pump	1.7%	7,009	120	349.9
Heating	Geothermal Heat Pump	0.0%	4,675	0	0.0
Ventilation	Ventilation	100.0%	286	286	830.1
Interior Lighting	Screw-in	100.0%	95	95	276.0
Interior Lighting	High-Bay Fixtures	100.0%	1,486	1,486	4,317.7
Interior Lighting	Linear Lighting	100.0%	247	247	717.7
Exterior Lighting	Screw-in	100.0%	17	17	50.8
Exterior Lighting	Area Lighting	100.0%	331	331	962.6
Exterior Lighting	Linear Lighting	100.0%	68	68	197.2
Motors	Pumps	100.0%	43,525	43,525	126,489.4
Motors	Fans & Blowers	0.0%	1,388	0	0.0
Motors	Compressed Air	100.0%	635	635	1,844.2
Motors	Material Handling	100.0%	1,888	1,888	5,487.7
Motors	Other Motors	100.0%	21	21	61.5
Process	Process Heating	0.0%	1,388	0	0.0
Process	Process Cooling	0.0%	1,388	0	0.0
Process	Process Refrigeration	0.0%	1,388	0	0.0
Process	Process Electrochemical	0.0%	1,388	0	0.0
Process	Process Other	100.0%	2,349	2,349	6,826.4
Miscellaneous	Miscellaneous	100.0%	1,388	1,388	4,033.8
Total				54,487	158,346.3

Table A-251 Utah Water New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,708	68
Cooling	Water-Cooled Chiller	2.5%	2,488	62
Cooling	RTU	11.9%	3,425	407
Cooling	Air-Source Heat Pump	1.7%	3,383	58
Cooling	Geothermal Heat Pump	0.0%	2,341	0
Heating	Electric Furnace	2.9%	7,305	210
Heating	Electric Room Heat	15.5%	6,958	1,082
Heating	Air-Source Heat Pump	1.7%	6,366	109
Heating	Geothermal Heat Pump	0.0%	2,437	0
Ventilation	Ventilation	100.0%	227	227
Interior Lighting	Screw-in	100.0%	134	134
Interior Lighting	High-Bay Fixtures	100.0%	1,558	1,558
Interior Lighting	Linear Lighting	100.0%	248	248
Exterior Lighting	Screw-in	100.0%	41	41
Exterior Lighting	Area Lighting	100.0%	365	365
Exterior Lighting	Linear Lighting	100.0%	67	67
Motors	Pumps	100.0%	43,525	43,525
Motors	Fans & Blowers	0.0%	1,388	0
Motors	Compressed Air	100.0%	635	635
Motors	Material Handling	100.0%	1,888	1,888
Motors	Other Motors	100.0%	21	21
Process	Process Heating	0.0%	1,388	0
Process	Process Cooling	0.0%	1,388	0
Process	Process Refrigeration	0.0%	1,388	0
Process	Process Electrochemical	0.0%	1,388	0
Process	Process Other	100.0%	2,349	2,349
Miscellaneous	Miscellaneous	100.0%	1,388	1,388
Total			54,442	

Table A-252 Utah Chemical Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,768	94	1,109.5
Cooling	Water-Cooled Chiller	2.5%	3,553	89	1,046.1
Cooling	RTU	11.9%	4,192	499	5,874.1
Cooling	Air-Source Heat Pump	1.7%	4,191	72	847.9
Cooling	Geothermal Heat Pump	0.0%	2,796	0	0.0
Heating	Electric Furnace	2.9%	9,067	261	3,070.0
Heating	Electric Room Heat	15.5%	8,635	1,343	15,814.6
Heating	Air-Source Heat Pump	1.7%	8,137	140	1,646.0
Heating	Geothermal Heat Pump	0.0%	5,427	0	0.0
Ventilation	Ventilation	100.0%	332	332	3,905.4
Interior Lighting	Screw-in	100.0%	75	75	886.3
Interior Lighting	High-Bay Fixtures	100.0%	1,177	1,177	13,865.7
Interior Lighting	Linear Lighting	100.0%	196	196	2,304.9
Exterior Lighting	Screw-in	100.0%	14	14	163.2
Exterior Lighting	Area Lighting	100.0%	262	262	3,091.3
Exterior Lighting	Linear Lighting	100.0%	54	54	633.3
Motors	Pumps	100.0%	7,344	7,344	86,500.1
Motors	Fans & Blowers	100.0%	3,356	3,356	39,526.5
Motors	Compressed Air	100.0%	7,782	7,782	91,655.7
Motors	Material Handling	100.0%	7,053	7,053	83,063.0
Motors	Other Motors	100.0%	925	925	10,888.8
Process	Process Heating	100.0%	3,093	3,093	36,426.7
Process	Process Cooling	100.0%	1,736	1,736	20,441.5
Process	Process Refrigeration	100.0%	1,736	1,736	20,441.5
Process	Process Electrochemical	100.0%	8,882	8,882	104,608.4
Process	Process Other	100.0%	553	553	6,509.4
Miscellaneous	Miscellaneous	100.0%	1,366	1,366	16,089.9
Total				48,431	570,409.8

Table A-253 Utah Chemical Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,143	79
Cooling	Water-Cooled Chiller	2.5%	2,888	72
Cooling	RTU	11.9%	3,976	473
Cooling	Air-Source Heat Pump	1.7%	3,927	67
Cooling	Geothermal Heat Pump	0.0%	2,718	0
Heating	Electric Furnace	2.9%	8,480	244
Heating	Electric Room Heat	15.5%	8,077	1,256
Heating	Air-Source Heat Pump	1.7%	7,390	127
Heating	Geothermal Heat Pump	0.0%	2,829	0
Ventilation	Ventilation	100.0%	264	264
Interior Lighting	Screw-in	100.0%	106	106
Interior Lighting	High-Bay Fixtures	100.0%	1,234	1,234
Interior Lighting	Linear Lighting	100.0%	196	196
Exterior Lighting	Screw-in	100.0%	33	33
Exterior Lighting	Area Lighting	100.0%	289	289
Exterior Lighting	Linear Lighting	100.0%	53	53
Motors	Pumps	100.0%	7,344	7,344
Motors	Fans & Blowers	100.0%	3,356	3,356
Motors	Compressed Air	100.0%	7,782	7,782
Motors	Material Handling	100.0%	7,053	7,053
Motors	Other Motors	100.0%	925	925
Process	Process Heating	100.0%	3,093	3,093
Process	Process Cooling	100.0%	1,736	1,736
Process	Process Refrigeration	100.0%	1,736	1,736
Process	Process Electrochemical	100.0%	8,882	8,882
Process	Process Other	100.0%	553	553
Miscellaneous	Miscellaneous	100.0%	1,366	1,366
Total			48,317	

Table A-254 Utah Electronic Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	13,264	332	4,118.0
Cooling	Water-Cooled Chiller	2.5%	12,505	313	3,882.5
Cooling	RTU	11.9%	14,757	1,756	21,801.5
Cooling	Air-Source Heat Pump	1.7%	14,753	253	3,147.0
Cooling	Geothermal Heat Pump	0.0%	9,840	0	0.0
Heating	Electric Furnace	2.9%	31,915	917	11,394.1
Heating	Electric Room Heat	15.5%	30,396	4,726	58,695.9
Heating	Air-Source Heat Pump	1.7%	28,640	492	6,109.2
Heating	Geothermal Heat Pump	0.0%	19,103	0	0.0
Ventilation	Ventilation	100.0%	1,167	1,167	14,494.7
Interior Lighting	Screw-in	100.0%	172	172	2,131.1
Interior Lighting	High-Bay Fixtures	100.0%	2,685	2,685	33,340.0
Interior Lighting	Linear Lighting	100.0%	446	446	5,542.1
Exterior Lighting	Screw-in	100.0%	32	32	392.3
Exterior Lighting	Area Lighting	100.0%	599	599	7,433.1
Exterior Lighting	Linear Lighting	100.0%	123	123	1,522.8
Motors	Pumps	100.0%	506	506	6,281.7
Motors	Fans & Blowers	100.0%	809	809	10,050.7
Motors	Compressed Air	100.0%	1,464	1,464	18,183.5
Motors	Material Handling	100.0%	4,578	4,578	56,849.5
Motors	Other Motors	0.0%	3,009	0	0.0
Process	Process Heating	100.0%	3,820	3,820	47,434.9
Process	Process Cooling	100.0%	1,774	1,774	22,027.8
Process	Process Refrigeration	100.0%	1,774	1,774	22,027.8
Process	Process Electrochemical	100.0%	667	667	8,277.8
Process	Process Other	100.0%	3,354	3,354	41,648.0
Miscellaneous	Miscellaneous	100.0%	3,009	3,009	37,362.5
Total				35,764	444,148.9

Table A-255 Utah Electronic Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	11,064	277
Cooling	Water-Cooled Chiller	2.5%	10,166	254
Cooling	RTU	11.9%	13,995	1,665
Cooling	Air-Source Heat Pump	1.7%	13,823	237
Cooling	Geothermal Heat Pump	0.0%	9,567	0
Heating	Electric Furnace	2.9%	29,850	858
Heating	Electric Room Heat	15.5%	28,429	4,421
Heating	Air-Source Heat Pump	1.7%	26,012	447
Heating	Geothermal Heat Pump	0.0%	9,957	0
Ventilation	Ventilation	100.0%	928	928
Interior Lighting	Screw-in	100.0%	242	242
Interior Lighting	High-Bay Fixtures	100.0%	2,815	2,815
Interior Lighting	Linear Lighting	100.0%	447	447
Exterior Lighting	Screw-in	100.0%	74	74
Exterior Lighting	Area Lighting	100.0%	659	659
Exterior Lighting	Linear Lighting	100.0%	121	121
Motors	Pumps	100.0%	506	506
Motors	Fans & Blowers	100.0%	809	809
Motors	Compressed Air	100.0%	1,464	1,464
Motors	Material Handling	100.0%	4,578	4,578
Motors	Other Motors	0.0%	3,009	0
Process	Process Heating	100.0%	3,820	3,820
Process	Process Cooling	100.0%	1,774	1,774
Process	Process Refrigeration	100.0%	1,774	1,774
Process	Process Electrochemical	100.0%	667	667
Process	Process Other	100.0%	3,354	3,354
Miscellaneous	Miscellaneous	100.0%	3,009	3,009
Total			35,197	

Table A-256 Utah Industrial Machinery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	7,581	190	896.5
Cooling	Water-Cooled Chiller	2.5%	7,148	179	845.2
Cooling	RTU	11.9%	8,435	1,003	4,746.3
Cooling	Air-Source Heat Pump	1.7%	8,433	145	685.1
Cooling	Geothermal Heat Pump	0.0%	5,625	0	0.0
Heating	Electric Furnace	2.9%	18,243	524	2,480.6
Heating	Electric Room Heat	15.5%	17,374	2,702	12,778.4
Heating	Air-Source Heat Pump	1.7%	16,370	281	1,330.0
Heating	Geothermal Heat Pump	0.0%	10,919	0	0.0
Ventilation	Ventilation	100.0%	667	667	3,155.6
Interior Lighting	Screw-in	100.0%	146	146	692.3
Interior Lighting	High-Bay Fixtures	100.0%	2,290	2,290	10,831.1
Interior Lighting	Linear Lighting	100.0%	381	381	1,800.5
Exterior Lighting	Screw-in	100.0%	27	27	127.5
Exterior Lighting	Area Lighting	100.0%	511	511	2,414.8
Exterior Lighting	Linear Lighting	100.0%	105	105	494.7
Motors	Pumps	100.0%	1,258	1,258	5,949.3
Motors	Fans & Blowers	100.0%	2,927	2,927	13,845.7
Motors	Compressed Air	100.0%	2,493	2,493	11,790.5
Motors	Material Handling	100.0%	4,036	4,036	19,088.7
Motors	Other Motors	0.0%	1,747	0	0.0
Process	Process Heating	100.0%	1,667	1,667	7,886.3
Process	Process Cooling	100.0%	327	327	1,544.9
Process	Process Refrigeration	100.0%	327	327	1,544.9
Process	Process Electrochemical	100.0%	221	221	1,046.5
Process	Process Other	100.0%	744	744	3,518.5
Miscellaneous	Miscellaneous	100.0%	1,747	1,747	8,263.2
Total				24,895	117,757.2

Table A-257 Utah Industrial Machinery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	6,324	158
Cooling	Water-Cooled Chiller	2.5%	5,811	145
Cooling	RTU	11.9%	7,999	952
Cooling	Air-Source Heat Pump	1.7%	7,901	136
Cooling	Geothermal Heat Pump	0.0%	5,468	0
Heating	Electric Furnace	2.9%	17,062	490
Heating	Electric Room Heat	15.5%	16,250	2,527
Heating	Air-Source Heat Pump	1.7%	14,868	255
Heating	Geothermal Heat Pump	0.0%	5,691	0
Ventilation	Ventilation	100.0%	530	530
Interior Lighting	Screw-in	100.0%	207	207
Interior Lighting	High-Bay Fixtures	100.0%	2,401	2,401
Interior Lighting	Linear Lighting	100.0%	382	382
Exterior Lighting	Screw-in	100.0%	63	63
Exterior Lighting	Area Lighting	100.0%	562	562
Exterior Lighting	Linear Lighting	100.0%	103	103
Motors	Pumps	100.0%	1,258	1,258
Motors	Fans & Blowers	100.0%	2,927	2,927
Motors	Compressed Air	100.0%	2,493	2,493
Motors	Material Handling	100.0%	4,036	4,036
Motors	Other Motors	0.0%	1,747	0
Process	Process Heating	100.0%	1,667	1,667
Process	Process Cooling	100.0%	327	327
Process	Process Refrigeration	100.0%	327	327
Process	Process Electrochemical	100.0%	221	221
Process	Process Other	100.0%	744	744
Miscellaneous	Miscellaneous	100.0%	1,747	1,747
Total			24,657	

Table A-258 Utah Lumber & Wood Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	882	22	34.0
Cooling	Water-Cooled Chiller	2.5%	832	21	32.1
Cooling	RTU	11.9%	981	117	180.1
Cooling	Air-Source Heat Pump	1.7%	981	17	26.0
Cooling	Geothermal Heat Pump	0.0%	654	0	0.0
Heating	Electric Furnace	2.9%	2,122	61	94.1
Heating	Electric Room Heat	15.5%	2,021	314	484.9
Heating	Air-Source Heat Pump	1.7%	1,904	33	50.5
Heating	Geothermal Heat Pump	0.0%	1,270	0	0.0
Ventilation	Ventilation	100.0%	78	78	119.8
Interior Lighting	Screw-in	100.0%	41	41	62.6
Interior Lighting	High-Bay Fixtures	100.0%	634	634	978.8
Interior Lighting	Linear Lighting	100.0%	105	105	162.7
Exterior Lighting	Screw-in	100.0%	7	7	11.5
Exterior Lighting	Area Lighting	100.0%	141	141	218.2
Exterior Lighting	Linear Lighting	100.0%	29	29	44.7
Motors	Pumps	100.0%	1,411	1,411	2,177.5
Motors	Fans & Blowers	100.0%	1,040	1,040	1,604.5
Motors	Compressed Air	100.0%	535	535	825.7
Motors	Material Handling	100.0%	7,198	7,198	11,107.4
Motors	Other Motors	100.0%	109	109	168.4
Process	Process Heating	100.0%	1,176	1,176	1,815.0
Process	Process Cooling	100.0%	87	87	134.7
Process	Process Refrigeration	100.0%	87	87	134.7
Process	Process Electrochemical	100.0%	101	101	156.5
Process	Process Other	100.0%	73	73	112.9
Miscellaneous	Miscellaneous	100.0%	620	620	956.4
Total				14,058	21,693.7

Table A-259 Utah Lumber & Wood Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	736	18
Cooling	Water-Cooled Chiller	2.5%	676	17
Cooling	RTU	11.9%	931	111
Cooling	Air-Source Heat Pump	1.7%	919	16
Cooling	Geothermal Heat Pump	0.0%	636	0
Heating	Electric Furnace	2.9%	1,985	57
Heating	Electric Room Heat	15.5%	1,890	294
Heating	Air-Source Heat Pump	1.7%	1,730	30
Heating	Geothermal Heat Pump	0.0%	662	0
Ventilation	Ventilation	100.0%	62	62
Interior Lighting	Screw-in	100.0%	57	57
Interior Lighting	High-Bay Fixtures	100.0%	665	665
Interior Lighting	Linear Lighting	100.0%	106	106
Exterior Lighting	Screw-in	100.0%	18	18
Exterior Lighting	Area Lighting	100.0%	156	156
Exterior Lighting	Linear Lighting	100.0%	29	29
Motors	Pumps	100.0%	1,411	1,411
Motors	Fans & Blowers	100.0%	1,040	1,040
Motors	Compressed Air	100.0%	535	535
Motors	Material Handling	100.0%	7,198	7,198
Motors	Other Motors	100.0%	109	109
Process	Process Heating	100.0%	1,176	1,176
Process	Process Cooling	100.0%	87	87
Process	Process Refrigeration	100.0%	87	87
Process	Process Electrochemical	100.0%	101	101
Process	Process Other	100.0%	73	73
Miscellaneous	Miscellaneous	100.0%	620	620
Total			14,072	

Table A-260 Utah Metal Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,796	70	1,000.4
Cooling	Water-Cooled Chiller	2.5%	2,636	66	943.2
Cooling	RTU	11.9%	3,111	370	5,296.4
Cooling	Air-Source Heat Pump	1.7%	3,110	53	764.5
Cooling	Geothermal Heat Pump	0.0%	2,075	0	0.0
Heating	Electric Furnace	2.9%	6,728	193	2,768.1
Heating	Electric Room Heat	15.5%	6,408	996	14,259.4
Heating	Air-Source Heat Pump	1.7%	6,038	104	1,484.2
Heating	Geothermal Heat Pump	0.0%	4,027	0	0.0
Ventilation	Ventilation	100.0%	246	246	3,521.3
Interior Lighting	Screw-in	100.0%	80	80	1,142.4
Interior Lighting	High-Bay Fixtures	100.0%	1,249	1,249	17,871.8
Interior Lighting	Linear Lighting	100.0%	208	208	2,970.8
Exterior Lighting	Screw-in	100.0%	15	15	210.3
Exterior Lighting	Area Lighting	100.0%	278	278	3,984.5
Exterior Lighting	Linear Lighting	100.0%	57	57	816.3
Motors	Pumps	100.0%	1,312	1,312	18,776.4
Motors	Fans & Blowers	100.0%	627	627	8,967.7
Motors	Compressed Air	100.0%	1,325	1,325	18,967.5
Motors	Material Handling	100.0%	6,402	6,402	91,611.4
Motors	Other Motors	100.0%	163	163	2,337.3
Process	Process Heating	100.0%	3,815	3,815	54,589.6
Process	Process Cooling	100.0%	337	337	4,827.1
Process	Process Refrigeration	100.0%	337	337	4,827.1
Process	Process Electrochemical	100.0%	642	642	9,191.6
Process	Process Other	100.0%	823	823	11,780.7
Miscellaneous	Miscellaneous	100.0%	778	778	11,137.7
Total				20,547	294,047.8

Table A-261 Utah Metal Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,333	58
Cooling	Water-Cooled Chiller	2.5%	2,143	54
Cooling	RTU	11.9%	2,950	351
Cooling	Air-Source Heat Pump	1.7%	2,914	50
Cooling	Geothermal Heat Pump	0.0%	2,017	0
Heating	Electric Furnace	2.9%	6,293	181
Heating	Electric Room Heat	15.5%	5,993	932
Heating	Air-Source Heat Pump	1.7%	5,484	94
Heating	Geothermal Heat Pump	0.0%	2,099	0
Ventilation	Ventilation	100.0%	196	196
Interior Lighting	Screw-in	100.0%	113	113
Interior Lighting	High-Bay Fixtures	100.0%	1,310	1,310
Interior Lighting	Linear Lighting	100.0%	208	208
Exterior Lighting	Screw-in	100.0%	35	35
Exterior Lighting	Area Lighting	100.0%	306	306
Exterior Lighting	Linear Lighting	100.0%	56	56
Motors	Pumps	100.0%	1,312	1,312
Motors	Fans & Blowers	100.0%	627	627
Motors	Compressed Air	100.0%	1,325	1,325
Motors	Material Handling	100.0%	6,402	6,402
Motors	Other Motors	100.0%	163	163
Process	Process Heating	100.0%	3,815	3,815
Process	Process Cooling	100.0%	337	337
Process	Process Refrigeration	100.0%	337	337
Process	Process Electrochemical	100.0%	642	642
Process	Process Other	100.0%	823	823
Miscellaneous	Miscellaneous	100.0%	778	778
Total			20,505	

Table A-262 Utah Miscellaneous Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	6,606	165	4,872.6
Cooling	Water-Cooled Chiller	2.5%	6,229	156	4,594.1
Cooling	RTU	11.9%	7,350	874	25,797.0
Cooling	Air-Source Heat Pump	1.7%	7,348	126	3,723.8
Cooling	Geothermal Heat Pump	0.0%	4,901	0	0.0
Heating	Electric Furnace	2.9%	15,897	457	13,482.3
Heating	Electric Room Heat	15.5%	15,140	2,354	69,452.8
Heating	Air-Source Heat Pump	1.7%	14,265	245	7,228.8
Heating	Geothermal Heat Pump	0.0%	9,515	0	0.0
Ventilation	Ventilation	100.0%	581	581	17,151.1
Interior Lighting	Screw-in	100.0%	137	137	4,050.0
Interior Lighting	High-Bay Fixtures	100.0%	2,148	2,148	63,359.0
Interior Lighting	Linear Lighting	100.0%	357	357	10,532.2
Exterior Lighting	Screw-in	100.0%	25	25	745.6
Exterior Lighting	Area Lighting	100.0%	479	479	14,125.8
Exterior Lighting	Linear Lighting	100.0%	98	98	2,893.9
Motors	Pumps	100.0%	1,473	1,473	43,463.0
Motors	Fans & Blowers	100.0%	977	977	28,814.0
Motors	Compressed Air	100.0%	1,032	1,032	30,452.5
Motors	Material Handling	100.0%	2,754	2,754	81,243.2
Motors	Other Motors	100.0%	400	400	11,801.6
Process	Process Heating	100.0%	2,133	2,133	62,930.6
Process	Process Cooling	100.0%	560	560	16,522.6
Process	Process Refrigeration	100.0%	560	560	16,522.6
Process	Process Electrochemical	100.0%	216	216	6,360.3
Process	Process Other	100.0%	234	234	6,902.5
Miscellaneous	Miscellaneous	100.0%	1,287	1,287	37,970.9
Total				19,829	584,992.8

Table A-263 Utah Miscellaneous Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	5,511	138
Cooling	Water-Cooled Chiller	2.5%	5,064	127
Cooling	RTU	11.9%	6,971	829
Cooling	Air-Source Heat Pump	1.7%	6,885	118
Cooling	Geothermal Heat Pump	0.0%	4,765	0
Heating	Electric Furnace	2.9%	14,868	427
Heating	Electric Room Heat	15.5%	14,160	2,202
Heating	Air-Source Heat Pump	1.7%	12,956	223
Heating	Geothermal Heat Pump	0.0%	4,960	0
Ventilation	Ventilation	100.0%	462	462
Interior Lighting	Screw-in	100.0%	194	194
Interior Lighting	High-Bay Fixtures	100.0%	2,252	2,252
Interior Lighting	Linear Lighting	100.0%	358	358
Exterior Lighting	Screw-in	100.0%	59	59
Exterior Lighting	Area Lighting	100.0%	527	527
Exterior Lighting	Linear Lighting	100.0%	97	97
Motors	Pumps	100.0%	1,473	1,473
Motors	Fans & Blowers	100.0%	977	977
Motors	Compressed Air	100.0%	1,032	1,032
Motors	Material Handling	100.0%	2,754	2,754
Motors	Other Motors	100.0%	400	400
Process	Process Heating	100.0%	2,133	2,133
Process	Process Cooling	100.0%	560	560
Process	Process Refrigeration	100.0%	560	560
Process	Process Electrochemical	100.0%	216	216
Process	Process Other	100.0%	234	234
Miscellaneous	Miscellaneous	100.0%	1,287	1,287
Total			19,638	

Table A-264 Washington Agriculture Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,437	36	160.2
Cooling	Water-Cooled Chiller	2.5%	1,514	38	168.8
Cooling	RTU	11.7%	1,602	187	832.7
Cooling	Air-Source Heat Pump	1.7%	1,601	27	122.6
Cooling	Geothermal Heat Pump	0.0%	1,068	0	0.0
Heating	Electric Furnace	2.3%	7,040	164	733.5
Heating	Electric Room Heat	12.6%	6,705	847	3,778.6
Heating	Air-Source Heat Pump	1.7%	6,182	106	473.6
Heating	Geothermal Heat Pump	0.0%	4,124	0	0.0
Ventilation	Ventilation	100.0%	234	234	1,042.0
Interior Lighting	Screw-in	100.0%	59	59	261.3
Interior Lighting	High-Bay Fixtures	100.0%	916	916	4,087.2
Interior Lighting	Linear Lighting	100.0%	152	152	679.4
Exterior Lighting	Screw-in	100.0%	11	11	48.1
Exterior Lighting	Area Lighting	100.0%	204	204	911.2
Exterior Lighting	Linear Lighting	100.0%	42	42	186.7
Motors	Pumps	100.0%	544	544	2,424.3
Motors	Fans & Blowers	100.0%	3,386	3,386	15,100.9
Motors	Compressed Air	100.0%	719	719	3,206.3
Motors	Material Handling	100.0%	4,161	4,161	18,558.8
Motors	Other Motors	0.0%	959	0	0.0
Process	Process Heating	100.0%	1,451	1,451	6,471.0
Process	Process Cooling	100.0%	2,441	2,441	10,889.0
Process	Process Refrigeration	100.0%	2,441	2,441	10,889.0
Process	Process Electrochemical	100.0%	47	47	208.4
Process	Process Other	100.0%	182	182	809.5
Miscellaneous	Miscellaneous	100.0%	959	959	4,278.5
Total				19,355	86,321.6

Table A-265 Washington Agriculture New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,199	30
Cooling	Water-Cooled Chiller	2.5%	1,230	31
Cooling	RTU	11.7%	1,519	177
Cooling	Air-Source Heat Pump	1.7%	1,500	26
Cooling	Geothermal Heat Pump	0.0%	1,038	0
Heating	Electric Furnace	2.3%	6,585	154
Heating	Electric Room Heat	12.6%	6,271	792
Heating	Air-Source Heat Pump	1.7%	5,615	96
Heating	Geothermal Heat Pump	0.0%	2,149	0
Ventilation	Ventilation	100.0%	187	187
Interior Lighting	Screw-in	100.0%	56	56
Interior Lighting	High-Bay Fixtures	100.0%	871	871
Interior Lighting	Linear Lighting	100.0%	145	145
Exterior Lighting	Screw-in	100.0%	10	10
Exterior Lighting	Area Lighting	100.0%	194	194
Exterior Lighting	Linear Lighting	100.0%	40	40
Motors	Pumps	100.0%	544	544
Motors	Fans & Blowers	100.0%	3,386	3,386
Motors	Compressed Air	100.0%	719	719
Motors	Material Handling	100.0%	4,161	4,161
Motors	Other Motors	0.0%	959	0
Process	Process Heating	100.0%	1,451	1,451
Process	Process Cooling	100.0%	2,441	2,441
Process	Process Refrigeration	100.0%	2,441	2,441
Process	Process Electrochemical	100.0%	47	47
Process	Process Other	100.0%	182	182
Miscellaneous	Miscellaneous	100.0%	959	959
Total			19,140	

Table A-266 Washington Mining and Extraction Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,493	37	3.4
Cooling	Water-Cooled Chiller	2.5%	1,573	39	3.5
Cooling	RTU	11.7%	1,665	194	17.5
Cooling	Air-Source Heat Pump	1.7%	1,664	29	2.6
Cooling	Geothermal Heat Pump	0.0%	1,110	0	0.0
Heating	Electric Furnace	2.3%	7,316	171	15.4
Heating	Electric Room Heat	12.6%	6,968	880	79.2
Heating	Air-Source Heat Pump	1.7%	6,425	110	9.9
Heating	Geothermal Heat Pump	0.0%	4,285	0	0.0
Ventilation	Ventilation	100.0%	243	243	21.9
Interior Lighting	Screw-in	100.0%	93	93	8.3
Interior Lighting	High-Bay Fixtures	100.0%	1,450	1,450	130.5
Interior Lighting	Linear Lighting	100.0%	241	241	21.7
Exterior Lighting	Screw-in	100.0%	17	17	1.5
Exterior Lighting	Area Lighting	100.0%	323	323	29.1
Exterior Lighting	Linear Lighting	100.0%	66	66	6.0
Motors	Pumps	100.0%	16,648	16,648	1,498.3
Motors	Fans & Blowers	100.0%	4,625	4,625	416.2
Motors	Compressed Air	100.0%	6,937	6,937	624.3
Motors	Material Handling	100.0%	4,856	4,856	437.0
Motors	Other Motors	100.0%	13,180	13,180	1,186.2
Process	Process Heating	100.0%	487	487	43.8
Process	Process Cooling	0.0%	487	0	0.0
Process	Process Refrigeration	0.0%	487	0	0.0
Process	Process Electrochemical	100.0%	487	487	43.8
Process	Process Other	100.0%	2,677	2,677	241.0
Miscellaneous	Miscellaneous	100.0%	487	487	43.8
Total				54,277	4,885.0

Table A-267 Washington Mining and Extraction New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,246	31
Cooling	Water-Cooled Chiller	2.5%	1,279	32
Cooling	RTU	11.7%	1,579	184
Cooling	Air-Source Heat Pump	1.7%	1,559	27
Cooling	Geothermal Heat Pump	0.0%	1,079	0
Heating	Electric Furnace	2.3%	6,843	160
Heating	Electric Room Heat	12.6%	6,517	823
Heating	Air-Source Heat Pump	1.7%	5,835	100
Heating	Geothermal Heat Pump	0.0%	2,234	0
Ventilation	Ventilation	100.0%	194	194
Interior Lighting	Screw-in	100.0%	88	88
Interior Lighting	High-Bay Fixtures	100.0%	1,379	1,379
Interior Lighting	Linear Lighting	100.0%	229	229
Exterior Lighting	Screw-in	100.0%	16	16
Exterior Lighting	Area Lighting	100.0%	307	307
Exterior Lighting	Linear Lighting	100.0%	63	63
Motors	Pumps	100.0%	16,648	16,648
Motors	Fans & Blowers	100.0%	4,625	4,625
Motors	Compressed Air	100.0%	6,937	6,937
Motors	Material Handling	100.0%	4,856	4,856
Motors	Other Motors	100.0%	13,180	13,180
Process	Process Heating	100.0%	487	487
Process	Process Cooling	0.0%	487	0
Process	Process Refrigeration	0.0%	487	0
Process	Process Electrochemical	100.0%	487	487
Process	Process Other	100.0%	2,677	2,677
Miscellaneous	Miscellaneous	100.0%	487	487
Total			54,017	

Table A-268 Washington Food Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,626	41	81.3
Cooling	Water-Cooled Chiller	2.5%	1,713	43	85.7
Cooling	RTU	11.7%	1,813	211	422.6
Cooling	Air-Source Heat Pump	1.7%	1,812	31	62.2
Cooling	Geothermal Heat Pump	0.0%	1,209	0	0.0
Heating	Electric Furnace	2.3%	7,968	186	372.3
Heating	Electric Room Heat	12.6%	7,589	959	1,917.8
Heating	Air-Source Heat Pump	1.7%	6,997	120	240.4
Heating	Geothermal Heat Pump	0.0%	4,667	0	0.0
Ventilation	Ventilation	100.0%	264	264	528.9
Interior Lighting	Screw-in	100.0%	164	164	327.5
Interior Lighting	High-Bay Fixtures	100.0%	2,562	2,562	5,123.0
Interior Lighting	Linear Lighting	100.0%	426	426	851.6
Exterior Lighting	Screw-in	100.0%	30	30	60.3
Exterior Lighting	Area Lighting	100.0%	571	571	1,142.2
Exterior Lighting	Linear Lighting	100.0%	117	117	234.0
Motors	Pumps	100.0%	8,057	8,057	16,113.5
Motors	Fans & Blowers	100.0%	13,395	13,395	26,790.8
Motors	Compressed Air	100.0%	5,152	5,152	10,303.8
Motors	Material Handling	100.0%	25,271	25,271	50,541.2
Motors	Other Motors	100.0%	2,585	2,585	5,170.2
Process	Process Heating	100.0%	3,377	3,377	6,753.6
Process	Process Cooling	100.0%	4,592	4,592	9,183.9
Process	Process Refrigeration	100.0%	4,592	4,592	9,183.9
Process	Process Electrochemical	100.0%	181	181	362.7
Process	Process Other	100.0%	704	704	1,408.5
Miscellaneous	Miscellaneous	100.0%	1,469	1,469	2,938.6
Total				75,100	150,200.5

Table A-269 Washington Food Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,357	34
Cooling	Water-Cooled Chiller	2.5%	1,393	35
Cooling	RTU	11.7%	1,719	200
Cooling	Air-Source Heat Pump	1.7%	1,698	29
Cooling	Geothermal Heat Pump	0.0%	1,175	0
Heating	Electric Furnace	2.3%	7,453	174
Heating	Electric Room Heat	12.6%	7,098	897
Heating	Air-Source Heat Pump	1.7%	6,355	109
Heating	Geothermal Heat Pump	0.0%	2,433	0
Ventilation	Ventilation	100.0%	211	211
Interior Lighting	Screw-in	100.0%	156	156
Interior Lighting	High-Bay Fixtures	100.0%	2,435	2,435
Interior Lighting	Linear Lighting	100.0%	405	405
Exterior Lighting	Screw-in	100.0%	29	29
Exterior Lighting	Area Lighting	100.0%	543	543
Exterior Lighting	Linear Lighting	100.0%	111	111
Motors	Pumps	100.0%	8,057	8,057
Motors	Fans & Blowers	100.0%	13,395	13,395
Motors	Compressed Air	100.0%	5,152	5,152
Motors	Material Handling	100.0%	25,271	25,271
Motors	Other Motors	100.0%	2,585	2,585
Process	Process Heating	100.0%	3,377	3,377
Process	Process Cooling	100.0%	4,592	4,592
Process	Process Refrigeration	100.0%	4,592	4,592
Process	Process Electrochemical	100.0%	181	181
Process	Process Other	100.0%	704	704
Miscellaneous	Miscellaneous	100.0%	1,469	1,469
Total			74,743	

Table A-270 Washington Paper Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	11,179	279	125.8
Cooling	Water-Cooled Chiller	2.5%	11,775	294	132.5
Cooling	RTU	11.7%	12,461	1,453	653.6
Cooling	Air-Source Heat Pump	1.7%	12,455	214	96.3
Cooling	Geothermal Heat Pump	0.0%	8,308	0	0.0
Heating	Electric Furnace	2.3%	54,772	1,279	575.8
Heating	Electric Room Heat	12.6%	52,164	6,591	2,966.0
Heating	Air-Source Heat Pump	1.7%	48,097	826	371.8
Heating	Geothermal Heat Pump	0.0%	32,081	0	0.0
Ventilation	Ventilation	100.0%	1,818	1,818	817.9
Interior Lighting	Screw-in	100.0%	1,510	1,510	679.6
Interior Lighting	High-Bay Fixtures	100.0%	23,628	23,628	10,632.6
Interior Lighting	Linear Lighting	100.0%	3,928	3,928	1,767.5
Exterior Lighting	Screw-in	100.0%	278	278	125.1
Exterior Lighting	Area Lighting	100.0%	5,268	5,268	2,370.5
Exterior Lighting	Linear Lighting	100.0%	1,079	1,079	485.6
Motors	Pumps	100.0%	154,595	154,595	69,567.6
Motors	Fans & Blowers	100.0%	149,445	149,445	67,250.5
Motors	Compressed Air	100.0%	83,976	83,976	37,789.3
Motors	Material Handling	100.0%	356,390	356,390	160,375.3
Motors	Other Motors	100.0%	9,436	9,436	4,246.1
Process	Process Heating	100.0%	22,135	22,135	9,960.7
Process	Process Cooling	100.0%	4,376	4,376	1,969.4
Process	Process Refrigeration	100.0%	4,376	4,376	1,969.4
Process	Process Electrochemical	100.0%	7,294	7,294	3,282.1
Process	Process Other	100.0%	12,645	12,645	5,690.3
Miscellaneous	Miscellaneous	100.0%	13,409	13,409	6,034.0
Total				866,523	389,935.2

Table A-271 Washington Paper Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	9,325	233
Cooling	Water-Cooled Chiller	2.5%	9,573	239
Cooling	RTU	11.7%	11,817	1,378
Cooling	Air-Source Heat Pump	1.7%	11,670	200
Cooling	Geothermal Heat Pump	0.0%	8,077	0
Heating	Electric Furnace	2.3%	51,228	1,197
Heating	Electric Room Heat	12.6%	48,788	6,165
Heating	Air-Source Heat Pump	1.7%	43,683	750
Heating	Geothermal Heat Pump	0.0%	16,722	0
Ventilation	Ventilation	100.0%	1,452	1,452
Interior Lighting	Screw-in	100.0%	1,436	1,436
Interior Lighting	High-Bay Fixtures	100.0%	22,461	22,461
Interior Lighting	Linear Lighting	100.0%	3,734	3,734
Exterior Lighting	Screw-in	100.0%	264	264
Exterior Lighting	Area Lighting	100.0%	5,008	5,008
Exterior Lighting	Linear Lighting	100.0%	1,026	1,026
Motors	Pumps	100.0%	154,595	154,595
Motors	Fans & Blowers	100.0%	149,445	149,445
Motors	Compressed Air	100.0%	83,976	83,976
Motors	Material Handling	100.0%	356,390	356,390
Motors	Other Motors	100.0%	9,436	9,436
Process	Process Heating	100.0%	22,135	22,135
Process	Process Cooling	100.0%	4,376	4,376
Process	Process Refrigeration	100.0%	4,376	4,376
Process	Process Electrochemical	100.0%	7,294	7,294
Process	Process Other	100.0%	12,645	12,645
Miscellaneous	Miscellaneous	100.0%	13,409	13,409
Total			863,620	

Table A-272 Washington Petroleum Refining Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	275	7	0.5
Cooling	Water-Cooled Chiller	2.5%	290	7	0.5
Cooling	RTU	11.7%	307	36	2.7
Cooling	Air-Source Heat Pump	1.7%	307	5	0.4
Cooling	Geothermal Heat Pump	0.0%	205	0	0.0
Heating	Electric Furnace	2.3%	1,349	32	2.4
Heating	Electric Room Heat	12.6%	1,284	162	12.2
Heating	Air-Source Heat Pump	1.7%	1,184	20	1.5
Heating	Geothermal Heat Pump	0.0%	790	0	0.0
Ventilation	Ventilation	100.0%	45	45	3.4
Interior Lighting	Screw-in	100.0%	9	9	0.7
Interior Lighting	High-Bay Fixtures	100.0%	138	138	10.3
Interior Lighting	Linear Lighting	100.0%	23	23	1.7
Exterior Lighting	Screw-in	100.0%	2	2	0.1
Exterior Lighting	Area Lighting	100.0%	31	31	2.3
Exterior Lighting	Linear Lighting	100.0%	6	6	0.5
Motors	Pumps	100.0%	4,114	4,114	308.5
Motors	Fans & Blowers	100.0%	674	674	50.6
Motors	Compressed Air	100.0%	1,079	1,079	80.9
Motors	Material Handling	100.0%	967	967	72.5
Motors	Other Motors	100.0%	378	378	28.3
Process	Process Heating	100.0%	361	361	27.1
Process	Process Cooling	100.0%	220	220	16.5
Process	Process Refrigeration	100.0%	220	220	16.5
Process	Process Electrochemical	100.0%	9	9	0.7
Process	Process Other	100.0%	67	67	5.0
Miscellaneous	Miscellaneous	100.0%	94	94	7.1
Total				8,705	652.9

Table A-273 Washington Petroleum Refining New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	230	6
Cooling	Water-Cooled Chiller	2.5%	236	6
Cooling	RTU	11.7%	291	34
Cooling	Air-Source Heat Pump	1.7%	287	5
Cooling	Geothermal Heat Pump	0.0%	199	0
Heating	Electric Furnace	2.3%	1,261	29
Heating	Electric Room Heat	12.6%	1,201	152
Heating	Air-Source Heat Pump	1.7%	1,076	18
Heating	Geothermal Heat Pump	0.0%	412	0
Ventilation	Ventilation	100.0%	36	36
Interior Lighting	Screw-in	100.0%	8	8
Interior Lighting	High-Bay Fixtures	100.0%	131	131
Interior Lighting	Linear Lighting	100.0%	22	22
Exterior Lighting	Screw-in	100.0%	2	2
Exterior Lighting	Area Lighting	100.0%	29	29
Exterior Lighting	Linear Lighting	100.0%	6	6
Motors	Pumps	100.0%	4,114	4,114
Motors	Fans & Blowers	100.0%	674	674
Motors	Compressed Air	100.0%	1,079	1,079
Motors	Material Handling	100.0%	967	967
Motors	Other Motors	100.0%	378	378
Process	Process Heating	100.0%	361	361
Process	Process Cooling	100.0%	220	220
Process	Process Refrigeration	100.0%	220	220
Process	Process Electrochemical	100.0%	9	9
Process	Process Other	100.0%	67	67
Miscellaneous	Miscellaneous	100.0%	94	94
Total			8,667	

Table A-274 Washington Stone Clay Glass Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	641	16	0.8
Cooling	Water-Cooled Chiller	2.5%	675	17	0.8
Cooling	RTU	11.7%	714	83	4.2
Cooling	Air-Source Heat Pump	1.7%	714	12	0.6
Cooling	Geothermal Heat Pump	0.0%	476	0	0.0
Heating	Electric Furnace	2.3%	3,140	73	3.7
Heating	Electric Room Heat	12.6%	2,991	378	18.9
Heating	Air-Source Heat Pump	1.7%	2,758	47	2.4
Heating	Geothermal Heat Pump	0.0%	1,839	0	0.0
Ventilation	Ventilation	100.0%	104	104	5.2
Interior Lighting	Screw-in	100.0%	25	25	1.3
Interior Lighting	High-Bay Fixtures	100.0%	393	393	19.7
Interior Lighting	Linear Lighting	100.0%	65	65	3.3
Exterior Lighting	Screw-in	100.0%	5	5	0.2
Exterior Lighting	Area Lighting	100.0%	88	88	4.4
Exterior Lighting	Linear Lighting	100.0%	18	18	0.9
Motors	Pumps	100.0%	772	772	38.6
Motors	Fans & Blowers	100.0%	1,086	1,086	54.3
Motors	Compressed Air	100.0%	195	195	9.8
Motors	Material Handling	100.0%	4,495	4,495	224.8
Motors	Other Motors	100.0%	70	70	3.5
Process	Process Heating	100.0%	2,367	2,367	118.4
Process	Process Cooling	100.0%	145	145	7.3
Process	Process Refrigeration	100.0%	145	145	7.3
Process	Process Electrochemical	100.0%	41	41	2.0
Process	Process Other	100.0%	483	483	24.1
Miscellaneous	Miscellaneous	100.0%	377	377	18.8
Total				11,501	575.1

Table A-275 Washington Stone Clay Glass Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	535	13
Cooling	Water-Cooled Chiller	2.5%	549	14
Cooling	RTU	11.7%	678	79
Cooling	Air-Source Heat Pump	1.7%	669	11
Cooling	Geothermal Heat Pump	0.0%	463	0
Heating	Electric Furnace	2.3%	2,937	69
Heating	Electric Room Heat	12.6%	2,797	353
Heating	Air-Source Heat Pump	1.7%	2,504	43
Heating	Geothermal Heat Pump	0.0%	959	0
Ventilation	Ventilation	100.0%	83	83
Interior Lighting	Screw-in	100.0%	24	24
Interior Lighting	High-Bay Fixtures	100.0%	374	374
Interior Lighting	Linear Lighting	100.0%	62	62
Exterior Lighting	Screw-in	100.0%	4	4
Exterior Lighting	Area Lighting	100.0%	83	83
Exterior Lighting	Linear Lighting	100.0%	17	17
Motors	Pumps	100.0%	772	772
Motors	Fans & Blowers	100.0%	1,086	1,086
Motors	Compressed Air	100.0%	195	195
Motors	Material Handling	100.0%	4,495	4,495
Motors	Other Motors	100.0%	70	70
Process	Process Heating	100.0%	2,367	2,367
Process	Process Cooling	100.0%	145	145
Process	Process Refrigeration	100.0%	145	145
Process	Process Electrochemical	100.0%	41	41
Process	Process Other	100.0%	483	483
Miscellaneous	Miscellaneous	100.0%	377	377
Total			11,406	

Table A-276 Washington Transportation Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,341	59	20.5
Cooling	Water-Cooled Chiller	2.5%	2,465	62	21.6
Cooling	RTU	11.7%	2,609	304	106.4
Cooling	Air-Source Heat Pump	1.7%	2,608	45	15.7
Cooling	Geothermal Heat Pump	0.0%	1,739	0	0.0
Heating	Electric Furnace	2.3%	11,467	268	93.8
Heating	Electric Room Heat	12.6%	10,921	1,380	483.0
Heating	Air-Source Heat Pump	1.7%	10,070	173	60.5
Heating	Geothermal Heat Pump	0.0%	6,716	0	0.0
Ventilation	Ventilation	100.0%	381	381	133.2
Interior Lighting	Screw-in	100.0%	81	81	28.5
Interior Lighting	High-Bay Fixtures	100.0%	1,272	1,272	445.2
Interior Lighting	Linear Lighting	100.0%	211	211	74.0
Exterior Lighting	Screw-in	100.0%	15	15	5.2
Exterior Lighting	Area Lighting	100.0%	284	284	99.3
Exterior Lighting	Linear Lighting	100.0%	58	58	20.3
Motors	Pumps	100.0%	646	646	226.1
Motors	Fans & Blowers	100.0%	308	308	108.0
Motors	Compressed Air	100.0%	652	652	228.4
Motors	Material Handling	100.0%	3,151	3,151	1,103.0
Motors	Other Motors	100.0%	80	80	28.1
Process	Process Heating	100.0%	1,800	1,800	630.0
Process	Process Cooling	100.0%	397	397	139.1
Process	Process Refrigeration	100.0%	397	397	139.1
Process	Process Electrochemical	100.0%	216	216	75.6
Process	Process Other	100.0%	485	485	169.7
Miscellaneous	Miscellaneous	100.0%	791	791	276.8
Total				13,517	4,730.9

Table A-277 Washington Transportation Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,952	49
Cooling	Water-Cooled Chiller	2.5%	2,004	50
Cooling	RTU	11.7%	2,474	288
Cooling	Air-Source Heat Pump	1.7%	2,443	42
Cooling	Geothermal Heat Pump	0.0%	1,691	0
Heating	Electric Furnace	2.3%	10,725	251
Heating	Electric Room Heat	12.6%	10,214	1,291
Heating	Air-Source Heat Pump	1.7%	9,145	157
Heating	Geothermal Heat Pump	0.0%	3,501	0
Ventilation	Ventilation	100.0%	304	304
Interior Lighting	Screw-in	100.0%	77	77
Interior Lighting	High-Bay Fixtures	100.0%	1,209	1,209
Interior Lighting	Linear Lighting	100.0%	201	201
Exterior Lighting	Screw-in	100.0%	14	14
Exterior Lighting	Area Lighting	100.0%	270	270
Exterior Lighting	Linear Lighting	100.0%	55	55
Motors	Pumps	100.0%	646	646
Motors	Fans & Blowers	100.0%	308	308
Motors	Compressed Air	100.0%	652	652
Motors	Material Handling	100.0%	3,151	3,151
Motors	Other Motors	100.0%	80	80
Process	Process Heating	100.0%	1,800	1,800
Process	Process Cooling	100.0%	397	397
Process	Process Refrigeration	100.0%	397	397
Process	Process Electrochemical	100.0%	216	216
Process	Process Other	100.0%	485	485
Miscellaneous	Miscellaneous	100.0%	791	791
Total			13,183	

Table A-278 Washington Wastewater Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,622	91	10.1
Cooling	Water-Cooled Chiller	2.5%	3,815	95	10.7
Cooling	RTU	11.7%	4,037	471	52.7
Cooling	Air-Source Heat Pump	1.7%	4,035	69	7.8
Cooling	Geothermal Heat Pump	0.0%	2,691	0	0.0
Heating	Electric Furnace	2.3%	17,743	414	46.4
Heating	Electric Room Heat	12.6%	16,898	2,135	239.1
Heating	Air-Source Heat Pump	1.7%	15,581	268	30.0
Heating	Geothermal Heat Pump	0.0%	10,392	0	0.0
Ventilation	Ventilation	100.0%	589	589	65.9
Interior Lighting	Screw-in	100.0%	161	161	18.0
Interior Lighting	High-Bay Fixtures	100.0%	2,519	2,519	282.2
Interior Lighting	Linear Lighting	100.0%	419	419	46.9
Exterior Lighting	Screw-in	100.0%	30	30	3.3
Exterior Lighting	Area Lighting	100.0%	562	562	62.9
Exterior Lighting	Linear Lighting	100.0%	115	115	12.9
Motors	Pumps	100.0%	20,431	20,431	2,288.2
Motors	Fans & Blowers	100.0%	50,300	50,300	5,633.7
Motors	Compressed Air	100.0%	1,076	1,076	120.5
Motors	Material Handling	100.0%	4,807	4,807	538.3
Motors	Other Motors	100.0%	1,507	1,507	168.7
Process	Process Heating	0.0%	2,354	0	0.0
Process	Process Cooling	0.0%	2,354	0	0.0
Process	Process Refrigeration	0.0%	2,354	0	0.0
Process	Process Electrochemical	0.0%	2,354	0	0.0
Process	Process Other	100.0%	3,983	3,983	446.1
Miscellaneous	Miscellaneous	100.0%	2,354	2,354	263.6
Total				92,395	10,348.2

Table A-279 Washington Wastewater New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,021	76
Cooling	Water-Cooled Chiller	2.5%	3,101	78
Cooling	RTU	11.7%	3,828	446
Cooling	Air-Source Heat Pump	1.7%	3,781	65
Cooling	Geothermal Heat Pump	0.0%	2,616	0
Heating	Electric Furnace	2.3%	16,595	388
Heating	Electric Room Heat	12.6%	15,805	1,997
Heating	Air-Source Heat Pump	1.7%	14,151	243
Heating	Geothermal Heat Pump	0.0%	5,417	0
Ventilation	Ventilation	100.0%	470	470
Interior Lighting	Screw-in	100.0%	153	153
Interior Lighting	High-Bay Fixtures	100.0%	2,395	2,395
Interior Lighting	Linear Lighting	100.0%	398	398
Exterior Lighting	Screw-in	100.0%	28	28
Exterior Lighting	Area Lighting	100.0%	534	534
Exterior Lighting	Linear Lighting	100.0%	109	109
Motors	Pumps	100.0%	20,431	20,431
Motors	Fans & Blowers	100.0%	50,300	50,300
Motors	Compressed Air	100.0%	1,076	1,076
Motors	Material Handling	100.0%	4,807	4,807
Motors	Other Motors	100.0%	1,507	1,507
Process	Process Heating	0.0%	2,354	0
Process	Process Cooling	0.0%	2,354	0
Process	Process Refrigeration	0.0%	2,354	0
Process	Process Electrochemical	0.0%	2,354	0
Process	Process Other	100.0%	3,983	3,983
Miscellaneous	Miscellaneous	100.0%	2,354	2,354
Total			91,837	

Table A-280 Washington Water Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	818	20	15.7
Cooling	Water-Cooled Chiller	2.5%	862	22	16.6
Cooling	RTU	11.7%	912	106	81.7
Cooling	Air-Source Heat Pump	1.7%	912	16	12.0
Cooling	Geothermal Heat Pump	0.0%	608	0	0.0
Heating	Electric Furnace	2.3%	4,010	94	71.9
Heating	Electric Room Heat	12.6%	3,819	483	370.6
Heating	Air-Source Heat Pump	1.7%	3,521	60	46.5
Heating	Geothermal Heat Pump	0.0%	2,349	0	0.0
Ventilation	Ventilation	100.0%	133	133	102.2
Interior Lighting	Screw-in	100.0%	36	36	28.0
Interior Lighting	High-Bay Fixtures	100.0%	569	569	437.3
Interior Lighting	Linear Lighting	100.0%	95	95	72.7
Exterior Lighting	Screw-in	100.0%	7	7	5.1
Exterior Lighting	Area Lighting	100.0%	127	127	97.5
Exterior Lighting	Linear Lighting	100.0%	26	26	20.0
Motors	Pumps	100.0%	16,681	16,681	12,810.8
Motors	Fans & Blowers	0.0%	532	0	0.0
Motors	Compressed Air	100.0%	243	243	186.8
Motors	Material Handling	100.0%	724	724	555.8
Motors	Other Motors	100.0%	8	8	6.2
Process	Process Heating	0.0%	532	0	0.0
Process	Process Cooling	0.0%	532	0	0.0
Process	Process Refrigeration	0.0%	532	0	0.0
Process	Process Electrochemical	0.0%	532	0	0.0
Process	Process Other	100.0%	900	900	691.4
Miscellaneous	Miscellaneous	100.0%	532	532	408.5
Total				20,882	16,037.3

Table A-281 Washington Water New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	683	17
Cooling	Water-Cooled Chiller	2.5%	701	18
Cooling	RTU	11.7%	865	101
Cooling	Air-Source Heat Pump	1.7%	854	15
Cooling	Geothermal Heat Pump	0.0%	591	0
Heating	Electric Furnace	2.3%	3,751	88
Heating	Electric Room Heat	12.6%	3,572	451
Heating	Air-Source Heat Pump	1.7%	3,198	55
Heating	Geothermal Heat Pump	0.0%	1,224	0
Ventilation	Ventilation	100.0%	106	106
Interior Lighting	Screw-in	100.0%	35	35
Interior Lighting	High-Bay Fixtures	100.0%	541	541
Interior Lighting	Linear Lighting	100.0%	90	90
Exterior Lighting	Screw-in	100.0%	6	6
Exterior Lighting	Area Lighting	100.0%	121	121
Exterior Lighting	Linear Lighting	100.0%	25	25
Motors	Pumps	100.0%	16,681	16,681
Motors	Fans & Blowers	0.0%	532	0
Motors	Compressed Air	100.0%	243	243
Motors	Material Handling	100.0%	724	724
Motors	Other Motors	100.0%	8	8
Process	Process Heating	0.0%	532	0
Process	Process Cooling	0.0%	532	0
Process	Process Refrigeration	0.0%	532	0
Process	Process Electrochemical	0.0%	532	0
Process	Process Other	100.0%	900	900
Miscellaneous	Miscellaneous	100.0%	532	532
Total			20,756	

Table A-282 Washington Chemical Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	468	12	0.5
Cooling	Water-Cooled Chiller	2.5%	493	12	0.5
Cooling	RTU	11.7%	521	61	2.4
Cooling	Air-Source Heat Pump	1.7%	521	9	0.4
Cooling	Geothermal Heat Pump	0.0%	348	0	0.0
Heating	Electric Furnace	2.3%	2,291	54	2.1
Heating	Electric Room Heat	12.6%	2,182	276	11.0
Heating	Air-Source Heat Pump	1.7%	2,012	35	1.4
Heating	Geothermal Heat Pump	0.0%	1,342	0	0.0
Ventilation	Ventilation	100.0%	76	76	3.0
Interior Lighting	Screw-in	100.0%	14	14	0.6
Interior Lighting	High-Bay Fixtures	100.0%	222	222	8.9
Interior Lighting	Linear Lighting	100.0%	37	37	1.5
Exterior Lighting	Screw-in	100.0%	3	3	0.1
Exterior Lighting	Area Lighting	100.0%	50	50	2.0
Exterior Lighting	Linear Lighting	100.0%	10	10	0.4
Motors	Pumps	100.0%	1,385	1,385	55.4
Motors	Fans & Blowers	100.0%	633	633	25.3
Motors	Compressed Air	100.0%	1,468	1,468	58.7
Motors	Material Handling	100.0%	1,330	1,330	53.2
Motors	Other Motors	100.0%	174	174	7.0
Process	Process Heating	100.0%	583	583	23.3
Process	Process Cooling	100.0%	327	327	13.1
Process	Process Refrigeration	100.0%	327	327	13.1
Process	Process Electrochemical	100.0%	1,675	1,675	67.0
Process	Process Other	100.0%	104	104	4.2
Miscellaneous	Miscellaneous	100.0%	258	258	10.3
Total				9,136	365.4

Table A-283 Washington Chemical Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	390	10
Cooling	Water-Cooled Chiller	2.5%	400	10
Cooling	RTU	11.7%	494	58
Cooling	Air-Source Heat Pump	1.7%	488	8
Cooling	Geothermal Heat Pump	0.0%	338	0
Heating	Electric Furnace	2.3%	2,143	50
Heating	Electric Room Heat	12.6%	2,041	258
Heating	Air-Source Heat Pump	1.7%	1,827	31
Heating	Geothermal Heat Pump	0.0%	700	0
Ventilation	Ventilation	100.0%	61	61
Interior Lighting	Screw-in	100.0%	13	13
Interior Lighting	High-Bay Fixtures	100.0%	211	211
Interior Lighting	Linear Lighting	100.0%	35	35
Exterior Lighting	Screw-in	100.0%	2	2
Exterior Lighting	Area Lighting	100.0%	47	47
Exterior Lighting	Linear Lighting	100.0%	10	10
Motors	Pumps	100.0%	1,385	1,385
Motors	Fans & Blowers	100.0%	633	633
Motors	Compressed Air	100.0%	1,468	1,468
Motors	Material Handling	100.0%	1,330	1,330
Motors	Other Motors	100.0%	174	174
Process	Process Heating	100.0%	583	583
Process	Process Cooling	100.0%	327	327
Process	Process Refrigeration	100.0%	327	327
Process	Process Electrochemical	100.0%	1,675	1,675
Process	Process Other	100.0%	104	104
Miscellaneous	Miscellaneous	100.0%	258	258
Total			9,072	

Table A-284 Washington Electronic Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,025	51	10.1
Cooling	Water-Cooled Chiller	2.5%	2,133	53	10.7
Cooling	RTU	11.7%	2,258	263	52.6
Cooling	Air-Source Heat Pump	1.7%	2,257	39	7.8
Cooling	Geothermal Heat Pump	0.0%	1,505	0	0.0
Heating	Electric Furnace	2.3%	9,924	232	46.4
Heating	Electric Room Heat	12.6%	9,451	1,194	238.8
Heating	Air-Source Heat Pump	1.7%	8,714	150	29.9
Heating	Geothermal Heat Pump	0.0%	5,812	0	0.0
Ventilation	Ventilation	100.0%	329	329	65.9
Interior Lighting	Screw-in	100.0%	40	40	8.0
Interior Lighting	High-Bay Fixtures	100.0%	623	623	124.6
Interior Lighting	Linear Lighting	100.0%	104	104	20.7
Exterior Lighting	Screw-in	100.0%	7	7	1.5
Exterior Lighting	Area Lighting	100.0%	139	139	27.8
Exterior Lighting	Linear Lighting	100.0%	28	28	5.7
Motors	Pumps	100.0%	117	117	23.5
Motors	Fans & Blowers	100.0%	188	188	37.6
Motors	Compressed Air	100.0%	340	340	68.0
Motors	Material Handling	100.0%	1,063	1,063	212.5
Motors	Other Motors	0.0%	698	0	0.0
Process	Process Heating	100.0%	887	887	177.3
Process	Process Cooling	100.0%	412	412	82.3
Process	Process Refrigeration	100.0%	412	412	82.3
Process	Process Electrochemical	100.0%	155	155	30.9
Process	Process Other	100.0%	778	778	155.7
Miscellaneous	Miscellaneous	100.0%	698	698	139.7
Total				8,301	1660.2

Table A-285 Washington Electronic Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,690	42
Cooling	Water-Cooled Chiller	2.5%	1,734	43
Cooling	RTU	11.7%	2,141	250
Cooling	Air-Source Heat Pump	1.7%	2,114	36
Cooling	Geothermal Heat Pump	0.0%	1,463	0
Heating	Electric Furnace	2.3%	9,281	217
Heating	Electric Room Heat	12.6%	8,839	1,117
Heating	Air-Source Heat Pump	1.7%	7,915	136
Heating	Geothermal Heat Pump	0.0%	3,030	0
Ventilation	Ventilation	100.0%	263	263
Interior Lighting	Screw-in	100.0%	38	38
Interior Lighting	High-Bay Fixtures	100.0%	592	592
Interior Lighting	Linear Lighting	100.0%	98	98
Exterior Lighting	Screw-in	100.0%	7	7
Exterior Lighting	Area Lighting	100.0%	132	132
Exterior Lighting	Linear Lighting	100.0%	27	27
Motors	Pumps	100.0%	117	117
Motors	Fans & Blowers	100.0%	188	188
Motors	Compressed Air	100.0%	340	340
Motors	Material Handling	100.0%	1,063	1,063
Motors	Other Motors	0.0%	698	0
Process	Process Heating	100.0%	887	887
Process	Process Cooling	100.0%	412	412
Process	Process Refrigeration	100.0%	412	412
Process	Process Electrochemical	100.0%	155	155
Process	Process Other	100.0%	778	778
Miscellaneous	Miscellaneous	100.0%	698	698
Total			8,048	

Table A-286 Washington Industrial Machinery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,064	102	71.1
Cooling	Water-Cooled Chiller	2.5%	4,280	107	74.9
Cooling	RTU	11.7%	4,530	528	369.6
Cooling	Air-Source Heat Pump	1.7%	4,528	78	54.4
Cooling	Geothermal Heat Pump	0.0%	3,020	0	0.0
Heating	Electric Furnace	2.3%	19,910	465	325.6
Heating	Electric Room Heat	12.6%	18,962	2,396	1,677.2
Heating	Air-Source Heat Pump	1.7%	17,484	300	210.2
Heating	Geothermal Heat Pump	0.0%	11,662	0	0.0
Ventilation	Ventilation	100.0%	661	661	462.5
Interior Lighting	Screw-in	100.0%	119	119	83.5
Interior Lighting	High-Bay Fixtures	100.0%	1,866	1,866	1,305.9
Interior Lighting	Linear Lighting	100.0%	310	310	217.1
Exterior Lighting	Screw-in	100.0%	22	22	15.4
Exterior Lighting	Area Lighting	100.0%	416	416	291.2
Exterior Lighting	Linear Lighting	100.0%	85	85	59.6
Motors	Pumps	100.0%	1,025	1,025	717.3
Motors	Fans & Blowers	100.0%	2,385	2,385	1,669.4
Motors	Compressed Air	100.0%	2,031	2,031	1,421.6
Motors	Material Handling	100.0%	3,288	3,288	2,301.5
Motors	Other Motors	0.0%	1,423	0	0.0
Process	Process Heating	100.0%	1,358	1,358	950.9
Process	Process Cooling	100.0%	266	266	186.3
Process	Process Refrigeration	100.0%	266	266	186.3
Process	Process Electrochemical	100.0%	180	180	126.2
Process	Process Other	100.0%	606	606	424.2
Miscellaneous	Miscellaneous	100.0%	1,423	1,423	996.3
Total				20,283	14,198.1

Table A-287 Washington Industrial Machinery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,390	85
Cooling	Water-Cooled Chiller	2.5%	3,480	87
Cooling	RTU	11.7%	4,296	501
Cooling	Air-Source Heat Pump	1.7%	4,242	73
Cooling	Geothermal Heat Pump	0.0%	2,936	0
Heating	Electric Furnace	2.3%	18,622	435
Heating	Electric Room Heat	12.6%	17,735	2,241
Heating	Air-Source Heat Pump	1.7%	15,879	273
Heating	Geothermal Heat Pump	0.0%	6,079	0
Ventilation	Ventilation	100.0%	528	528
Interior Lighting	Screw-in	100.0%	113	113
Interior Lighting	High-Bay Fixtures	100.0%	1,773	1,773
Interior Lighting	Linear Lighting	100.0%	295	295
Exterior Lighting	Screw-in	100.0%	21	21
Exterior Lighting	Area Lighting	100.0%	395	395
Exterior Lighting	Linear Lighting	100.0%	81	81
Motors	Pumps	100.0%	1,025	1,025
Motors	Fans & Blowers	100.0%	2,385	2,385
Motors	Compressed Air	100.0%	2,031	2,031
Motors	Material Handling	100.0%	3,288	3,288
Motors	Other Motors	0.0%	1,423	0
Process	Process Heating	100.0%	1,358	1,358
Process	Process Cooling	100.0%	266	266
Process	Process Refrigeration	100.0%	266	266
Process	Process Electrochemical	100.0%	180	180
Process	Process Other	100.0%	606	606
Miscellaneous	Miscellaneous	100.0%	1,423	1,423
Total			19,729	

Table A-288 Washington Lumber & Wood Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,731	43	9.5
Cooling	Water-Cooled Chiller	2.5%	1,823	46	10.0
Cooling	RTU	11.7%	1,930	225	49.5
Cooling	Air-Source Heat Pump	1.7%	1,929	33	7.3
Cooling	Geothermal Heat Pump	0.0%	1,286	0	0.0
Heating	Electric Furnace	2.3%	8,482	198	43.6
Heating	Electric Room Heat	12.6%	8,078	1,021	224.5
Heating	Air-Source Heat Pump	1.7%	7,448	128	28.1
Heating	Geothermal Heat Pump	0.0%	4,968	0	0.0
Ventilation	Ventilation	100.0%	281	281	61.9
Interior Lighting	Screw-in	100.0%	121	121	26.6
Interior Lighting	High-Bay Fixtures	100.0%	1,892	1,892	416.3
Interior Lighting	Linear Lighting	100.0%	315	315	69.2
Exterior Lighting	Screw-in	100.0%	22	22	4.9
Exterior Lighting	Area Lighting	100.0%	422	422	92.8
Exterior Lighting	Linear Lighting	100.0%	86	86	19.0
Motors	Pumps	100.0%	4,210	4,210	926.2
Motors	Fans & Blowers	100.0%	3,102	3,102	682.5
Motors	Compressed Air	100.0%	1,596	1,596	351.2
Motors	Material Handling	100.0%	21,475	21,475	4,724.6
Motors	Other Motors	100.0%	326	326	71.6
Process	Process Heating	100.0%	3,509	3,509	772.0
Process	Process Cooling	100.0%	260	260	57.3
Process	Process Refrigeration	100.0%	260	260	57.3
Process	Process Electrochemical	100.0%	303	303	66.6
Process	Process Other	100.0%	218	218	48.0
Miscellaneous	Miscellaneous	100.0%	1,849	1,849	406.8
Total				41,943	9,227.5

Table A-289 Washington Lumber & Wood Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,444	36
Cooling	Water-Cooled Chiller	2.5%	1,482	37
Cooling	RTU	11.7%	1,830	213
Cooling	Air-Source Heat Pump	1.7%	1,807	31
Cooling	Geothermal Heat Pump	0.0%	1,251	0
Heating	Electric Furnace	2.3%	7,933	185
Heating	Electric Room Heat	12.6%	7,555	955
Heating	Air-Source Heat Pump	1.7%	6,764	116
Heating	Geothermal Heat Pump	0.0%	2,589	0
Ventilation	Ventilation	100.0%	225	225
Interior Lighting	Screw-in	100.0%	115	115
Interior Lighting	High-Bay Fixtures	100.0%	1,799	1,799
Interior Lighting	Linear Lighting	100.0%	299	299
Exterior Lighting	Screw-in	100.0%	21	21
Exterior Lighting	Area Lighting	100.0%	401	401
Exterior Lighting	Linear Lighting	100.0%	82	82
Motors	Pumps	100.0%	4,210	4,210
Motors	Fans & Blowers	100.0%	3,102	3,102
Motors	Compressed Air	100.0%	1,596	1,596
Motors	Material Handling	100.0%	21,475	21,475
Motors	Other Motors	100.0%	326	326
Process	Process Heating	100.0%	3,509	3,509
Process	Process Cooling	100.0%	260	260
Process	Process Refrigeration	100.0%	260	260
Process	Process Electrochemical	100.0%	303	303
Process	Process Other	100.0%	218	218
Miscellaneous	Miscellaneous	100.0%	1,849	1,849
Total			41,625	

Table A-290 Washington Metal Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	1,501	38	24.8
Cooling	Water-Cooled Chiller	2.5%	1,581	40	26.1
Cooling	RTU	11.7%	1,673	195	128.7
Cooling	Air-Source Heat Pump	1.7%	1,672	29	19.0
Cooling	Geothermal Heat Pump	0.0%	1,115	0	0.0
Heating	Electric Furnace	2.3%	7,354	172	113.4
Heating	Electric Room Heat	12.6%	7,004	885	584.1
Heating	Air-Source Heat Pump	1.7%	6,458	111	73.2
Heating	Geothermal Heat Pump	0.0%	4,308	0	0.0
Ventilation	Ventilation	100.0%	244	244	161.1
Interior Lighting	Screw-in	100.0%	65	65	43.0
Interior Lighting	High-Bay Fixtures	100.0%	1,019	1,019	672.5
Interior Lighting	Linear Lighting	100.0%	169	169	111.8
Exterior Lighting	Screw-in	100.0%	12	12	7.9
Exterior Lighting	Area Lighting	100.0%	227	227	149.9
Exterior Lighting	Linear Lighting	100.0%	47	47	30.7
Motors	Pumps	100.0%	1,071	1,071	706.6
Motors	Fans & Blowers	100.0%	511	511	337.5
Motors	Compressed Air	100.0%	1,081	1,081	713.8
Motors	Material Handling	100.0%	5,223	5,223	3,447.4
Motors	Other Motors	100.0%	133	133	88.0
Process	Process Heating	100.0%	3,112	3,112	2,054.2
Process	Process Cooling	100.0%	275	275	181.6
Process	Process Refrigeration	100.0%	275	275	181.6
Process	Process Electrochemical	100.0%	524	524	345.9
Process	Process Other	100.0%	672	672	443.3
Miscellaneous	Miscellaneous	100.0%	635	635	419.1
Total				16,765	11,065.2

Table A-291 Washington Metal Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,252	31
Cooling	Water-Cooled Chiller	2.5%	1,285	32
Cooling	RTU	11.7%	1,587	185
Cooling	Air-Source Heat Pump	1.7%	1,567	27
Cooling	Geothermal Heat Pump	0.0%	1,085	0
Heating	Electric Furnace	2.3%	6,879	161
Heating	Electric Room Heat	12.6%	6,551	828
Heating	Air-Source Heat Pump	1.7%	5,866	101
Heating	Geothermal Heat Pump	0.0%	2,245	0
Ventilation	Ventilation	100.0%	195	195
Interior Lighting	Screw-in	100.0%	62	62
Interior Lighting	High-Bay Fixtures	100.0%	969	969
Interior Lighting	Linear Lighting	100.0%	161	161
Exterior Lighting	Screw-in	100.0%	11	11
Exterior Lighting	Area Lighting	100.0%	216	216
Exterior Lighting	Linear Lighting	100.0%	44	44
Motors	Pumps	100.0%	1,071	1,071
Motors	Fans & Blowers	100.0%	511	511
Motors	Compressed Air	100.0%	1,081	1,081
Motors	Material Handling	100.0%	5,223	5,223
Motors	Other Motors	100.0%	133	133
Process	Process Heating	100.0%	3,112	3,112
Process	Process Cooling	100.0%	275	275
Process	Process Refrigeration	100.0%	275	275
Process	Process Electrochemical	100.0%	524	524
Process	Process Other	100.0%	672	672
Miscellaneous	Miscellaneous	100.0%	635	635
Total			16,536	

Table A-292 Washington Miscellaneous Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	30,492	762	564.1
Cooling	Water-Cooled Chiller	2.5%	32,117	803	594.2
Cooling	RTU	11.7%	33,987	3,962	2,931.7
Cooling	Air-Source Heat Pump	1.7%	33,972	584	431.8
Cooling	Geothermal Heat Pump	0.0%	22,659	0	0.0
Heating	Electric Furnace	2.3%	149,391	3,490	2,582.4
Heating	Electric Room Heat	12.6%	142,277	17,977	13,303.3
Heating	Air-Source Heat Pump	1.7%	131,185	2,253	1,667.4
Heating	Geothermal Heat Pump	0.0%	87,500	0	0.0
Ventilation	Ventilation	100.0%	4,957	4,957	3,668.5
Interior Lighting	Screw-in	100.0%	963	963	712.6
Interior Lighting	High-Bay Fixtures	100.0%	15,066	15,066	11,148.7
Interior Lighting	Linear Lighting	100.0%	2,504	2,504	1,853.3
Exterior Lighting	Screw-in	100.0%	177	177	131.2
Exterior Lighting	Area Lighting	100.0%	3,359	3,359	2,485.6
Exterior Lighting	Linear Lighting	100.0%	688	688	509.2
Motors	Pumps	100.0%	10,335	10,335	7,647.8
Motors	Fans & Blowers	100.0%	6,852	6,852	5,070.1
Motors	Compressed Air	100.0%	7,241	7,241	5,358.4
Motors	Material Handling	100.0%	19,318	19,318	14,295.6
Motors	Other Motors	100.0%	2,806	2,806	2,076.6
Process	Process Heating	100.0%	14,964	14,964	11,073.3
Process	Process Cooling	100.0%	3,929	3,929	2,907.3
Process	Process Refrigeration	100.0%	3,929	3,929	2,907.3
Process	Process Electrochemical	100.0%	1,512	1,512	1,119.2
Process	Process Other	100.0%	1,641	1,641	1,214.6
Miscellaneous	Miscellaneous	100.0%	9,029	9,029	6,681.4
Total				139,102	102,935.7

Table A-293 Washington Miscellaneous Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	25,435	636
Cooling	Water-Cooled Chiller	2.5%	26,110	653
Cooling	RTU	11.7%	32,232	3,757
Cooling	Air-Source Heat Pump	1.7%	31,831	547
Cooling	Geothermal Heat Pump	0.0%	22,030	0
Heating	Electric Furnace	2.3%	139,724	3,264
Heating	Electric Room Heat	12.6%	133,071	16,814
Heating	Air-Source Heat Pump	1.7%	119,147	2,047
Heating	Geothermal Heat Pump	0.0%	45,609	0
Ventilation	Ventilation	100.0%	3,960	3,960
Interior Lighting	Screw-in	100.0%	915	915
Interior Lighting	High-Bay Fixtures	100.0%	14,322	14,322
Interior Lighting	Linear Lighting	100.0%	2,381	2,381
Exterior Lighting	Screw-in	100.0%	169	169
Exterior Lighting	Area Lighting	100.0%	3,193	3,193
Exterior Lighting	Linear Lighting	100.0%	654	654
Motors	Pumps	100.0%	10,335	10,335
Motors	Fans & Blowers	100.0%	6,852	6,852
Motors	Compressed Air	100.0%	7,241	7,241
Motors	Material Handling	100.0%	19,318	19,318
Motors	Other Motors	100.0%	2,806	2,806
Process	Process Heating	100.0%	14,964	14,964
Process	Process Cooling	100.0%	3,929	3,929
Process	Process Refrigeration	100.0%	3,929	3,929
Process	Process Electrochemical	100.0%	1,512	1,512
Process	Process Other	100.0%	1,641	1,641
Miscellaneous	Miscellaneous	100.0%	9,029	9,029
Total			134,868	

Table A-294 Wyoming Agriculture Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	2,001	50	14.19
Cooling	Water-Cooled Chiller	2.5%	2,061	52	14.61
Cooling	RTU	10.6%	2,136	226	64.05
Cooling	Air-Source Heat Pump	2.7%	2,136	58	16.46
Cooling	Geothermal Heat Pump	0.0%	1,424	0	0.00
Heating	Electric Furnace	2.7%	12,480	339	96.24
Heating	Electric Room Heat	14.7%	11,886	1,748	495.76
Heating	Air-Source Heat Pump	2.7%	11,296	307	87.07
Heating	Geothermal Heat Pump	0.0%	7,534	0	0.00
Ventilation	Ventilation	100.0%	226	226	64.14
Interior Lighting	Screw-in	100.0%	107	107	30.46
Interior Lighting	High-Bay Fixtures	100.0%	1,680	1,680	476.53
Interior Lighting	Linear Lighting	100.0%	279	279	79.21
Exterior Lighting	Screw-in	100.0%	20	20	5.61
Exterior Lighting	Area Lighting	100.0%	375	375	106.24
Exterior Lighting	Linear Lighting	100.0%	77	77	21.77
Motors	Pumps	100.0%	996	996	282.65
Motors	Fans & Blowers	100.0%	6,207	6,207	1,760.63
Motors	Compressed Air	100.0%	1,318	1,318	373.82
Motors	Material Handling	100.0%	7,628	7,628	2,163.78
Motors	Other Motors	0.0%	1,759	0	0.00
Process	Process Heating	100.0%	2,660	2,660	754.46
Process	Process Cooling	100.0%	4,476	4,476	1,269.55
Process	Process Refrigeration	100.0%	4,476	4,476	1,269.55
Process	Process Electrochemical	100.0%	86	86	24.30
Process	Process Other	100.0%	333	333	94.38
Miscellaneous	Miscellaneous	100.0%	1,759	1,759	498.83
Total				35,482	10,064.29

Table A-295 Wyoming Agriculture New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	1,669	42
Cooling	Water-Cooled Chiller	2.5%	1,675	42
Cooling	RTU	10.6%	2,026	214
Cooling	Air-Source Heat Pump	2.7%	2,001	54
Cooling	Geothermal Heat Pump	0.0%	1,385	0
Heating	Electric Furnace	2.7%	11,672	317
Heating	Electric Room Heat	14.7%	11,116	1,635
Heating	Air-Source Heat Pump	2.7%	10,259	279
Heating	Geothermal Heat Pump	0.0%	3,927	0
Ventilation	Ventilation	100.0%	180	180
Interior Lighting	Screw-in	100.0%	152	152
Interior Lighting	High-Bay Fixtures	100.0%	1,762	1,762
Interior Lighting	Linear Lighting	100.0%	280	280
Exterior Lighting	Screw-in	100.0%	46	46
Exterior Lighting	Area Lighting	100.0%	412	412
Exterior Lighting	Linear Lighting	100.0%	76	76
Motors	Pumps	100.0%	996	996
Motors	Fans & Blowers	100.0%	6,207	6,207
Motors	Compressed Air	100.0%	1,318	1,318
Motors	Material Handling	100.0%	7,628	7,628
Motors	Other Motors	0.0%	1,759	0
Process	Process Heating	100.0%	2,660	2,660
Process	Process Cooling	100.0%	4,476	4,476
Process	Process Refrigeration	100.0%	4,476	4,476
Process	Process Electrochemical	100.0%	86	86
Process	Process Other	100.0%	333	333
Miscellaneous	Miscellaneous	100.0%	1,759	1,759
Total			35,429	

Table A-296 Wyoming Mining and Extraction Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Emp.)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	63,172	1,579	3,033.34
Cooling	Water-Cooled Chiller	2.5%	65,047	1,626	3,123.39
Cooling	RTU	10.6%	67,430	7,127	13,689.26
Cooling	Air-Source Heat Pump	2.7%	67,414	1,832	3,518.85
Cooling	Geothermal Heat Pump	0.0%	44,965	0	0.00
Heating	Electric Furnace	2.7%	393,933	10,710	20,570.33
Heating	Electric Room Heat	14.7%	375,174	55,171	105,966.40
Heating	Air-Source Heat Pump	2.7%	356,549	9,690	18,611.09
Heating	Geothermal Heat Pump	0.0%	237,818	0	0.00
Ventilation	Ventilation	100.0%	7,138	7,138	13,710.16
Interior Lighting	Screw-in	100.0%	5,162	5,162	9,914.21
Interior Lighting	High-Bay Fixtures	100.0%	80,752	80,752	155,100.85
Interior Lighting	Linear Lighting	100.0%	13,424	13,424	25,782.56
Exterior Lighting	Screw-in	100.0%	950	950	1,825.13
Exterior Lighting	Area Lighting	100.0%	18,004	18,004	34,579.46
Exterior Lighting	Linear Lighting	100.0%	3,688	3,688	7,084.27
Motors	Pumps	100.0%	927,048	927,048	1,780,577.27
Motors	Fans & Blowers	100.0%	257,513	257,513	494,604.80
Motors	Compressed Air	100.0%	386,270	386,270	741,907.19
Motors	Material Handling	100.0%	270,389	270,389	519,335.04
Motors	Other Motors	100.0%	733,913	733,913	1,409,623.67
Process	Process Heating	100.0%	27,107	27,107	52,063.66
Process	Process Cooling	0.0%	27,107	0	0.00
Process	Process Refrigeration	0.0%	27,107	0	0.00
Process	Process Electrochemical	100.0%	27,107	27,107	52,063.66
Process	Process Other	100.0%	149,087	149,087	286,350.15
Miscellaneous	Miscellaneous	100.0%	27,107	27,107	52,063.66
Total				3,022,393	5,805,098.40

Table A-297 Wyoming Mining and Extraction New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	52,695	1,317
Cooling	Water-Cooled Chiller	2.5%	52,880	1,322
Cooling	RTU	10.6%	63,948	6,759
Cooling	Air-Source Heat Pump	2.7%	63,165	1,717
Cooling	Geothermal Heat Pump	0.0%	43,716	0
Heating	Electric Furnace	2.7%	368,442	10,017
Heating	Electric Room Heat	14.7%	350,897	51,601
Heating	Air-Source Heat Pump	2.7%	323,831	8,801
Heating	Geothermal Heat Pump	0.0%	123,960	0
Ventilation	Ventilation	100.0%	5,675	5,675
Interior Lighting	Screw-in	100.0%	7,290	7,290
Interior Lighting	High-Bay Fixtures	100.0%	84,675	84,675
Interior Lighting	Linear Lighting	100.0%	13,454	13,454
Exterior Lighting	Screw-in	100.0%	2,231	2,231
Exterior Lighting	Area Lighting	100.0%	19,813	19,813
Exterior Lighting	Linear Lighting	100.0%	3,636	3,636
Motors	Pumps	100.0%	927,048	927,048
Motors	Fans & Blowers	100.0%	257,513	257,513
Motors	Compressed Air	100.0%	386,270	386,270
Motors	Material Handling	100.0%	270,389	270,389
Motors	Other Motors	100.0%	733,913	733,913
Process	Process Heating	100.0%	27,107	27,107
Process	Process Cooling	0.0%	27,107	0
Process	Process Refrigeration	0.0%	27,107	0
Process	Process Electrochemical	100.0%	27,107	27,107
Process	Process Other	100.0%	149,087	149,087
Miscellaneous	Miscellaneous	100.0%	27,107	27,107
Total			3,023,848	

Table A-298 Wyoming Food Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,637	141	35.23
Cooling	Water-Cooled Chiller	2.5%	5,804	145	36.28
Cooling	RTU	10.6%	6,017	636	158.99
Cooling	Air-Source Heat Pump	2.7%	6,015	163	40.87
Cooling	Geothermal Heat Pump	0.0%	4,012	0	0.00
Heating	Electric Furnace	2.7%	35,150	956	238.90
Heating	Electric Room Heat	14.7%	33,476	4,923	1,230.70
Heating	Air-Source Heat Pump	2.7%	31,814	865	216.15
Heating	Geothermal Heat Pump	0.0%	21,220	0	0.00
Ventilation	Ventilation	100.0%	637	637	159.23
Interior Lighting	Screw-in	100.0%	302	302	75.61
Interior Lighting	High-Bay Fixtures	100.0%	4,732	4,732	1,182.94
Interior Lighting	Linear Lighting	100.0%	787	787	196.64
Exterior Lighting	Screw-in	100.0%	56	56	13.92
Exterior Lighting	Area Lighting	100.0%	1,055	1,055	263.74
Exterior Lighting	Linear Lighting	100.0%	216	216	54.03
Motors	Pumps	100.0%	6,729	6,729	1,682.32
Motors	Fans & Blowers	100.0%	11,188	11,188	2,797.09
Motors	Compressed Air	100.0%	4,303	4,303	1,075.77
Motors	Material Handling	100.0%	21,107	21,107	5,276.74
Motors	Other Motors	100.0%	2,159	2,159	539.80
Process	Process Heating	100.0%	7,492	7,492	1,872.90
Process	Process Cooling	100.0%	12,606	12,606	3,151.58
Process	Process Refrigeration	100.0%	12,606	12,606	3,151.58
Process	Process Electrochemical	100.0%	241	241	60.33
Process	Process Other	100.0%	937	937	234.29
Miscellaneous	Miscellaneous	100.0%	4,953	4,953	1,238.31
Total				99,936	24,983.93

Table A-299 Wyoming Food Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,702	118
Cooling	Water-Cooled Chiller	2.5%	4,718	118
Cooling	RTU	10.6%	5,706	603
Cooling	Air-Source Heat Pump	2.7%	5,636	153
Cooling	Geothermal Heat Pump	0.0%	3,901	0
Heating	Electric Furnace	2.7%	32,875	894
Heating	Electric Room Heat	14.7%	31,310	4,604
Heating	Air-Source Heat Pump	2.7%	28,895	785
Heating	Geothermal Heat Pump	0.0%	11,061	0
Ventilation	Ventilation	100.0%	506	506
Interior Lighting	Screw-in	100.0%	427	427
Interior Lighting	High-Bay Fixtures	100.0%	4,962	4,962
Interior Lighting	Linear Lighting	100.0%	788	788
Exterior Lighting	Screw-in	100.0%	131	131
Exterior Lighting	Area Lighting	100.0%	1,161	1,161
Exterior Lighting	Linear Lighting	100.0%	213	213
Motors	Pumps	100.0%	6,729	6,729
Motors	Fans & Blowers	100.0%	11,188	11,188
Motors	Compressed Air	100.0%	4,303	4,303
Motors	Material Handling	100.0%	21,107	21,107
Motors	Other Motors	100.0%	2,159	2,159
Process	Process Heating	100.0%	7,492	7,492
Process	Process Cooling	100.0%	12,606	12,606
Process	Process Refrigeration	100.0%	12,606	12,606
Process	Process Electrochemical	100.0%	241	241
Process	Process Other	100.0%	937	937
Miscellaneous	Miscellaneous	100.0%	4,953	4,953
Total			99,786	

Table A-300 Wyoming Paper Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	39	1	0.02
Cooling	Water-Cooled Chiller	2.5%	40	1	0.02
Cooling	RTU	10.6%	42	4	0.09
Cooling	Air-Source Heat Pump	2.7%	42	1	0.02
Cooling	Geothermal Heat Pump	0.0%	28	0	0.00
Heating	Electric Furnace	2.7%	243	7	0.13
Heating	Electric Room Heat	14.7%	231	34	0.68
Heating	Air-Source Heat Pump	2.7%	220	6	0.12
Heating	Geothermal Heat Pump	0.0%	146	0	0.00
Ventilation	Ventilation	100.0%	4	4	0.09
Interior Lighting	Screw-in	100.0%	2	2	0.05
Interior Lighting	High-Bay Fixtures	100.0%	36	36	0.71
Interior Lighting	Linear Lighting	100.0%	6	6	0.12
Exterior Lighting	Screw-in	100.0%	0	0	0.01
Exterior Lighting	Area Lighting	100.0%	8	8	0.16
Exterior Lighting	Linear Lighting	100.0%	2	2	0.03
Motors	Pumps	100.0%	206	206	4.13
Motors	Fans & Blowers	100.0%	199	199	3.99
Motors	Compressed Air	100.0%	112	112	2.24
Motors	Material Handling	100.0%	476	476	9.51
Motors	Other Motors	100.0%	13	13	0.25
Process	Process Heating	100.0%	99	99	1.97
Process	Process Cooling	100.0%	10	10	0.20
Process	Process Refrigeration	100.0%	10	10	0.20
Process	Process Electrochemical	100.0%	18	18	0.35
Process	Process Other	100.0%	19	19	0.38
Miscellaneous	Miscellaneous	100.0%	33	33	0.67
Total				1,306	26.13

Table A-301 Wyoming Paper Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	32	1
Cooling	Water-Cooled Chiller	2.5%	33	1
Cooling	RTU	10.6%	39	4
Cooling	Air-Source Heat Pump	2.7%	39	1
Cooling	Geothermal Heat Pump	0.0%	27	0
Heating	Electric Furnace	2.7%	227	6
Heating	Electric Room Heat	14.7%	216	32
Heating	Air-Source Heat Pump	2.7%	199	5
Heating	Geothermal Heat Pump	0.0%	76	0
Ventilation	Ventilation	100.0%	3	3
Interior Lighting	Screw-in	100.0%	3	3
Interior Lighting	High-Bay Fixtures	100.0%	37	37
Interior Lighting	Linear Lighting	100.0%	6	6
Exterior Lighting	Screw-in	100.0%	1	1
Exterior Lighting	Area Lighting	100.0%	9	9
Exterior Lighting	Linear Lighting	100.0%	2	2
Motors	Pumps	100.0%	206	206
Motors	Fans & Blowers	100.0%	199	199
Motors	Compressed Air	100.0%	112	112
Motors	Material Handling	100.0%	476	476
Motors	Other Motors	100.0%	13	13
Process	Process Heating	100.0%	99	99
Process	Process Cooling	100.0%	10	10
Process	Process Refrigeration	100.0%	10	10
Process	Process Electrochemical	100.0%	18	18
Process	Process Other	100.0%	19	19
Miscellaneous	Miscellaneous	100.0%	33	33
Total			1,306	

Table A-302 Wyoming Petroleum Refining Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	35,761	894	178.80
Cooling	Water-Cooled Chiller	2.5%	36,822	921	184.11
Cooling	RTU	10.6%	38,171	4,035	806.93
Cooling	Air-Source Heat Pump	2.7%	38,162	1,037	207.42
Cooling	Geothermal Heat Pump	0.0%	25,454	0	0.00
Heating	Electric Furnace	2.7%	223,000	6,063	1,212.54
Heating	Electric Room Heat	14.7%	212,381	31,232	6,246.30
Heating	Air-Source Heat Pump	2.7%	201,838	5,485	1,097.05
Heating	Geothermal Heat Pump	0.0%	134,626	0	0.00
Ventilation	Ventilation	100.0%	4,041	4,041	808.16
Interior Lighting	Screw-in	100.0%	1,508	1,508	301.54
Interior Lighting	High-Bay Fixtures	100.0%	23,587	23,587	4,717.41
Interior Lighting	Linear Lighting	100.0%	3,921	3,921	784.18
Exterior Lighting	Screw-in	100.0%	278	278	55.51
Exterior Lighting	Area Lighting	100.0%	5,259	5,259	1,051.74
Exterior Lighting	Linear Lighting	100.0%	1,077	1,077	215.47
Motors	Pumps	100.0%	703,447	703,447	140,689.41
Motors	Fans & Blowers	100.0%	115,319	115,319	23,063.84
Motors	Compressed Air	100.0%	184,511	184,511	36,902.14
Motors	Material Handling	100.0%	165,291	165,291	33,058.17
Motors	Other Motors	100.0%	64,612	64,612	12,922.39
Process	Process Heating	100.0%	61,750	61,750	12,350.04
Process	Process Cooling	100.0%	37,647	37,647	7,529.48
Process	Process Refrigeration	100.0%	37,647	37,647	7,529.48
Process	Process Electrochemical	100.0%	1,515	1,515	303.02
Process	Process Other	100.0%	11,479	11,479	2,295.89
Miscellaneous	Miscellaneous	100.0%	16,082	16,082	3,216.40
Total				1,488,637	297,727.41

Table A-303 Wyoming Petroleum Refining New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	29,830	746
Cooling	Water-Cooled Chiller	2.5%	29,935	748
Cooling	RTU	10.6%	36,200	3,826
Cooling	Air-Source Heat Pump	2.7%	35,757	972
Cooling	Geothermal Heat Pump	0.0%	24,747	0
Heating	Electric Furnace	2.7%	208,571	5,670
Heating	Electric Room Heat	14.7%	198,639	29,211
Heating	Air-Source Heat Pump	2.7%	183,317	4,982
Heating	Geothermal Heat Pump	0.0%	70,172	0
Ventilation	Ventilation	100.0%	3,212	3,212
Interior Lighting	Screw-in	100.0%	2,129	2,129
Interior Lighting	High-Bay Fixtures	100.0%	24,733	24,733
Interior Lighting	Linear Lighting	100.0%	3,930	3,930
Exterior Lighting	Screw-in	100.0%	652	652
Exterior Lighting	Area Lighting	100.0%	5,787	5,787
Exterior Lighting	Linear Lighting	100.0%	1,062	1,062
Motors	Pumps	100.0%	703,447	703,447
Motors	Fans & Blowers	100.0%	115,319	115,319
Motors	Compressed Air	100.0%	184,511	184,511
Motors	Material Handling	100.0%	165,291	165,291
Motors	Other Motors	100.0%	64,612	64,612
Process	Process Heating	100.0%	61,750	61,750
Process	Process Cooling	100.0%	37,647	37,647
Process	Process Refrigeration	100.0%	37,647	37,647
Process	Process Electrochemical	100.0%	1,515	1,515
Process	Process Other	100.0%	11,479	11,479
Miscellaneous	Miscellaneous	100.0%	16,082	16,082
Total			1,486,962	

Table A-304 Wyoming Stone Clay Glass Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	28,102	703	140.51
Cooling	Water-Cooled Chiller	2.5%	28,936	723	144.68
Cooling	RTU	10.6%	29,996	3,171	634.11
Cooling	Air-Source Heat Pump	2.7%	29,989	815	163.00
Cooling	Geothermal Heat Pump	0.0%	20,003	0	0.00
Heating	Electric Furnace	2.7%	175,240	4,764	952.85
Heating	Electric Room Heat	14.7%	166,895	24,543	4,908.52
Heating	Air-Source Heat Pump	2.7%	158,610	4,310	862.09
Heating	Geothermal Heat Pump	0.0%	105,793	0	0.00
Ventilation	Ventilation	100.0%	3,175	3,175	635.07
Interior Lighting	Screw-in	100.0%	1,450	1,450	290.03
Interior Lighting	High-Bay Fixtures	100.0%	22,687	22,687	4,537.39
Interior Lighting	Linear Lighting	100.0%	3,771	3,771	754.26
Exterior Lighting	Screw-in	100.0%	267	267	53.39
Exterior Lighting	Area Lighting	100.0%	5,058	5,058	1,011.60
Exterior Lighting	Linear Lighting	100.0%	1,036	1,036	207.25
Motors	Pumps	100.0%	44,529	44,529	8,905.82
Motors	Fans & Blowers	100.0%	62,664	62,664	12,532.81
Motors	Compressed Air	100.0%	11,280	11,280	2,255.91
Motors	Material Handling	100.0%	259,429	259,429	51,885.85
Motors	Other Motors	100.0%	4,048	4,048	809.62
Process	Process Heating	100.0%	136,620	136,620	27,324.06
Process	Process Cooling	100.0%	8,384	8,384	1,676.72
Process	Process Refrigeration	100.0%	8,384	8,384	1,676.72
Process	Process Electrochemical	100.0%	2,351	2,351	470.26
Process	Process Other	100.0%	27,868	27,868	5,573.60
Miscellaneous	Miscellaneous	100.0%	21,749	21,749	4,349.74
Total				663,779	132,755.88

Table A-305 Wyoming Stone Clay Glass Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	23,441	586
Cooling	Water-Cooled Chiller	2.5%	23,524	588
Cooling	RTU	10.6%	28,447	3,007
Cooling	Air-Source Heat Pump	2.7%	28,099	764
Cooling	Geothermal Heat Pump	0.0%	19,447	0
Heating	Electric Furnace	2.7%	163,901	4,456
Heating	Electric Room Heat	14.7%	156,096	22,955
Heating	Air-Source Heat Pump	2.7%	144,055	3,915
Heating	Geothermal Heat Pump	0.0%	55,143	0
Ventilation	Ventilation	100.0%	2,524	2,524
Interior Lighting	Screw-in	100.0%	2,048	2,048
Interior Lighting	High-Bay Fixtures	100.0%	23,789	23,789
Interior Lighting	Linear Lighting	100.0%	3,780	3,780
Exterior Lighting	Screw-in	100.0%	627	627
Exterior Lighting	Area Lighting	100.0%	5,566	5,566
Exterior Lighting	Linear Lighting	100.0%	1,022	1,022
Motors	Pumps	100.0%	44,529	44,529
Motors	Fans & Blowers	100.0%	62,664	62,664
Motors	Compressed Air	100.0%	11,280	11,280
Motors	Material Handling	100.0%	259,429	259,429
Motors	Other Motors	100.0%	4,048	4,048
Process	Process Heating	100.0%	136,620	136,620
Process	Process Cooling	100.0%	8,384	8,384
Process	Process Refrigeration	100.0%	8,384	8,384
Process	Process Electrochemical	100.0%	2,351	2,351
Process	Process Other	100.0%	27,868	27,868
Miscellaneous	Miscellaneous	100.0%	21,749	21,749
Total			662,932	

Table A-306 Wyoming Transportation Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	5,980	149	14.95
Cooling	Water-Cooled Chiller	2.5%	6,157	154	15.39
Cooling	RTU	10.6%	6,383	675	67.47
Cooling	Air-Source Heat Pump	2.7%	6,381	173	17.34
Cooling	Geothermal Heat Pump	0.0%	4,256	0	0.00
Heating	Electric Furnace	2.7%	37,290	1,014	101.38
Heating	Electric Room Heat	14.7%	35,514	5,222	522.25
Heating	Air-Source Heat Pump	2.7%	33,751	917	91.72
Heating	Geothermal Heat Pump	0.0%	22,512	0	0.00
Ventilation	Ventilation	100.0%	676	676	67.57
Interior Lighting	Screw-in	100.0%	273	273	27.35
Interior Lighting	High-Bay Fixtures	100.0%	4,278	4,278	427.84
Interior Lighting	Linear Lighting	100.0%	711	711	71.12
Exterior Lighting	Screw-in	100.0%	50	50	5.03
Exterior Lighting	Area Lighting	100.0%	954	954	95.39
Exterior Lighting	Linear Lighting	100.0%	195	195	19.54
Motors	Pumps	100.0%	2,172	2,172	217.23
Motors	Fans & Blowers	100.0%	1,037	1,037	103.75
Motors	Compressed Air	100.0%	2,194	2,194	219.44
Motors	Material Handling	100.0%	10,599	10,599	1,059.86
Motors	Other Motors	100.0%	270	270	27.04
Process	Process Heating	100.0%	6,054	6,054	605.35
Process	Process Cooling	100.0%	1,336	1,336	133.62
Process	Process Refrigeration	100.0%	1,336	1,336	133.62
Process	Process Electrochemical	100.0%	726	726	72.62
Process	Process Other	100.0%	1,631	1,631	163.08
Miscellaneous	Miscellaneous	100.0%	2,660	2,660	266.02
Total				45,460	4,545.95

Table A-307 Wyoming Transportation Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	4,988	125
Cooling	Water-Cooled Chiller	2.5%	5,006	125
Cooling	RTU	10.6%	6,053	640
Cooling	Air-Source Heat Pump	2.7%	5,979	162
Cooling	Geothermal Heat Pump	0.0%	4,138	0
Heating	Electric Furnace	2.7%	34,877	948
Heating	Electric Room Heat	14.7%	33,216	4,885
Heating	Air-Source Heat Pump	2.7%	30,654	833
Heating	Geothermal Heat Pump	0.0%	11,734	0
Ventilation	Ventilation	100.0%	537	537
Interior Lighting	Screw-in	100.0%	386	386
Interior Lighting	High-Bay Fixtures	100.0%	4,486	4,486
Interior Lighting	Linear Lighting	100.0%	713	713
Exterior Lighting	Screw-in	100.0%	118	118
Exterior Lighting	Area Lighting	100.0%	1,050	1,050
Exterior Lighting	Linear Lighting	100.0%	193	193
Motors	Pumps	100.0%	2,172	2,172
Motors	Fans & Blowers	100.0%	1,037	1,037
Motors	Compressed Air	100.0%	2,194	2,194
Motors	Material Handling	100.0%	10,599	10,599
Motors	Other Motors	100.0%	270	270
Process	Process Heating	100.0%	6,054	6,054
Process	Process Cooling	100.0%	1,336	1,336
Process	Process Refrigeration	100.0%	1,336	1,336
Process	Process Electrochemical	100.0%	726	726
Process	Process Other	100.0%	1,631	1,631
Miscellaneous	Miscellaneous	100.0%	2,660	2,660
Total			45,217	

Table A-308 Wyoming Wastewater Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	6,766	169	16.92
Cooling	Water-Cooled Chiller	2.5%	6,967	174	17.42
Cooling	RTU	10.6%	7,222	763	76.34
Cooling	Air-Source Heat Pump	2.7%	7,220	196	19.62
Cooling	Geothermal Heat Pump	0.0%	4,816	0	0.00
Heating	Electric Furnace	2.7%	42,193	1,147	114.71
Heating	Electric Room Heat	14.7%	40,183	5,909	590.91
Heating	Air-Source Heat Pump	2.7%	38,189	1,038	103.78
Heating	Geothermal Heat Pump	0.0%	25,472	0	0.00
Ventilation	Ventilation	100.0%	765	765	76.45
Interior Lighting	Screw-in	100.0%	396	396	39.61
Interior Lighting	High-Bay Fixtures	100.0%	6,196	6,196	619.60
Interior Lighting	Linear Lighting	100.0%	1,030	1,030	103.00
Exterior Lighting	Screw-in	100.0%	73	73	7.29
Exterior Lighting	Area Lighting	100.0%	1,381	1,381	138.14
Exterior Lighting	Linear Lighting	100.0%	283	283	28.30
Motors	Pumps	100.0%	50,246	50,246	5,024.57
Motors	Fans & Blowers	100.0%	123,705	123,705	12,370.49
Motors	Compressed Air	100.0%	2,646	2,646	264.65
Motors	Material Handling	100.0%	11,821	11,821	1,182.10
Motors	Other Motors	100.0%	3,705	3,705	370.51
Process	Process Heating	0.0%	5,788	0	0.00
Process	Process Cooling	0.0%	5,788	0	0.00
Process	Process Refrigeration	0.0%	5,788	0	0.00
Process	Process Electrochemical	0.0%	5,788	0	0.00
Process	Process Other	100.0%	9,796	9,796	979.60
Miscellaneous	Miscellaneous	100.0%	5,788	5,788	578.85
Total				227,228	22,722.85

Table A-309 Wyoming Wastewater New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	5,644	141
Cooling	Water-Cooled Chiller	2.5%	5,664	142
Cooling	RTU	10.6%	6,849	724
Cooling	Air-Source Heat Pump	2.7%	6,765	184
Cooling	Geothermal Heat Pump	0.0%	4,682	0
Heating	Electric Furnace	2.7%	39,462	1,073
Heating	Electric Room Heat	14.7%	37,583	5,527
Heating	Air-Source Heat Pump	2.7%	34,684	943
Heating	Geothermal Heat Pump	0.0%	13,277	0
Ventilation	Ventilation	100.0%	608	608
Interior Lighting	Screw-in	100.0%	559	559
Interior Lighting	High-Bay Fixtures	100.0%	6,497	6,497
Interior Lighting	Linear Lighting	100.0%	1,032	1,032
Exterior Lighting	Screw-in	100.0%	171	171
Exterior Lighting	Area Lighting	100.0%	1,520	1,520
Exterior Lighting	Linear Lighting	100.0%	279	279
Motors	Pumps	100.0%	50,246	50,246
Motors	Fans & Blowers	100.0%	123,705	123,705
Motors	Compressed Air	100.0%	2,646	2,646
Motors	Material Handling	100.0%	11,821	11,821
Motors	Other Motors	100.0%	3,705	3,705
Process	Process Heating	0.0%	5,788	0
Process	Process Cooling	0.0%	5,788	0
Process	Process Refrigeration	0.0%	5,788	0
Process	Process Electrochemical	0.0%	5,788	0
Process	Process Other	100.0%	9,796	9,796
Miscellaneous	Miscellaneous	100.0%	5,788	5,788
Total			227,107	

Table A-310 Wyoming Water Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	4,696	117	23.48
Cooling	Water-Cooled Chiller	2.5%	4,836	121	24.18
Cooling	RTU	10.6%	5,013	530	105.97
Cooling	Air-Source Heat Pump	2.7%	5,012	136	27.24
Cooling	Geothermal Heat Pump	0.0%	3,343	0	0.00
Heating	Electric Furnace	2.7%	29,285	796	159.23
Heating	Electric Room Heat	14.7%	27,890	4,101	820.28
Heating	Air-Source Heat Pump	2.7%	26,506	720	144.07
Heating	Geothermal Heat Pump	0.0%	17,679	0	0.00
Ventilation	Ventilation	100.0%	531	531	106.13
Interior Lighting	Screw-in	100.0%	275	275	54.98
Interior Lighting	High-Bay Fixtures	100.0%	4,300	4,300	860.10
Interior Lighting	Linear Lighting	100.0%	715	715	142.97
Exterior Lighting	Screw-in	100.0%	51	51	10.12
Exterior Lighting	Area Lighting	100.0%	959	959	191.76
Exterior Lighting	Linear Lighting	100.0%	196	196	39.29
Motors	Pumps	100.0%	125,984	125,984	25,196.83
Motors	Fans & Blowers	0.0%	4,018	0	0.00
Motors	Compressed Air	100.0%	1,837	1,837	367.37
Motors	Material Handling	100.0%	5,466	5,466	1,093.16
Motors	Other Motors	100.0%	61	61	12.25
Process	Process Heating	0.0%	4,018	0	0.00
Process	Process Cooling	0.0%	4,018	0	0.00
Process	Process Refrigeration	0.0%	4,018	0	0.00
Process	Process Electrochemical	0.0%	4,018	0	0.00
Process	Process Other	100.0%	6,799	6,799	1,359.84
Miscellaneous	Miscellaneous	100.0%	4,018	4,018	803.53
Total				157,714	31,542.76

Table A-311 Wyoming Water New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	3,917	98
Cooling	Water-Cooled Chiller	2.5%	3,931	98
Cooling	RTU	10.6%	4,754	502
Cooling	Air-Source Heat Pump	2.7%	4,696	128
Cooling	Geothermal Heat Pump	0.0%	3,250	0
Heating	Electric Furnace	2.7%	27,390	745
Heating	Electric Room Heat	14.7%	26,086	3,836
Heating	Air-Source Heat Pump	2.7%	24,073	654
Heating	Geothermal Heat Pump	0.0%	9,215	0
Ventilation	Ventilation	100.0%	422	422
Interior Lighting	Screw-in	100.0%	388	388
Interior Lighting	High-Bay Fixtures	100.0%	4,509	4,509
Interior Lighting	Linear Lighting	100.0%	717	717
Exterior Lighting	Screw-in	100.0%	119	119
Exterior Lighting	Area Lighting	100.0%	1,055	1,055
Exterior Lighting	Linear Lighting	100.0%	194	194
Motors	Pumps	100.0%	125,984	125,984
Motors	Fans & Blowers	0.0%	4,018	0
Motors	Compressed Air	100.0%	1,837	1,837
Motors	Material Handling	100.0%	5,466	5,466
Motors	Other Motors	100.0%	61	61
Process	Process Heating	0.0%	4,018	0
Process	Process Cooling	0.0%	4,018	0
Process	Process Refrigeration	0.0%	4,018	0
Process	Process Electrochemical	0.0%	4,018	0
Process	Process Other	100.0%	6,799	6,799
Miscellaneous	Miscellaneous	100.0%	4,018	4,018
Total			157,630	

Table A-312 Wyoming Chemical Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	43,964	1,099	549.54
Cooling	Water-Cooled Chiller	2.5%	45,269	1,132	565.86
Cooling	RTU	10.6%	46,927	4,960	2,480.06
Cooling	Air-Source Heat Pump	2.7%	46,916	1,275	637.50
Cooling	Geothermal Heat Pump	0.0%	31,293	0	0.00
Heating	Electric Furnace	2.7%	274,152	7,453	3,726.69
Heating	Electric Room Heat	14.7%	261,098	38,395	19,197.72
Heating	Air-Source Heat Pump	2.7%	248,136	6,743	3,371.73
Heating	Geothermal Heat Pump	0.0%	165,507	0	0.00
Ventilation	Ventilation	100.0%	4,968	4,968	2,483.84
Interior Lighting	Screw-in	100.0%	1,757	1,757	878.31
Interior Lighting	High-Bay Fixtures	100.0%	27,481	27,481	13,740.61
Interior Lighting	Linear Lighting	100.0%	4,568	4,568	2,284.11
Exterior Lighting	Screw-in	100.0%	323	323	161.69
Exterior Lighting	Area Lighting	100.0%	6,127	6,127	3,063.44
Exterior Lighting	Linear Lighting	100.0%	1,255	1,255	627.61
Motors	Pumps	100.0%	171,439	171,439	85,719.53
Motors	Fans & Blowers	100.0%	78,340	78,340	39,169.85
Motors	Compressed Air	100.0%	181,657	181,657	90,828.64
Motors	Material Handling	100.0%	164,627	164,627	82,313.46
Motors	Other Motors	100.0%	21,581	21,581	10,790.55
Process	Process Heating	100.0%	72,196	72,196	36,098.03
Process	Process Cooling	100.0%	40,514	40,514	20,257.06
Process	Process Refrigeration	100.0%	40,514	40,514	20,257.06
Process	Process Electrochemical	100.0%	207,329	207,329	103,664.45
Process	Process Other	100.0%	12,901	12,901	6,450.64
Miscellaneous	Miscellaneous	100.0%	31,889	31,889	15,944.68
Total				1,130,525	565,262.69

Table A-313 Wyoming Chemical Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	36,673	917
Cooling	Water-Cooled Chiller	2.5%	36,801	920
Cooling	RTU	10.6%	44,504	4,704
Cooling	Air-Source Heat Pump	2.7%	43,959	1,195
Cooling	Geothermal Heat Pump	0.0%	30,424	0
Heating	Electric Furnace	2.7%	256,413	6,971
Heating	Electric Room Heat	14.7%	244,203	35,911
Heating	Air-Source Heat Pump	2.7%	225,366	6,125
Heating	Geothermal Heat Pump	0.0%	86,269	0
Ventilation	Ventilation	100.0%	3,949	3,949
Interior Lighting	Screw-in	100.0%	2,481	2,481
Interior Lighting	High-Bay Fixtures	100.0%	28,816	28,816
Interior Lighting	Linear Lighting	100.0%	4,579	4,579
Exterior Lighting	Screw-in	100.0%	759	759
Exterior Lighting	Area Lighting	100.0%	6,743	6,743
Exterior Lighting	Linear Lighting	100.0%	1,237	1,237
Motors	Pumps	100.0%	171,439	171,439
Motors	Fans & Blowers	100.0%	78,340	78,340
Motors	Compressed Air	100.0%	181,657	181,657
Motors	Material Handling	100.0%	164,627	164,627
Motors	Other Motors	100.0%	21,581	21,581
Process	Process Heating	100.0%	72,196	72,196
Process	Process Cooling	100.0%	40,514	40,514
Process	Process Refrigeration	100.0%	40,514	40,514
Process	Process Electrochemical	100.0%	207,329	207,329
Process	Process Other	100.0%	12,901	12,901
Miscellaneous	Miscellaneous	100.0%	31,889	31,889
Total			1,128,294	

Table A-314 Wyoming Electronic Equipment Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	21,575	539	53.94
Cooling	Water-Cooled Chiller	2.5%	22,215	555	55.54
Cooling	RTU	10.6%	23,029	2,434	243.41
Cooling	Air-Source Heat Pump	2.7%	23,023	626	62.57
Cooling	Geothermal Heat Pump	0.0%	15,357	0	0.00
Heating	Electric Furnace	2.7%	134,537	3,658	365.77
Heating	Electric Room Heat	14.7%	128,131	18,842	1,884.21
Heating	Air-Source Heat Pump	2.7%	121,770	3,309	330.93
Heating	Geothermal Heat Pump	0.0%	81,220	0	0.00
Ventilation	Ventilation	100.0%	2,438	2,438	243.78
Interior Lighting	Screw-in	100.0%	558	558	55.85
Interior Lighting	High-Bay Fixtures	100.0%	8,737	8,737	873.70
Interior Lighting	Linear Lighting	100.0%	1,452	1,452	145.24
Exterior Lighting	Screw-in	100.0%	103	103	10.28
Exterior Lighting	Area Lighting	100.0%	1,948	1,948	194.79
Exterior Lighting	Linear Lighting	100.0%	399	399	39.91
Motors	Pumps	100.0%	1,646	1,646	164.62
Motors	Fans & Blowers	100.0%	2,634	2,634	263.39
Motors	Compressed Air	100.0%	4,765	4,765	476.51
Motors	Material Handling	100.0%	14,898	14,898	1,489.77
Motors	Other Motors	0.0%	9,791	0	0.00
Process	Process Heating	100.0%	12,431	12,431	1,243.06
Process	Process Cooling	100.0%	5,773	5,773	577.25
Process	Process Refrigeration	100.0%	5,773	5,773	577.25
Process	Process Electrochemical	100.0%	2,169	2,169	216.92
Process	Process Other	100.0%	10,914	10,914	1,091.41
Miscellaneous	Miscellaneous	100.0%	9,791	9,791	979.11
Total				116,392	11,639.19

Table A-315 Wyoming Electronic Equipment Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	17,997	450
Cooling	Water-Cooled Chiller	2.5%	18,060	451
Cooling	RTU	10.6%	21,840	2,308
Cooling	Air-Source Heat Pump	2.7%	21,572	586
Cooling	Geothermal Heat Pump	0.0%	14,930	0
Heating	Electric Furnace	2.7%	125,832	3,421
Heating	Electric Room Heat	14.7%	119,840	17,623
Heating	Air-Source Heat Pump	2.7%	110,596	3,006
Heating	Geothermal Heat Pump	0.0%	42,335	0
Ventilation	Ventilation	100.0%	1,938	1,938
Interior Lighting	Screw-in	100.0%	789	789
Interior Lighting	High-Bay Fixtures	100.0%	9,161	9,161
Interior Lighting	Linear Lighting	100.0%	1,456	1,456
Exterior Lighting	Screw-in	100.0%	241	241
Exterior Lighting	Area Lighting	100.0%	2,144	2,144
Exterior Lighting	Linear Lighting	100.0%	393	393
Motors	Pumps	100.0%	1,646	1,646
Motors	Fans & Blowers	100.0%	2,634	2,634
Motors	Compressed Air	100.0%	4,765	4,765
Motors	Material Handling	100.0%	14,898	14,898
Motors	Other Motors	0.0%	9,791	0
Process	Process Heating	100.0%	12,431	12,431
Process	Process Cooling	100.0%	5,773	5,773
Process	Process Refrigeration	100.0%	5,773	5,773
Process	Process Electrochemical	100.0%	2,169	2,169
Process	Process Other	100.0%	10,914	10,914
Miscellaneous	Miscellaneous	100.0%	9,791	9,791
Total			114,761	

Table A-316 Wyoming Industrial Machinery Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	7,984	200	59.88
Cooling	Water-Cooled Chiller	2.5%	8,221	206	61.65
Cooling	RTU	10.6%	8,522	901	270.22
Cooling	Air-Source Heat Pump	2.7%	8,520	232	69.46
Cooling	Geothermal Heat Pump	0.0%	5,683	0	0.00
Heating	Electric Furnace	2.7%	49,785	1,353	406.05
Heating	Electric Room Heat	14.7%	47,414	6,972	2,091.72
Heating	Air-Source Heat Pump	2.7%	45,060	1,225	367.37
Heating	Geothermal Heat Pump	0.0%	30,055	0	0.00
Ventilation	Ventilation	100.0%	902	902	270.63
Interior Lighting	Screw-in	100.0%	308	308	92.52
Interior Lighting	High-Bay Fixtures	100.0%	4,824	4,824	1,447.34
Interior Lighting	Linear Lighting	100.0%	802	802	240.59
Exterior Lighting	Screw-in	100.0%	57	57	17.03
Exterior Lighting	Area Lighting	100.0%	1,076	1,076	322.68
Exterior Lighting	Linear Lighting	100.0%	220	220	66.11
Motors	Pumps	100.0%	2,650	2,650	795.00
Motors	Fans & Blowers	100.0%	6,167	6,167	1,850.18
Motors	Compressed Air	100.0%	5,252	5,252	1,575.54
Motors	Material Handling	100.0%	8,503	8,503	2,550.79
Motors	Other Motors	0.0%	3,681	0	0.00
Process	Process Heating	100.0%	3,513	3,513	1,053.84
Process	Process Cooling	100.0%	688	688	206.45
Process	Process Refrigeration	100.0%	688	688	206.45
Process	Process Electrochemical	100.0%	466	466	139.85
Process	Process Other	100.0%	1,567	1,567	470.17
Miscellaneous	Miscellaneous	100.0%	3,681	3,681	1,104.19
Total				52,452	15,735.69

Table A-317 Wyoming Industrial Machinery New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	6,660	166
Cooling	Water-Cooled Chiller	2.5%	6,683	167
Cooling	RTU	10.6%	8,082	854
Cooling	Air-Source Heat Pump	2.7%	7,983	217
Cooling	Geothermal Heat Pump	0.0%	5,525	0
Heating	Electric Furnace	2.7%	46,563	1,266
Heating	Electric Room Heat	14.7%	44,346	6,521
Heating	Air-Source Heat Pump	2.7%	40,925	1,112
Heating	Geothermal Heat Pump	0.0%	15,666	0
Ventilation	Ventilation	100.0%	717	717
Interior Lighting	Screw-in	100.0%	436	436
Interior Lighting	High-Bay Fixtures	100.0%	5,059	5,059
Interior Lighting	Linear Lighting	100.0%	804	804
Exterior Lighting	Screw-in	100.0%	133	133
Exterior Lighting	Area Lighting	100.0%	1,184	1,184
Exterior Lighting	Linear Lighting	100.0%	217	217
Motors	Pumps	100.0%	2,650	2,650
Motors	Fans & Blowers	100.0%	6,167	6,167
Motors	Compressed Air	100.0%	5,252	5,252
Motors	Material Handling	100.0%	8,503	8,503
Motors	Other Motors	0.0%	3,681	0
Process	Process Heating	100.0%	3,513	3,513
Process	Process Cooling	100.0%	688	688
Process	Process Refrigeration	100.0%	688	688
Process	Process Electrochemical	100.0%	466	466
Process	Process Other	100.0%	1,567	1,567
Miscellaneous	Miscellaneous	100.0%	3,681	3,681
Total			52,028	

Table A-318 Wyoming Lumber & Wood Products Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	3,325	83	8.31
Cooling	Water-Cooled Chiller	2.5%	3,424	86	8.56
Cooling	RTU	10.6%	3,550	375	37.52
Cooling	Air-Source Heat Pump	2.7%	3,549	96	9.64
Cooling	Geothermal Heat Pump	0.0%	2,367	0	0.00
Heating	Electric Furnace	2.7%	20,737	564	56.38
Heating	Electric Room Heat	14.7%	19,749	2,904	290.42
Heating	Air-Source Heat Pump	2.7%	18,769	510	51.01
Heating	Geothermal Heat Pump	0.0%	12,519	0	0.00
Ventilation	Ventilation	100.0%	376	376	37.58
Interior Lighting	Screw-in	100.0%	306	306	30.59
Interior Lighting	High-Bay Fixtures	100.0%	4,785	4,785	478.53
Interior Lighting	Linear Lighting	100.0%	795	795	79.55
Exterior Lighting	Screw-in	100.0%	56	56	5.63
Exterior Lighting	Area Lighting	100.0%	1,067	1,067	106.69
Exterior Lighting	Linear Lighting	100.0%	219	219	21.86
Motors	Pumps	100.0%	10,645	10,645	1,064.53
Motors	Fans & Blowers	100.0%	7,844	7,844	784.43
Motors	Compressed Air	100.0%	4,037	4,037	403.66
Motors	Material Handling	100.0%	54,302	54,302	5,430.20
Motors	Other Motors	100.0%	823	823	82.34
Process	Process Heating	100.0%	8,873	8,873	887.31
Process	Process Cooling	100.0%	658	658	65.83
Process	Process Refrigeration	100.0%	658	658	65.83
Process	Process Electrochemical	100.0%	765	765	76.52
Process	Process Other	100.0%	552	552	55.20
Miscellaneous	Miscellaneous	100.0%	4,675	4,675	467.55
Total				106,056	10,605.64

Table A-319 Wyoming Lumber & Wood Products New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	2,774	69
Cooling	Water-Cooled Chiller	2.5%	2,784	70
Cooling	RTU	10.6%	3,366	356
Cooling	Air-Source Heat Pump	2.7%	3,325	90
Cooling	Geothermal Heat Pump	0.0%	2,301	0
Heating	Electric Furnace	2.7%	19,395	527
Heating	Electric Room Heat	14.7%	18,471	2,716
Heating	Air-Source Heat Pump	2.7%	17,046	463
Heating	Geothermal Heat Pump	0.0%	6,525	0
Ventilation	Ventilation	100.0%	299	299
Interior Lighting	Screw-in	100.0%	432	432
Interior Lighting	High-Bay Fixtures	100.0%	5,018	5,018
Interior Lighting	Linear Lighting	100.0%	797	797
Exterior Lighting	Screw-in	100.0%	132	132
Exterior Lighting	Area Lighting	100.0%	1,174	1,174
Exterior Lighting	Linear Lighting	100.0%	215	215
Motors	Pumps	100.0%	10,645	10,645
Motors	Fans & Blowers	100.0%	7,844	7,844
Motors	Compressed Air	100.0%	4,037	4,037
Motors	Material Handling	100.0%	54,302	54,302
Motors	Other Motors	100.0%	823	823
Process	Process Heating	100.0%	8,873	8,873
Process	Process Cooling	100.0%	658	658
Process	Process Refrigeration	100.0%	658	658
Process	Process Electrochemical	100.0%	765	765
Process	Process Other	100.0%	552	552
Miscellaneous	Miscellaneous	100.0%	4,675	4,675
Total			106,193	

Table A-320 Wyoming Metal Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	7,713	193	57.85
Cooling	Water-Cooled Chiller	2.5%	7,942	199	59.56
Cooling	RTU	10.6%	8,233	870	261.05
Cooling	Air-Source Heat Pump	2.7%	8,231	224	67.10
Cooling	Geothermal Heat Pump	0.0%	5,490	0	0.00
Heating	Electric Furnace	2.7%	48,095	1,308	392.27
Heating	Electric Room Heat	14.7%	45,805	6,736	2,020.75
Heating	Air-Source Heat Pump	2.7%	43,531	1,183	354.91
Heating	Geothermal Heat Pump	0.0%	29,035	0	0.00
Ventilation	Ventilation	100.0%	871	871	261.45
Interior Lighting	Screw-in	100.0%	441	441	132.16
Interior Lighting	High-Bay Fixtures	100.0%	6,892	6,892	2,067.53
Interior Lighting	Linear Lighting	100.0%	1,146	1,146	343.69
Exterior Lighting	Screw-in	100.0%	81	81	24.33
Exterior Lighting	Area Lighting	100.0%	1,537	1,537	460.95
Exterior Lighting	Linear Lighting	100.0%	315	315	94.44
Motors	Pumps	100.0%	7,241	7,241	2,172.18
Motors	Fans & Blowers	100.0%	3,458	3,458	1,037.45
Motors	Compressed Air	100.0%	7,314	7,314	2,194.29
Motors	Material Handling	100.0%	35,327	35,327	10,598.23
Motors	Other Motors	100.0%	901	901	270.39
Process	Process Heating	100.0%	21,051	21,051	6,315.30
Process	Process Cooling	100.0%	1,861	1,861	558.44
Process	Process Refrigeration	100.0%	1,861	1,861	558.44
Process	Process Electrochemical	100.0%	3,544	3,544	1,063.35
Process	Process Other	100.0%	4,543	4,543	1,362.87
Miscellaneous	Miscellaneous	100.0%	4,295	4,295	1,288.48
Total				113,391	34,017.44

Table A-321 Wyoming Metal Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	6,434	161
Cooling	Water-Cooled Chiller	2.5%	6,456	161
Cooling	RTU	10.6%	7,807	825
Cooling	Air-Source Heat Pump	2.7%	7,712	210
Cooling	Geothermal Heat Pump	0.0%	5,337	0
Heating	Electric Furnace	2.7%	44,983	1,223
Heating	Electric Room Heat	14.7%	42,841	6,300
Heating	Air-Source Heat Pump	2.7%	39,537	1,074
Heating	Geothermal Heat Pump	0.0%	15,134	0
Ventilation	Ventilation	100.0%	693	693
Interior Lighting	Screw-in	100.0%	622	622
Interior Lighting	High-Bay Fixtures	100.0%	7,227	7,227
Interior Lighting	Linear Lighting	100.0%	1,148	1,148
Exterior Lighting	Screw-in	100.0%	190	190
Exterior Lighting	Area Lighting	100.0%	1,691	1,691
Exterior Lighting	Linear Lighting	100.0%	310	310
Motors	Pumps	100.0%	7,241	7,241
Motors	Fans & Blowers	100.0%	3,458	3,458
Motors	Compressed Air	100.0%	7,314	7,314
Motors	Material Handling	100.0%	35,327	35,327
Motors	Other Motors	100.0%	901	901
Process	Process Heating	100.0%	21,051	21,051
Process	Process Cooling	100.0%	1,861	1,861
Process	Process Refrigeration	100.0%	1,861	1,861
Process	Process Electrochemical	100.0%	3,544	3,544
Process	Process Other	100.0%	4,543	4,543
Miscellaneous	Miscellaneous	100.0%	4,295	4,295
Total			113,234	

Table A-322 Wyoming Miscellaneous Manufacturing Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Employee)	(MWh)
Cooling	Air-Cooled Chiller	2.5%	8,341	209	104.26
Cooling	Water-Cooled Chiller	2.5%	8,589	215	107.36
Cooling	RTU	10.6%	8,903	941	470.52
Cooling	Air-Source Heat Pump	2.7%	8,901	242	120.95
Cooling	Geothermal Heat Pump	0.0%	5,937	0	0.00
Heating	Electric Furnace	2.7%	52,013	1,414	707.04
Heating	Electric Room Heat	14.7%	49,536	7,284	3,642.24
Heating	Air-Source Heat Pump	2.7%	47,077	1,279	639.69
Heating	Geothermal Heat Pump	0.0%	31,400	0	0.00
Ventilation	Ventilation	100.0%	942	942	471.24
Interior Lighting	Screw-in	100.0%	347	347	173.38
Interior Lighting	High-Bay Fixtures	100.0%	5,425	5,425	2,712.44
Interior Lighting	Linear Lighting	100.0%	902	902	450.89
Exterior Lighting	Screw-in	100.0%	64	64	31.92
Exterior Lighting	Area Lighting	100.0%	1,209	1,209	604.73
Exterior Lighting	Linear Lighting	100.0%	248	248	123.89
Motors	Pumps	100.0%	3,721	3,721	1,860.68
Motors	Fans & Blowers	100.0%	2,467	2,467	1,233.55
Motors	Compressed Air	100.0%	2,607	2,607	1,303.69
Motors	Material Handling	100.0%	6,956	6,956	3,478.08
Motors	Other Motors	100.0%	1,010	1,010	505.24
Process	Process Heating	100.0%	5,388	5,388	2,694.10
Process	Process Cooling	100.0%	1,415	1,415	707.34
Process	Process Refrigeration	100.0%	1,415	1,415	707.34
Process	Process Electrochemical	100.0%	545	545	272.29
Process	Process Other	100.0%	591	591	295.50
Miscellaneous	Miscellaneous	100.0%	3,251	3,251	1,625.56
Total				50,088	25,043.94

Table A-323 Wyoming Miscellaneous Manufacturing New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/Employee)
Cooling	Air-Cooled Chiller	2.5%	6,958	174
Cooling	Water-Cooled Chiller	2.5%	6,982	175
Cooling	RTU	10.6%	8,443	892
Cooling	Air-Source Heat Pump	2.7%	8,340	227
Cooling	Geothermal Heat Pump	0.0%	5,772	0
Heating	Electric Furnace	2.7%	48,647	1,323
Heating	Electric Room Heat	14.7%	46,331	6,813
Heating	Air-Source Heat Pump	2.7%	42,757	1,162
Heating	Geothermal Heat Pump	0.0%	16,367	0
Ventilation	Ventilation	100.0%	749	749
Interior Lighting	Screw-in	100.0%	490	490
Interior Lighting	High-Bay Fixtures	100.0%	5,688	5,688
Interior Lighting	Linear Lighting	100.0%	904	904
Exterior Lighting	Screw-in	100.0%	150	150
Exterior Lighting	Area Lighting	100.0%	1,331	1,331
Exterior Lighting	Linear Lighting	100.0%	244	244
Motors	Pumps	100.0%	3,721	3,721
Motors	Fans & Blowers	100.0%	2,467	2,467
Motors	Compressed Air	100.0%	2,607	2,607
Motors	Material Handling	100.0%	6,956	6,956
Motors	Other Motors	100.0%	1,010	1,010
Process	Process Heating	100.0%	5,388	5,388
Process	Process Cooling	100.0%	1,415	1,415
Process	Process Refrigeration	100.0%	1,415	1,415
Process	Process Electrochemical	100.0%	545	545
Process	Process Other	100.0%	591	591
Miscellaneous	Miscellaneous	100.0%	3,251	3,251
Total			49,688	

IRRIGATION MARKET PROFILES

Table A-324 California Irrigation Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/SP)	(GWh)
Motors	Pumps (< 100 HP)	80.6%	23,787	19,167	35.2
Motors	Pumps (100 HP+)	17.3%	216,734	37,473	68.8
Motors	Other Motors	2.1%	11,968	255	0.5
Total				56,895	104.4

Table A-325 California Irrigation New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/SP)
Motors	Pumps (< 100 HP)	80.6%	23,742	19,131
Motors	Pumps (100 HP+)	17.3%	214,717	37,124
Motors	Other Motors	2.1%	11,826	252
Total				56,507

Table A-326 Idaho Irrigation Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/SP)	(GWh)
Motors	Pumps (< 100 HP)	37.9%	21,531	8,160	40.4
Motors	Pumps (100 HP+)	60.0%	196,182	117,652	582.0
Motors	Other Motors	2.1%	10,833	231	1.1
Total				126,042	623.5

Table A-327 Idaho Irrigation New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/SP)
Motors	Pumps (< 100 HP)	37.9%	21,491	8,144
Motors	Pumps (100 HP+)	60.0%	194,356	116,557
Motors	Other Motors	2.1%	10,704	228
Total				124,929

Table A-328 Utah Irrigation Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/SP)	(GWh)
Motors	Pumps (< 100 HP)	62.0%	19,853	12,316	38.4
Motors	Pumps (100 HP+)	35.8%	180,889	64,813	202.0
Motors	Other Motors	2.1%	9,988	213	0.7
Total				77,342	241.0

Table A-329 Utah Irrigation New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/SP)
Motors	Pumps (< 100 HP)	62.0%	19,816	12,293
Motors	Pumps (100 HP+)	35.8%	179,205	64,209
Motors	Other Motors	2.1%	9,870	211
Total				76,713

Table A-330 Washington Irrigation Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/SP)	(GWh)
Motors	Pumps (< 100 HP)	93.7%	24,624	23,083	117.5
Motors	Pumps (100 HP+)	4.1%	224,357	9,254	47.1
Motors	Other Motors	2.1%	12,388	264	1.3
Total				32,601	166.0

Table A-331 Washington Irrigation New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/SP)
Motors	Pumps (< 100 HP)	93.7%	24,577	23,039
Motors	Pumps (100 HP+)	4.1%	222,269	9,168
Motors	Other Motors	2.1%	12,242	261
Total				32,468

Table A-332 Wyoming Irrigation Existing Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/SP)	(GWh)
Motors	Pumps (< 100 HP)	77.3%	11,450	8,855	6.6
Motors	Pumps (100 HP+)	20.5%	104,328	21,421	15.9
Motors	Other Motors	2.1%	5,761	123	0.1
Total				30,399	22.6

Table A-333 Wyoming Irrigation New Construction Market Profile

End Use	Technology	Saturation	EUI	Intensity
			(kWh)	(kWh/SP)
Motors	Pumps (< 100 HP)	77.3%	11,429	8,838
Motors	Pumps (100 HP+)	20.5%	103,357	21,222
Motors	Other Motors	2.1%	5,692	121
Total				30,181

STREET LIGHTING MARKET PROFILES

Table A-334 California Street Lighting Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Fixt)	(MWh)
Street Lighting	Company - 100W	24.0%	479	115	433
Street Lighting	Company - 150W	5.8%	804	46	174
Street Lighting	Company - 250W	0.2%	1,208	3	11
Street Lighting	Company - 400W	0.1%	1,900	1	4
Street Lighting	Customer - 100W	23.6%	417	98	370
Street Lighting	Customer - 150W	18.4%	597	110	415
Street Lighting	Customer - 250W	7.0%	1,208	85	320
Street Lighting	Customer - 400W	1.3%	1,208	16	61
Street Lighting	Customer - 1000W	0.0%	0	0	0
Street Lighting	Other	19.5%	723	141	531
Total				616	2,321

Table A-335 Idaho Street Lighting Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Fixt)	(MWh)
Street Lighting	Company - 100W	7.8%	479	37	152
Street Lighting	Company - 150W	0.3%	804	2	9
Street Lighting	Company - 250W	0.6%	1,208	8	32
Street Lighting	Company - 400W	0.2%	1,900	4	18
Street Lighting	Customer - 100W	63.7%	479	305	1,245
Street Lighting	Customer - 150W	5.5%	788	43	175
Street Lighting	Customer - 250W	8.8%	1,208	107	435
Street Lighting	Customer - 400W	4.6%	1,815	84	342
Street Lighting	Customer - 1000W	0.0%	0	0	0
Street Lighting	Other	8.5%	788	67	272
Total				657	2,679

Table A-336 Utah Street Lighting Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Fixt)	(MWh)
Street Lighting	Company - 100W	20.8%	479	100	10,371
Street Lighting	Company - 150W	2.3%	726	17	1,773
Street Lighting	Company - 250W	2.1%	1,205	25	2,654
Street Lighting	Company - 400W	0.8%	1,873	15	1,605
Street Lighting	Customer - 100W	29.4%	469	138	14,357
Street Lighting	Customer - 150W	20.7%	766	159	16,567
Street Lighting	Customer - 250W	6.3%	1,198	75	7,847
Street Lighting	Customer - 400W	6.8%	1,897	130	13,518
Street Lighting	Customer - 1000W	0.6%	497	3	291
Street Lighting	Other	10.1%	762	77	8,047
Total				739	77,031

Table A-337 Washington Company Owned Street Lighting Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Fixt)	(MWh)
Street Lighting	Company - 100W	21.7%	479	104	1,580
Street Lighting	Company - 150W	21.6%	797	172	2,615
Street Lighting	Company - 250W	3.2%	1,203	38	577
Street Lighting	Company - 400W	2.7%	1,766	48	727
Street Lighting	Customer - 100W	8.4%	474	40	604
Street Lighting	Customer - 150W	14.1%	480	68	1,029
Street Lighting	Customer - 250W	2.8%	1,208	34	523
Street Lighting	Customer - 400W	2.7%	1,472	40	605
Street Lighting	Customer - 1000W	0.2%	1,900	4	59
Street Lighting	Other	22.6%	674	152	2,311
Total				700	10,631

Table A-338 Wyoming Company Owned Street Lighting Market Profile

End Use	Technology	Saturation	EUI	Intensity	Usage
			(kWh)	(kWh/Fixt)	(MWh)
Street Lighting	Company - 100W	42.2%	479	202	3,972
Street Lighting	Company - 150W	14.6%	785	114	2,250
Street Lighting	Company - 250W	4.1%	1,208	50	981
Street Lighting	Company - 400W	2.6%	1,845	48	935
Street Lighting	Customer - 100W	0.2%	479	1	16
Street Lighting	Customer - 150W	12.3%	484	59	1,169
Street Lighting	Customer - 250W	0.6%	1,208	7	136
Street Lighting	Customer - 400W	1.8%	1,253	22	434
Street Lighting	Customer - 1000W	0.0%	1,900	0	4
Street Lighting	Other	21.7%	597	130	2,547
Total				633	12,445

BASELINE PROJECTIONS

As mentioned in the analysis approach section of Volume 2 of this report, prior to developing estimates of energy-efficiency potential, AEG developed baseline projections of annual electricity use for 2014 through 2036 by state, sector, customer segment and end use without new utility DSM programs. These baseline projections are provided below.

BASELINE PROJECTIONS BY STATE AND SECTOR

Figure B-1 Overall Baseline Projection by Sector (MWh)

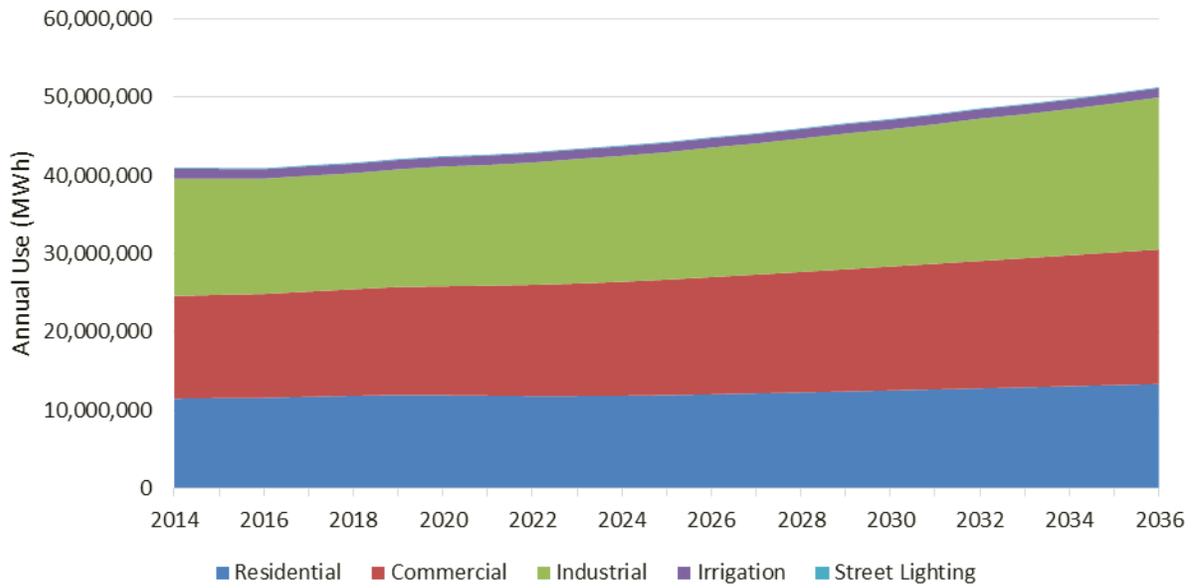


Figure B-2 California Baseline Projection by Sector (MWh)

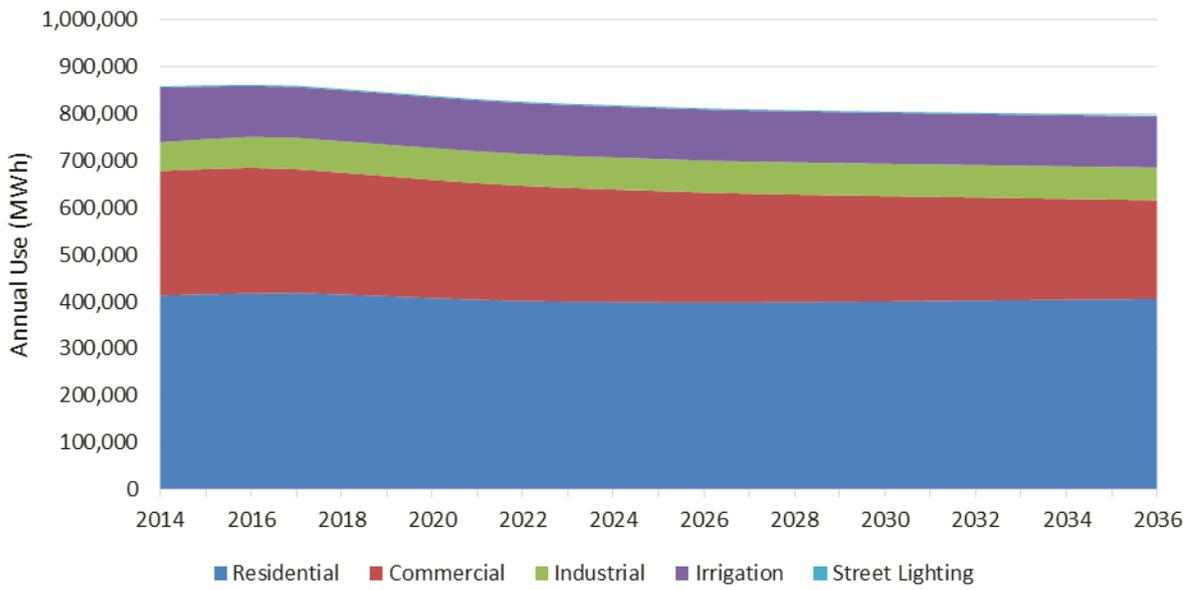


Figure B-3 Idaho Baseline Projection by Sector (MWh)

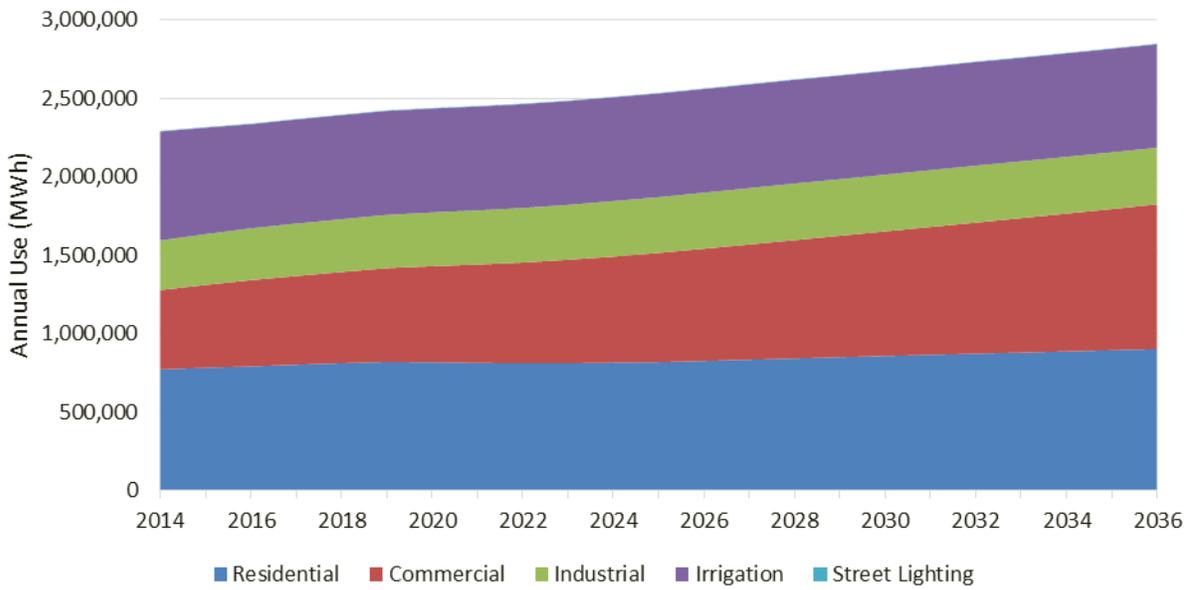


Figure B-4 Utah Baseline Projection by Sector (MWh)

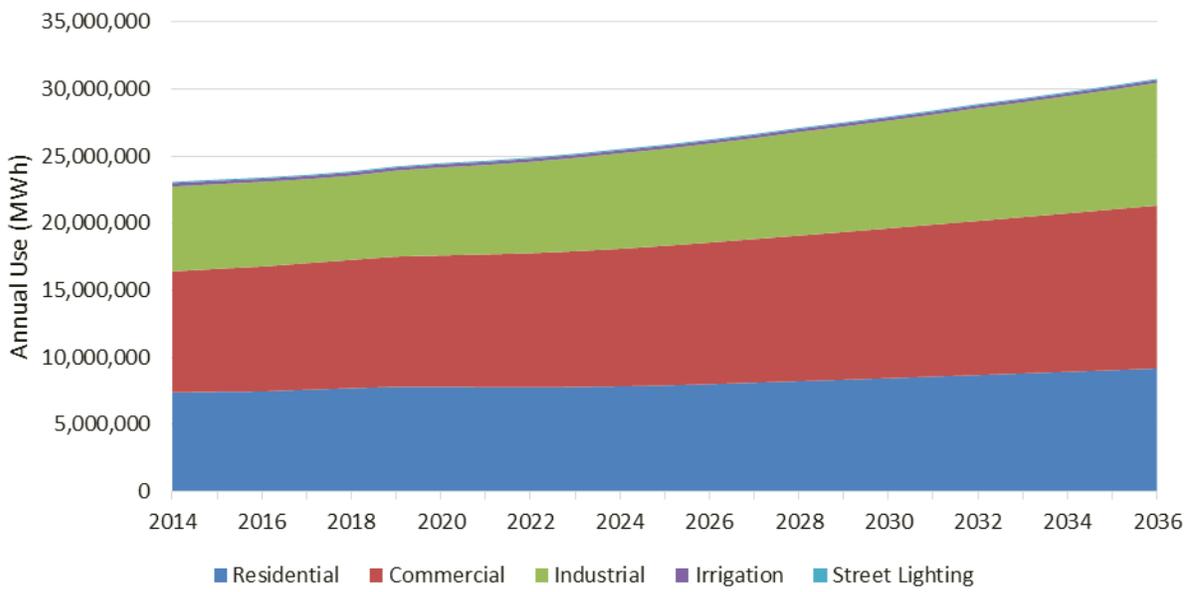


Figure B-5 Washington Baseline Projection by Sector (MWh)

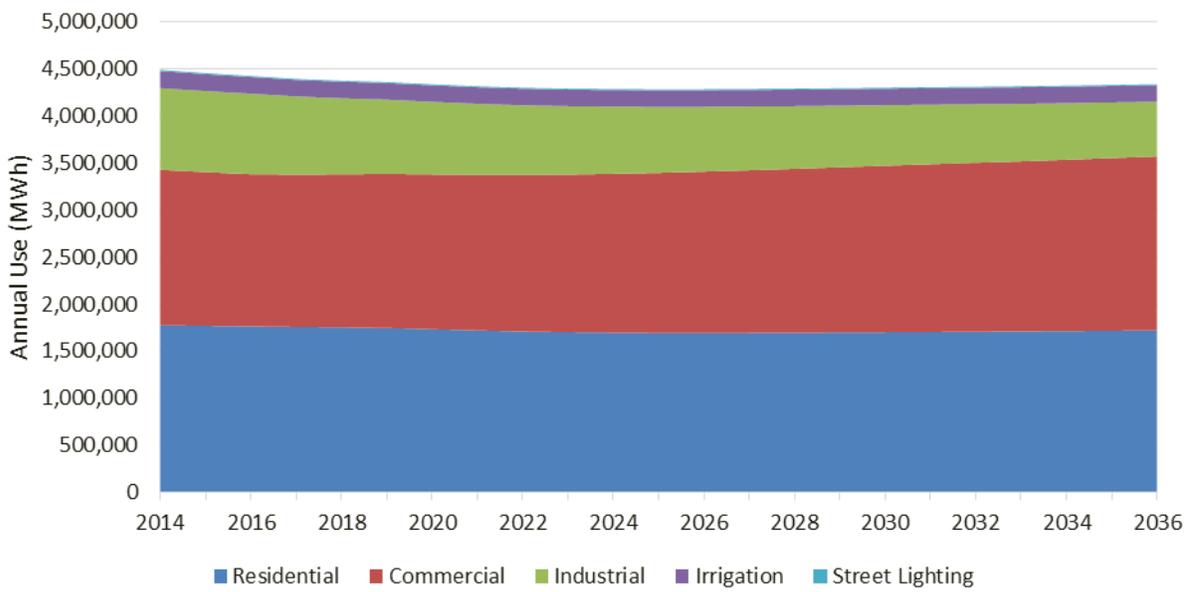
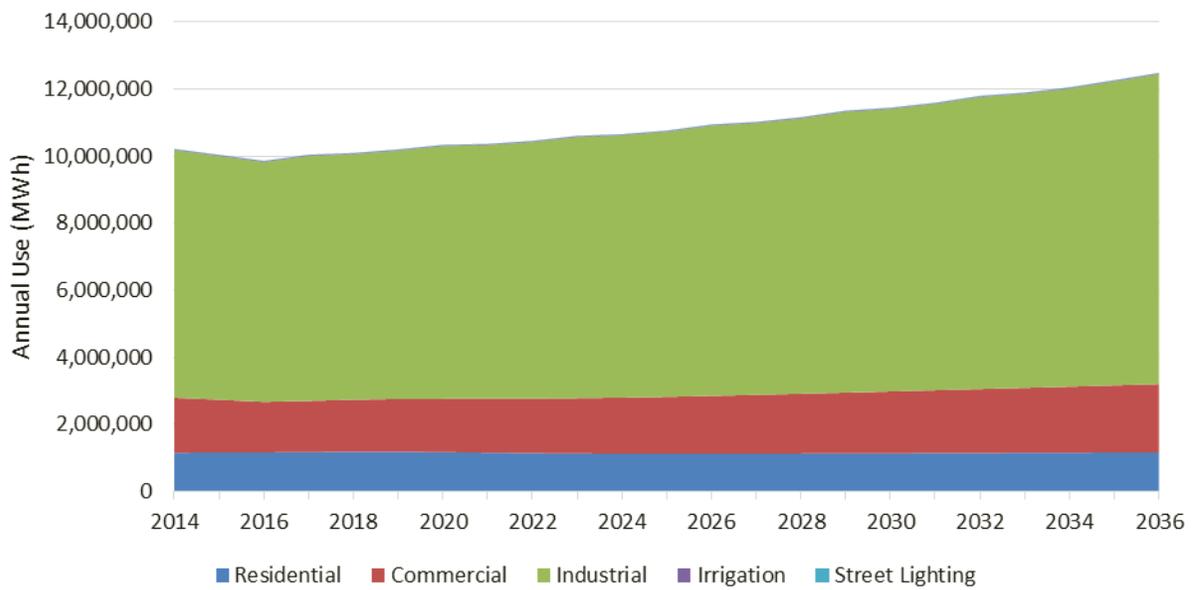


Figure B-6 Wyoming Baseline Projection by Sector (MWh)



BASELINE PROJECTIONS BY STATE, SECTOR, AND SEGMENT

Figure B-7 Overall Residential Baseline Projection by Segment (MWh)

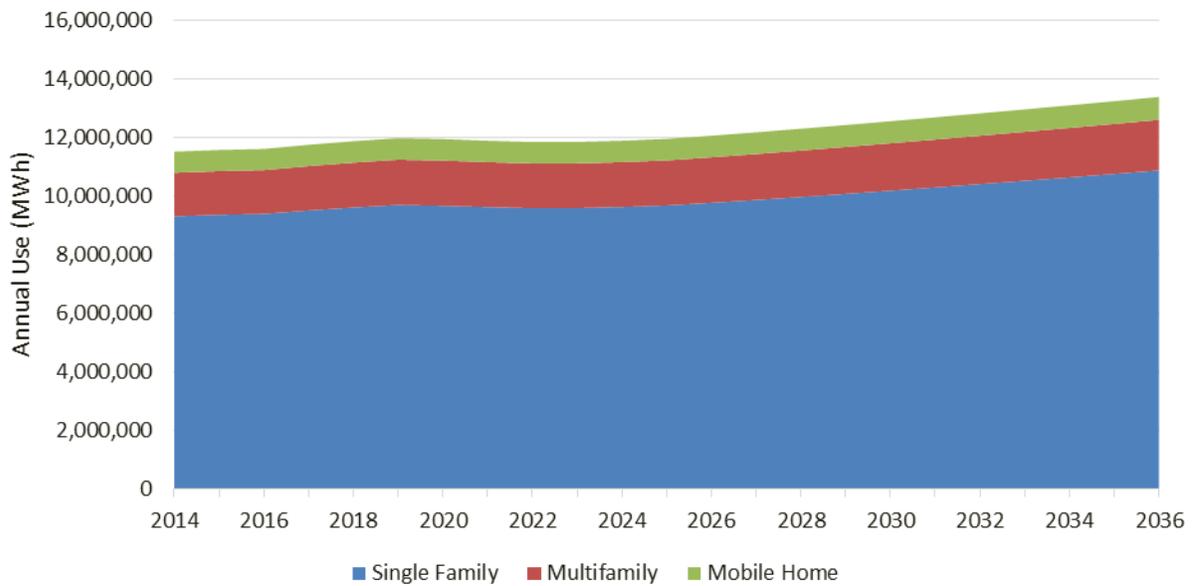


Figure B-8 California Residential Baseline Projection by Segment (MWh)

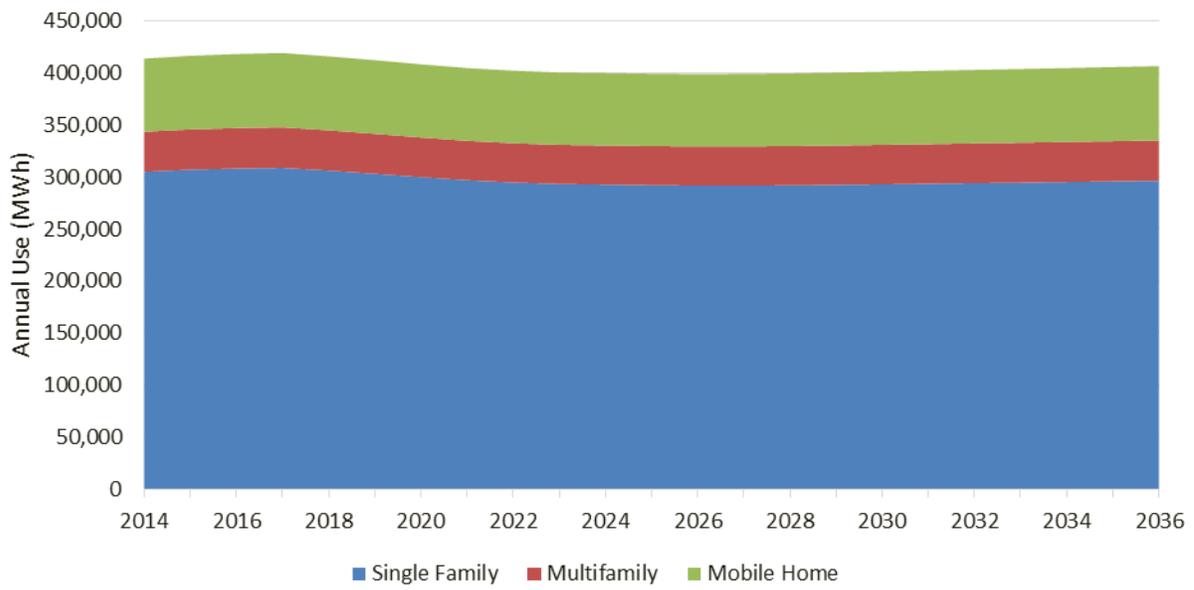


Figure B-9 Idaho Residential Baseline Projection by Segment (MWh)

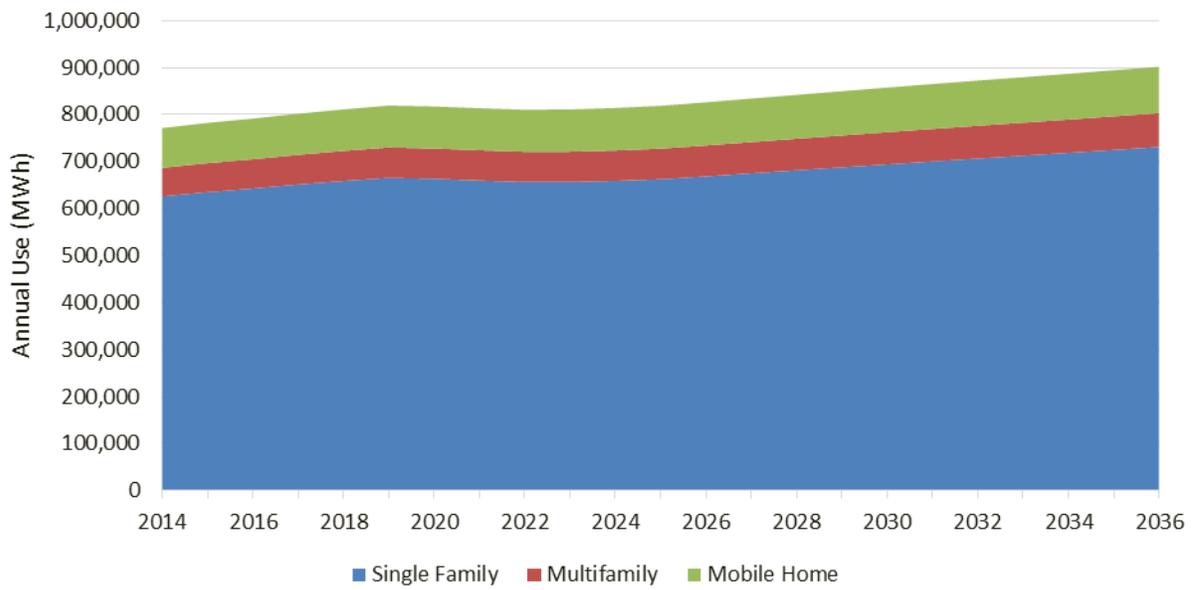


Figure B-10 Utah Residential Baseline Projection by Segment (MWh)

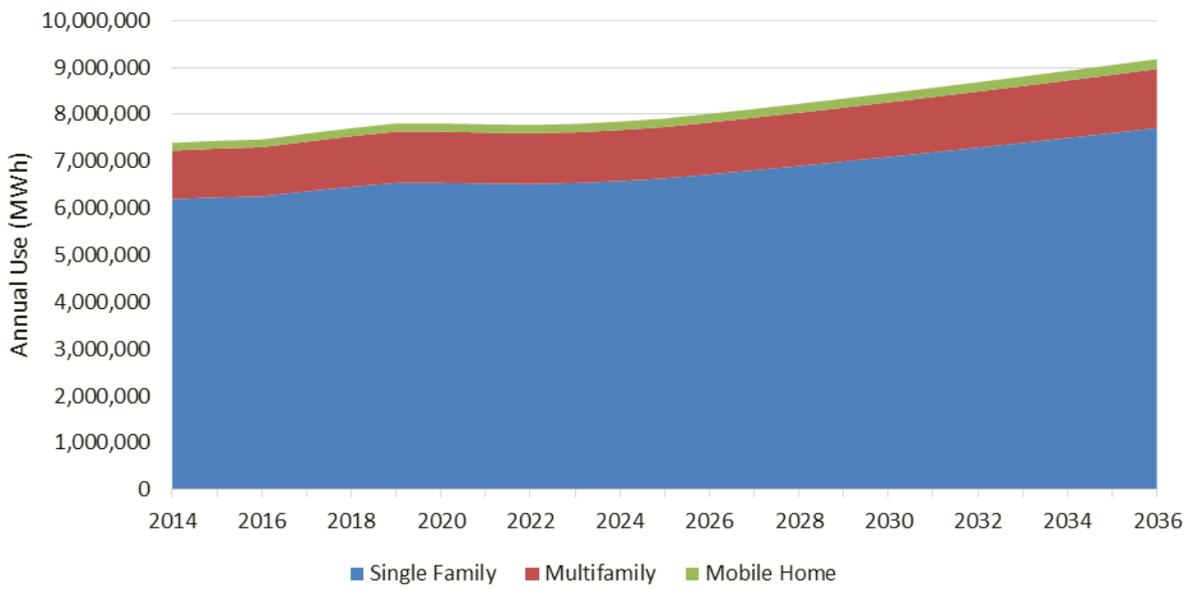


Figure B-11 Washington Residential Baseline Projection by Segment (MWh)

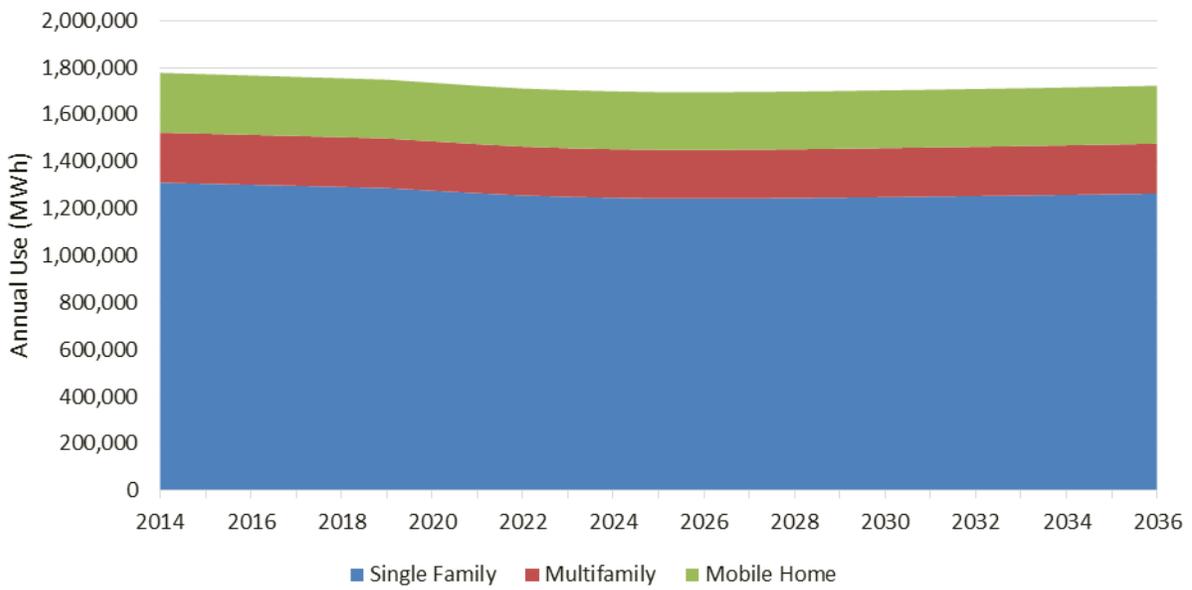


Figure B-12 Wyoming Residential Baseline Projection by Segment (MWh)

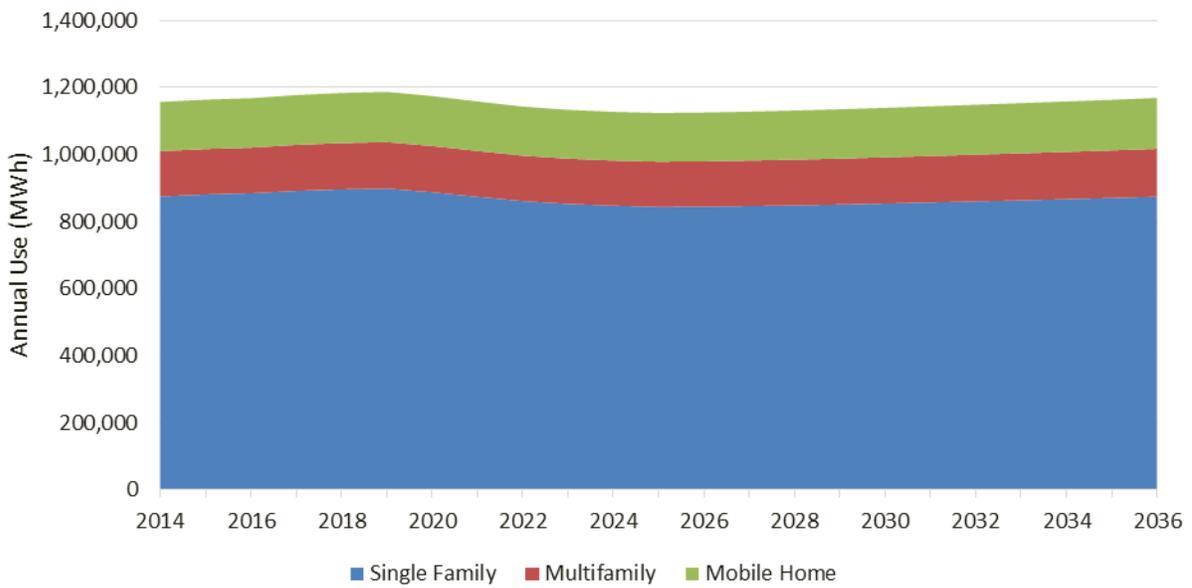


Figure B-13 Overall Commercial Baseline Projection by Segment (MWh)

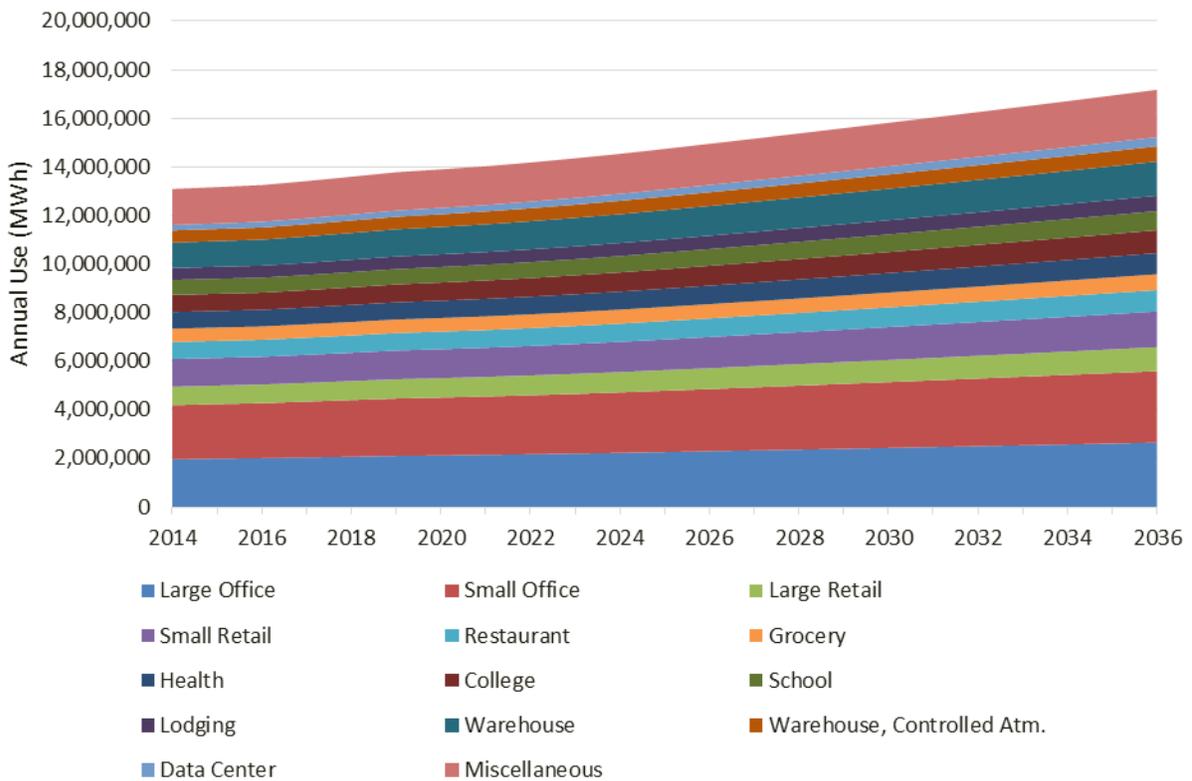


Figure B-14 California Commercial Baseline Projection by Segment (MWh)

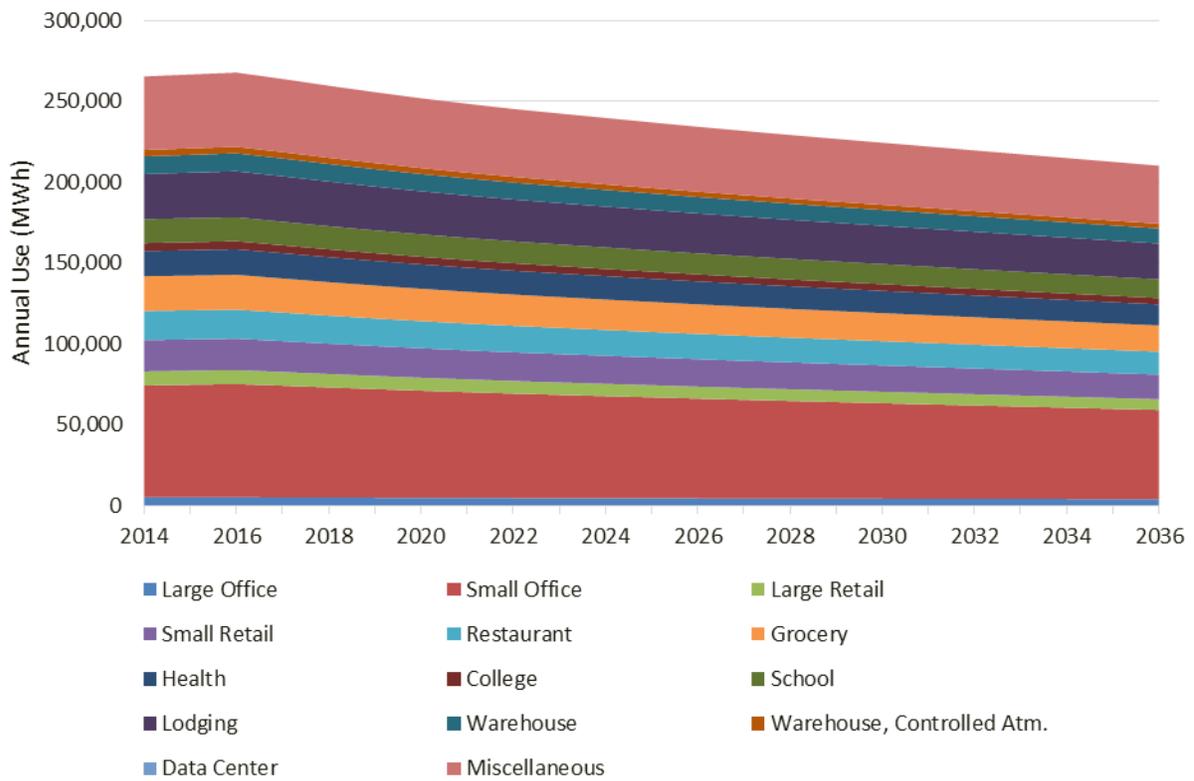


Figure B-15 Idaho Commercial Baseline Projection by Segment (MWh)

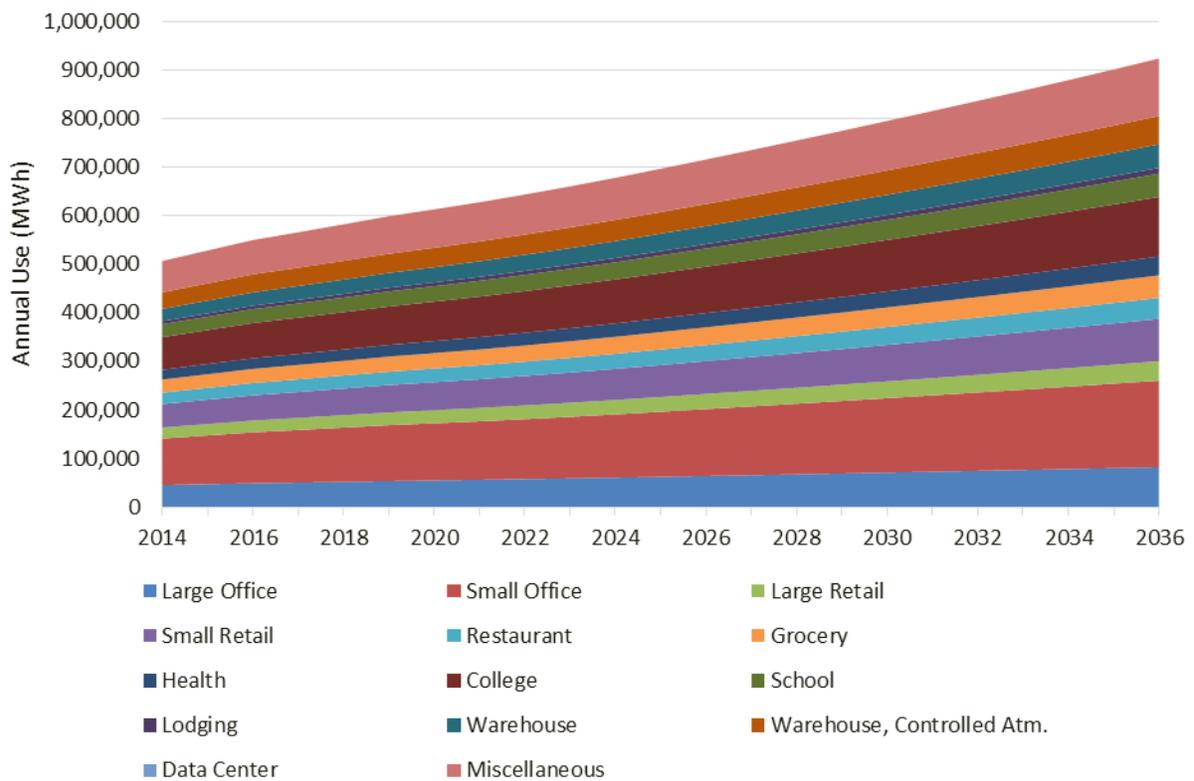


Figure B-16 Utah Commercial Baseline Projection by Segment (MWh)

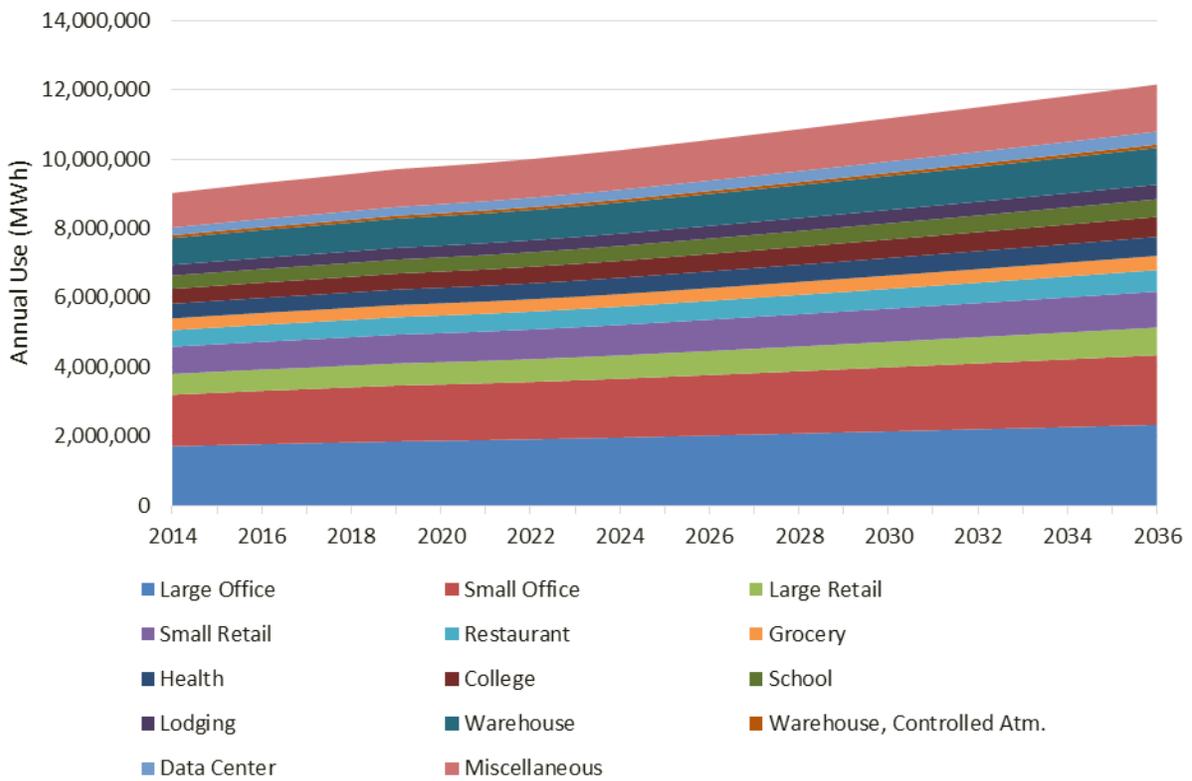


Figure B-17 Washington Commercial Baseline Projection by Segment (MWh)

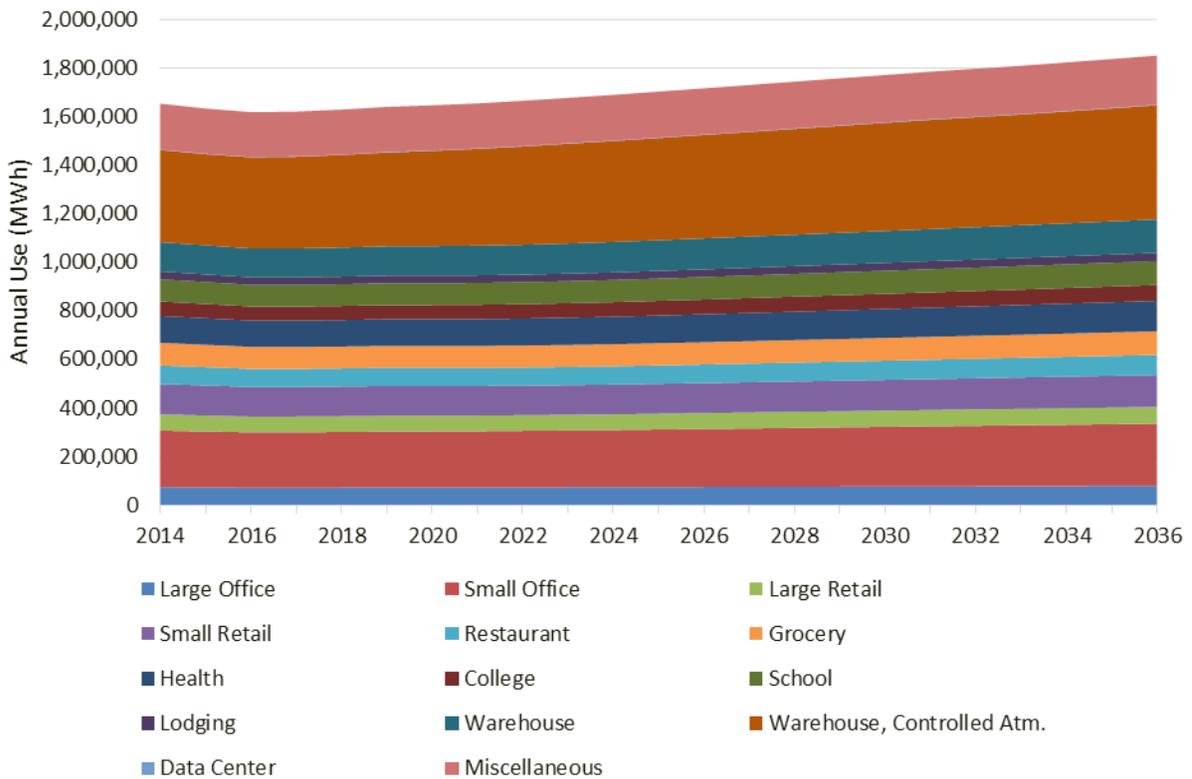


Figure B-18 Wyoming Commercial Baseline Projection by Segment (MWh)

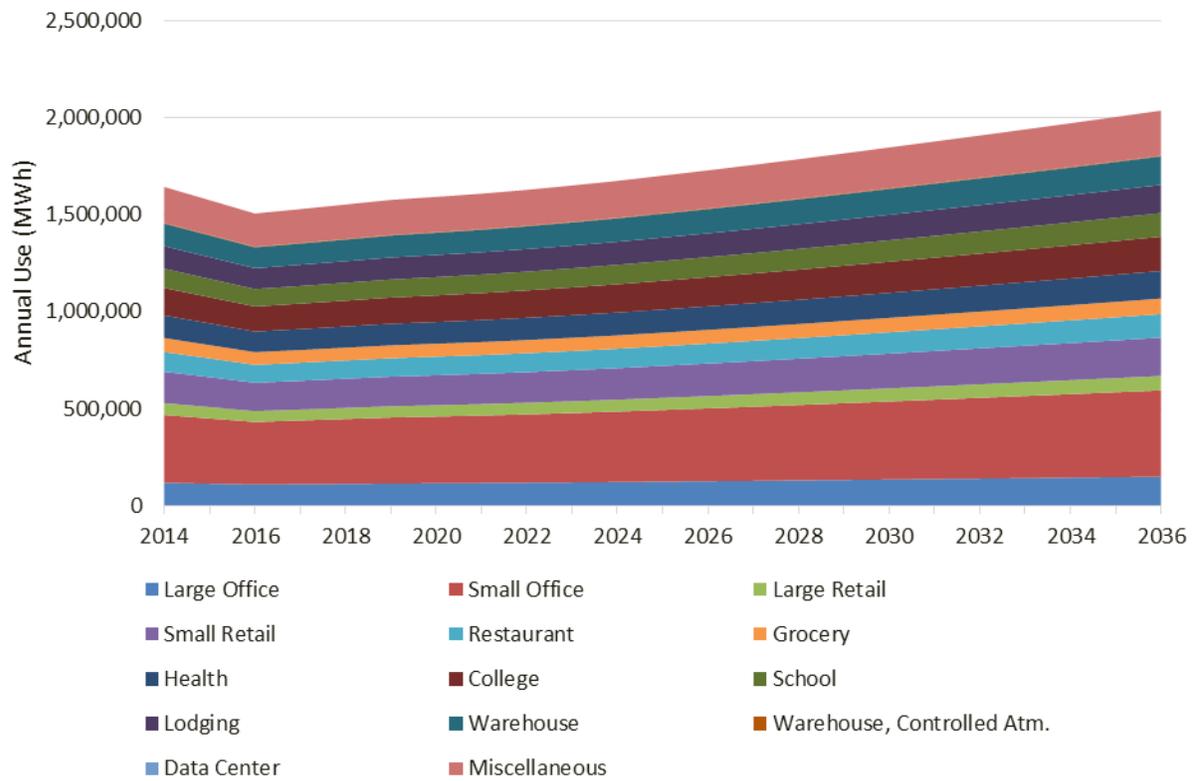


Figure B-19 Overall Industrial Baseline Projection by Segment (MWh)

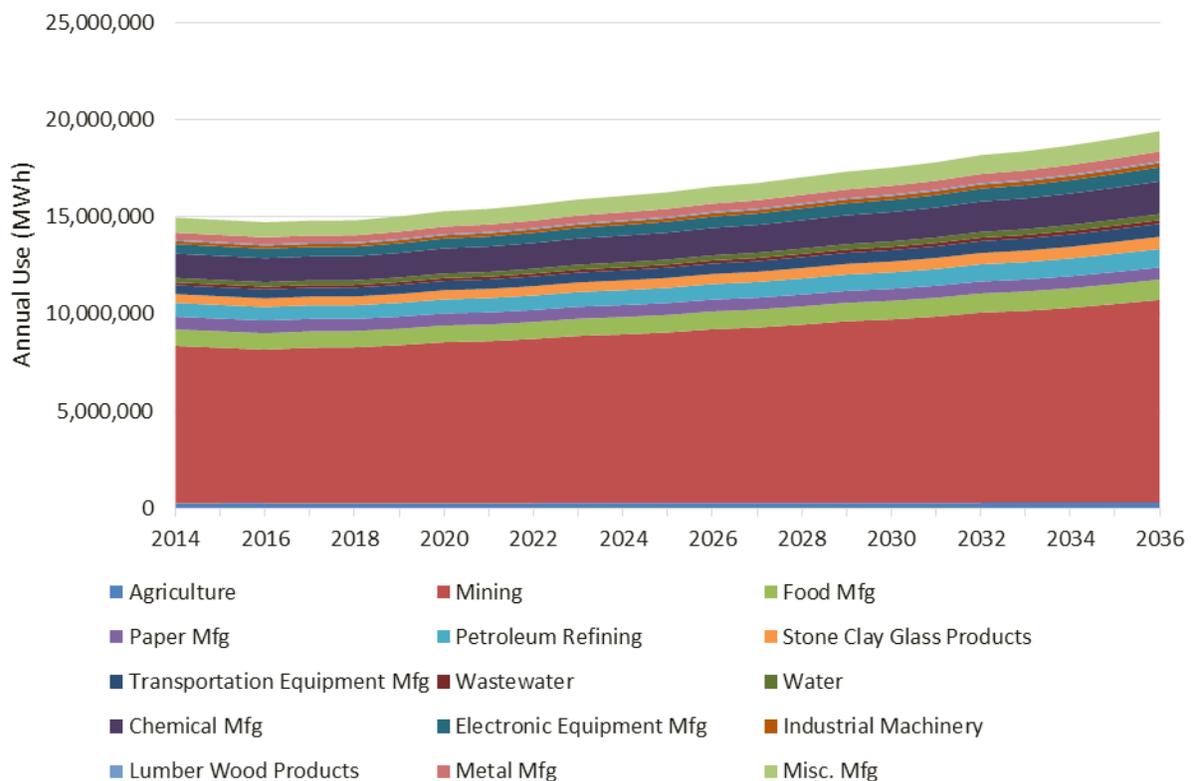


Figure B-20 California Industrial Baseline Projection by Segment (MWh)

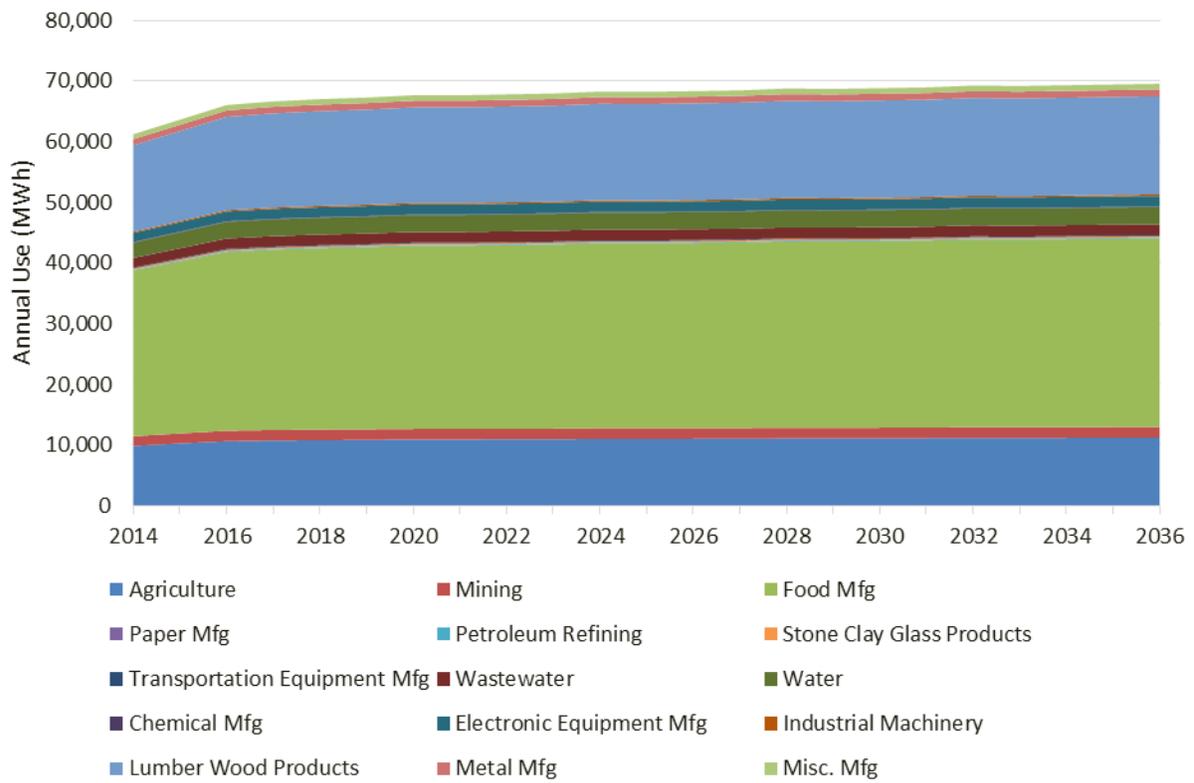


Figure B-21 Idaho Industrial Baseline Projection by Segment (MWh)

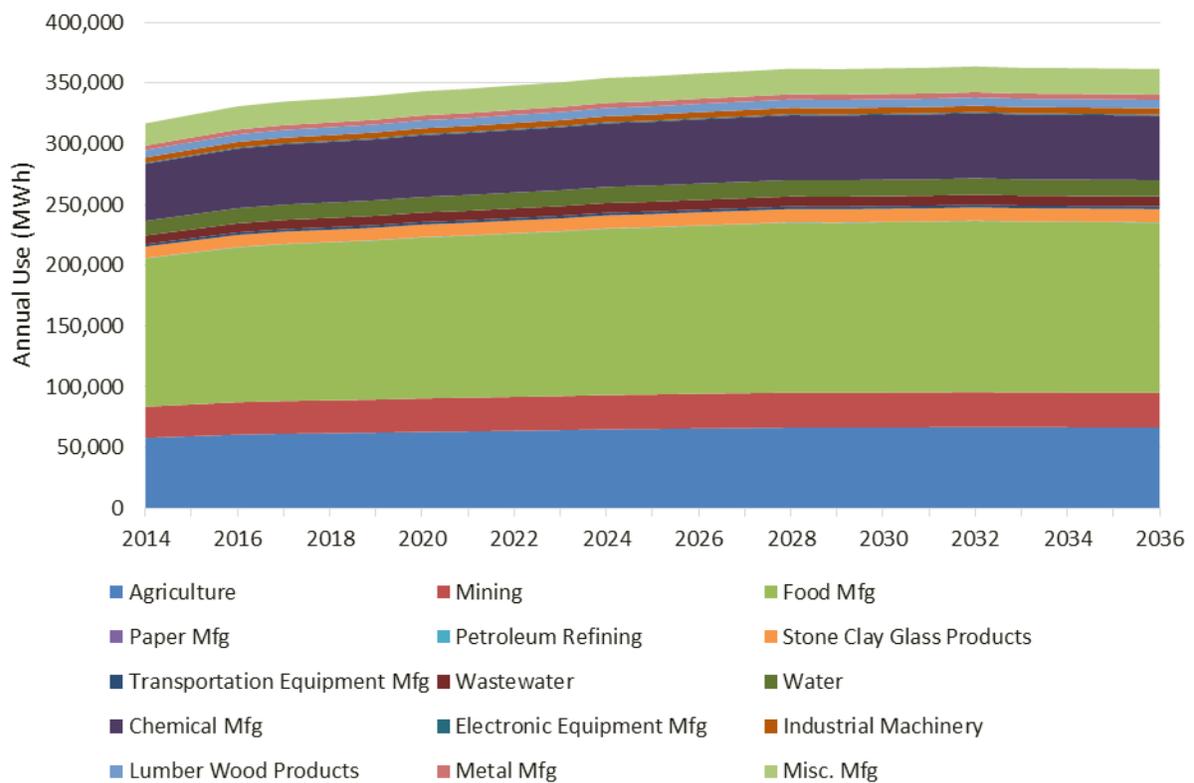


Figure B-22 Utah Industrial Baseline Projection by Segment (MWh)

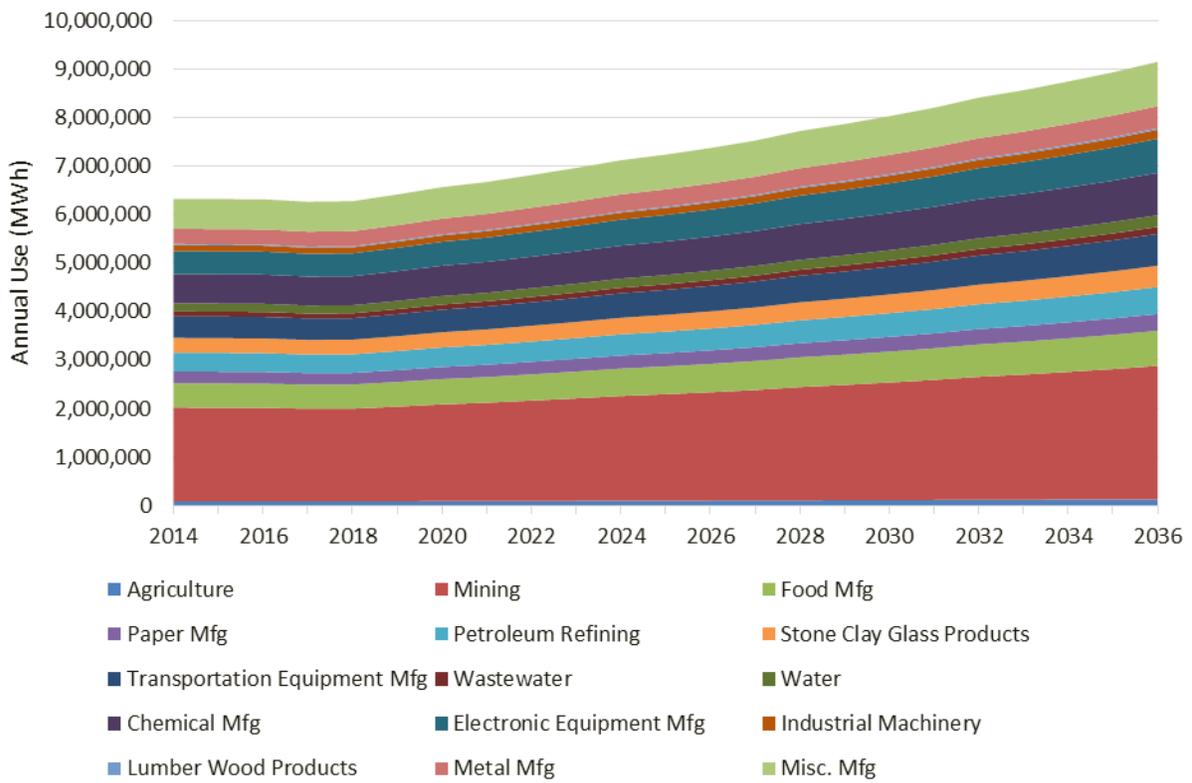


Figure B-23 Washington Industrial Baseline Projection by Segment (MWh)

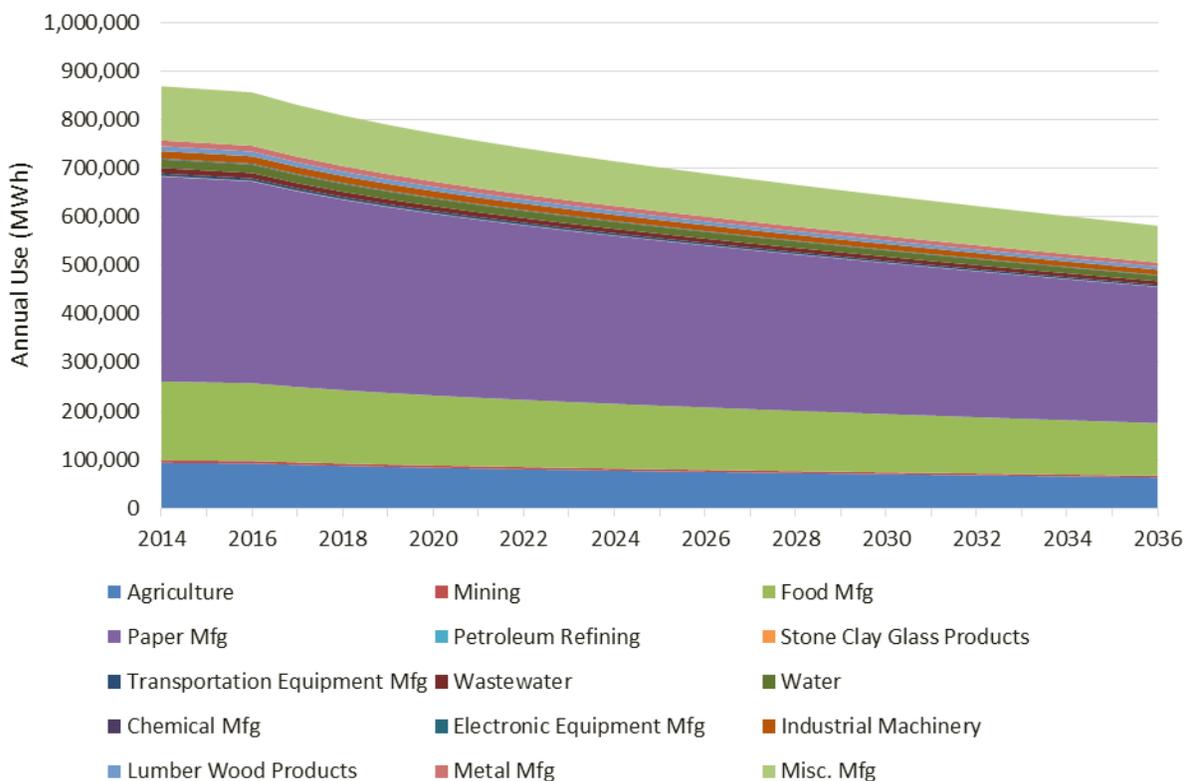


Figure B-24 Wyoming Industrial Baseline Projection by Segment (MWh)

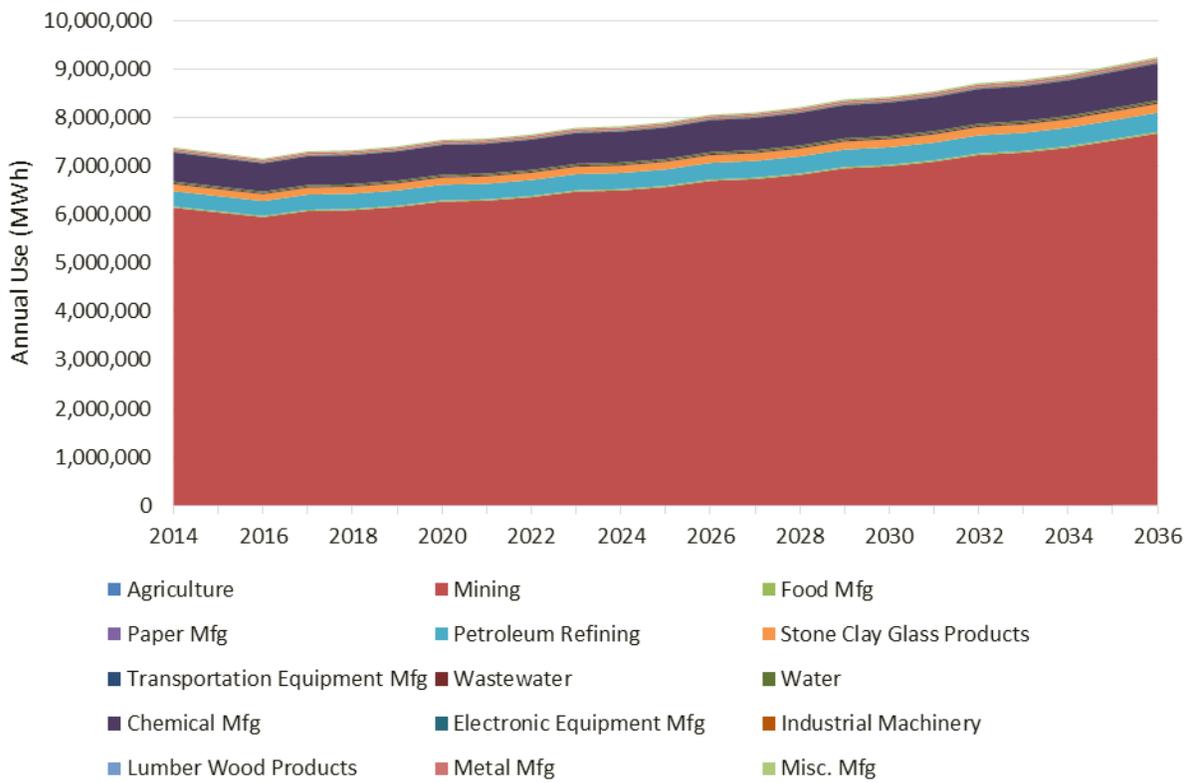


Figure B-25 Overall Irrigation Baseline Projection by Segment (MWh)

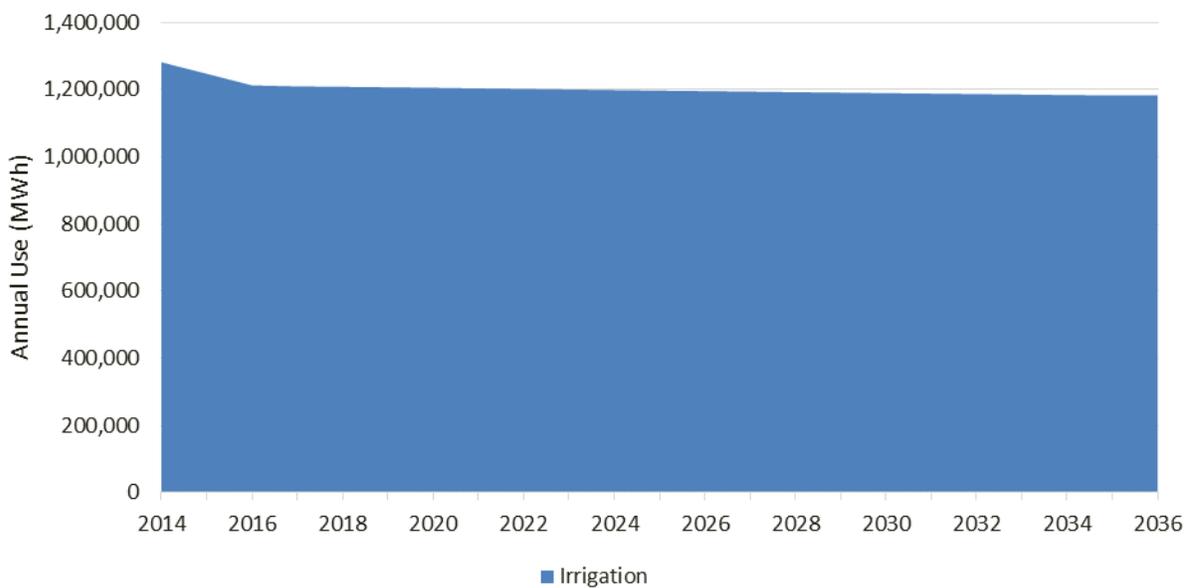


Figure B-26 California Irrigation Baseline Projection by Segment (MWh)

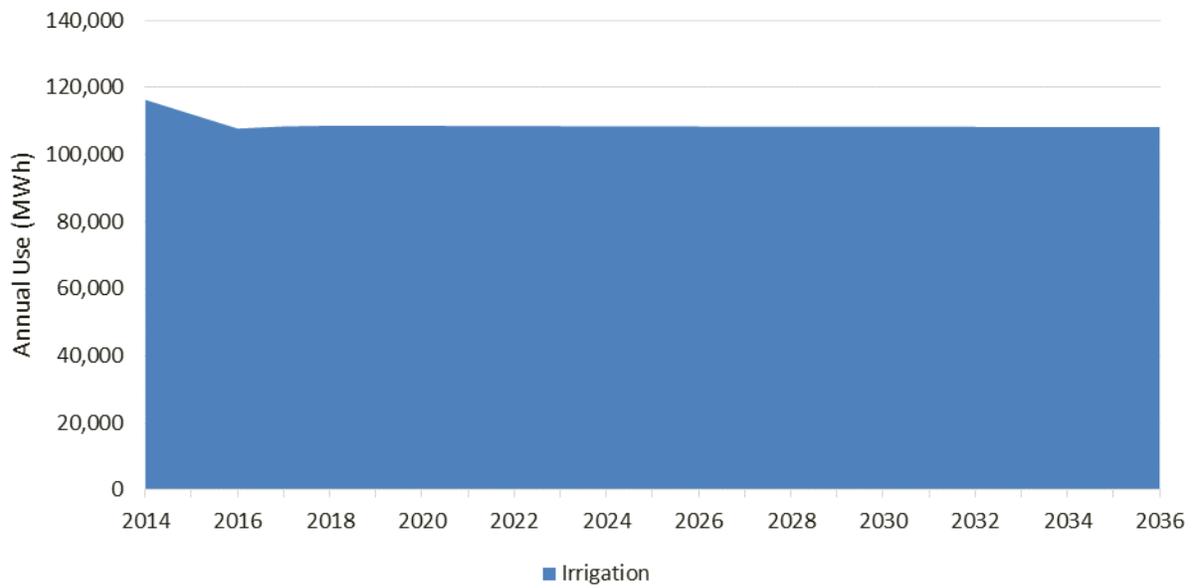


Figure B-27 Idaho Irrigation Baseline Projection by Segment (MWh)

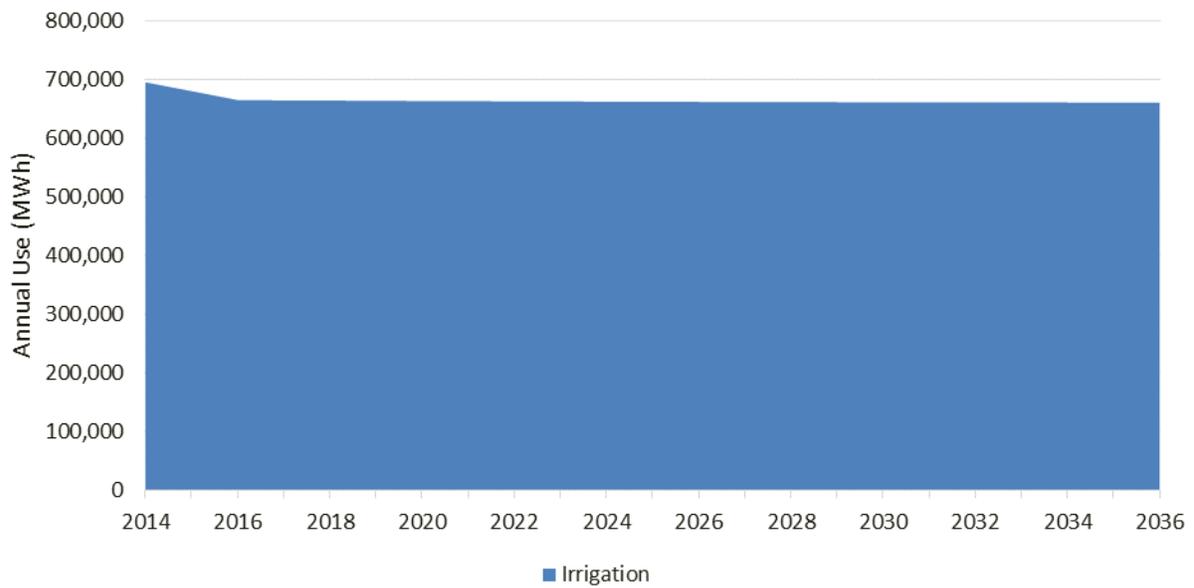


Figure B-28 Utah Irrigation Baseline Projection by Segment (MWh)

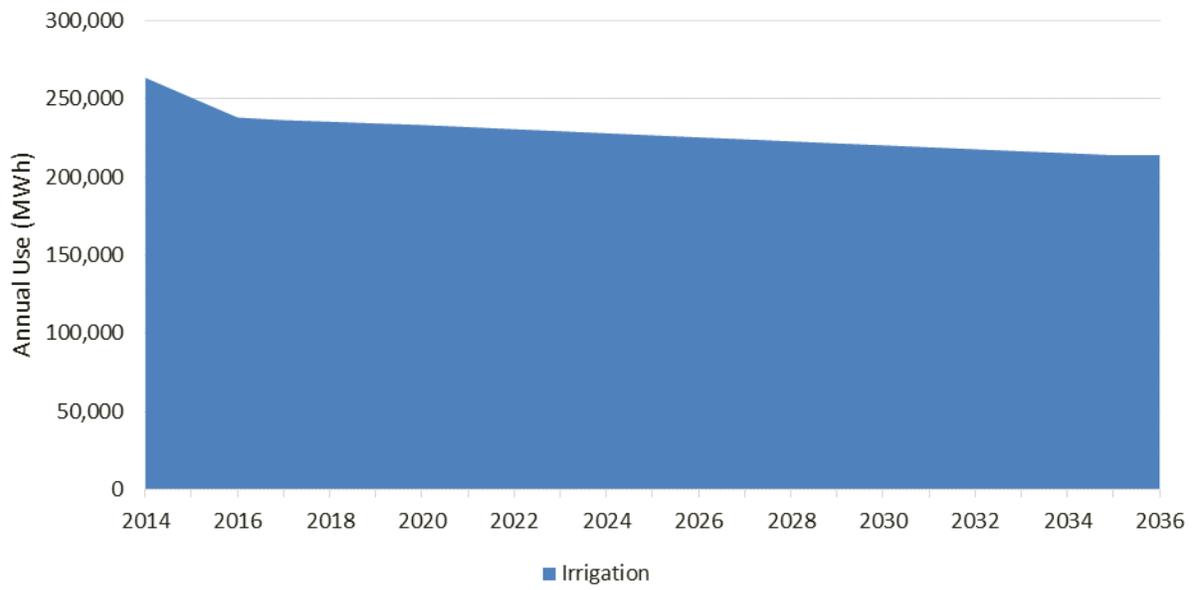


Figure B-29 Washington Irrigation Baseline Projection by Segment (MWh)

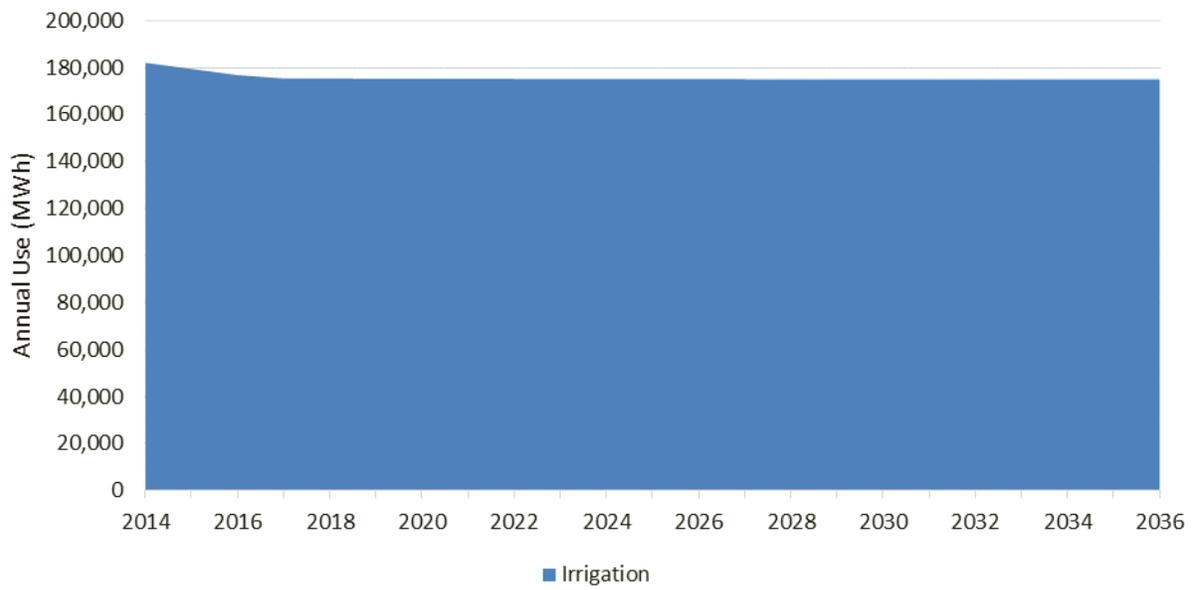


Figure B-30 Wyoming Irrigation Baseline Projection by Segment (MWh)

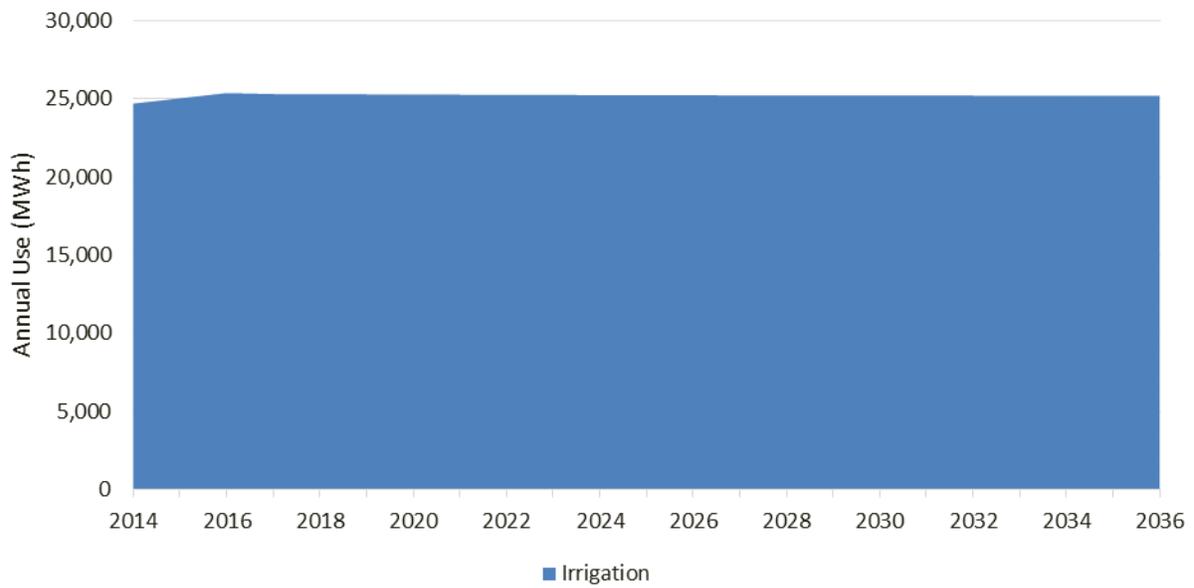


Figure B-31 Overall Street Lighting Baseline Projection by Segment (MWh)

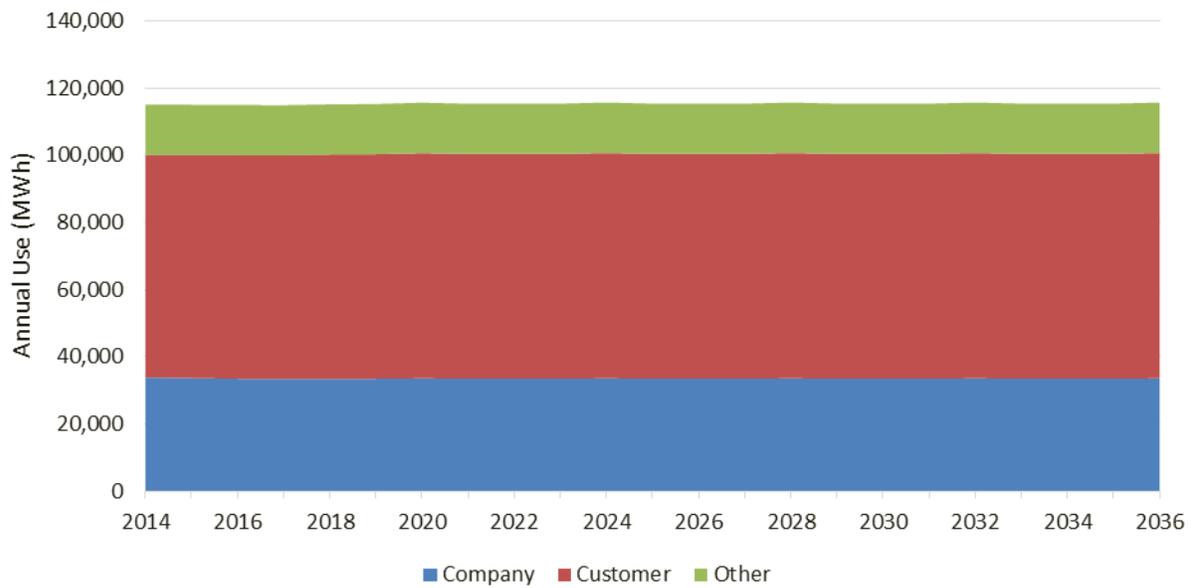


Figure B-32 California Street Lighting Baseline Projection by Segment (MWh)

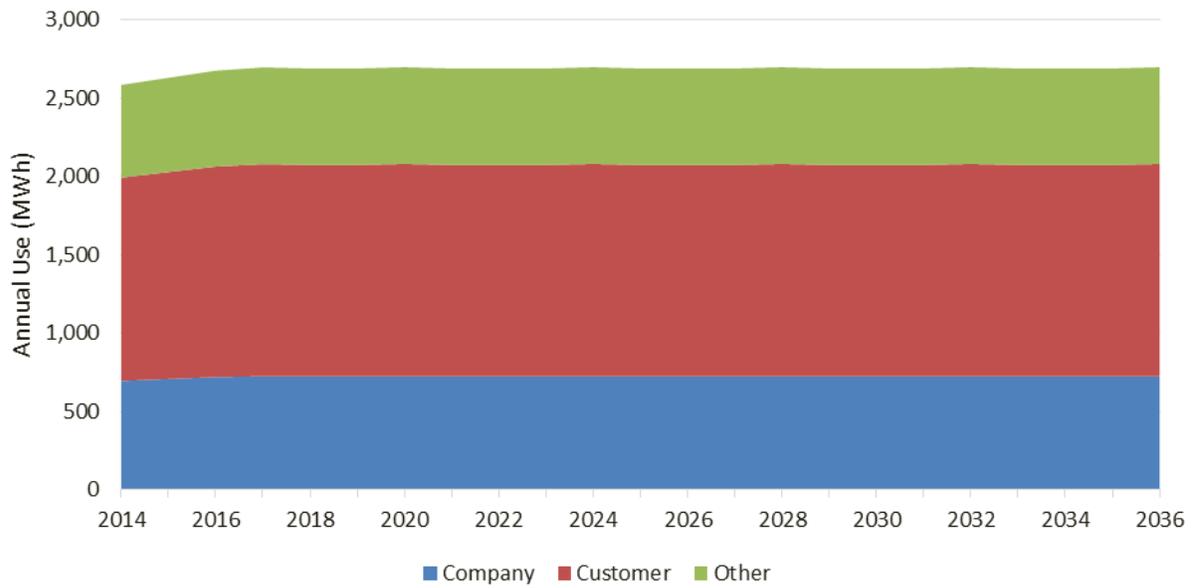


Figure B-33 Idaho Street Lighting Baseline Projection by Segment (MWh)

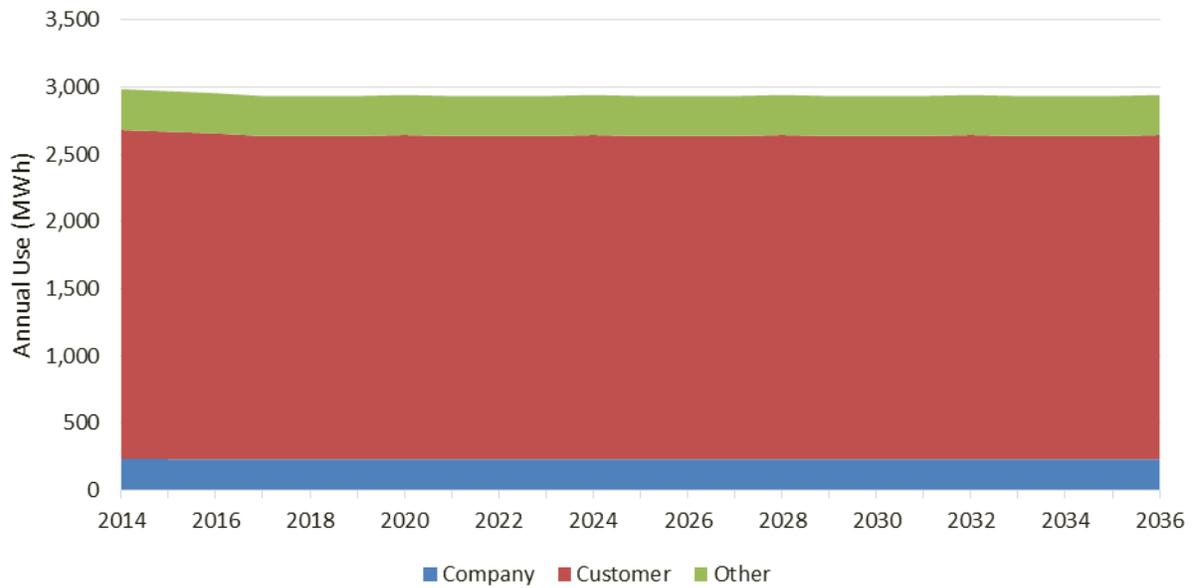


Figure B-34 Utah Street Lighting Baseline Projection by Segment (MWh)

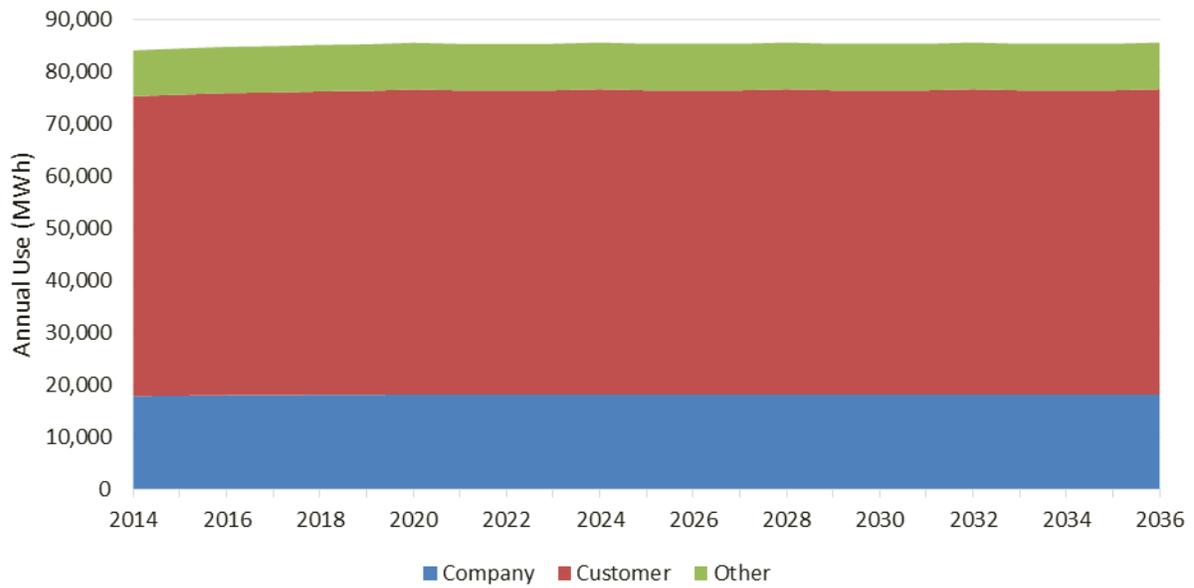


Figure B-35 Washington Street Lighting Baseline Projection by Segment (MWh)

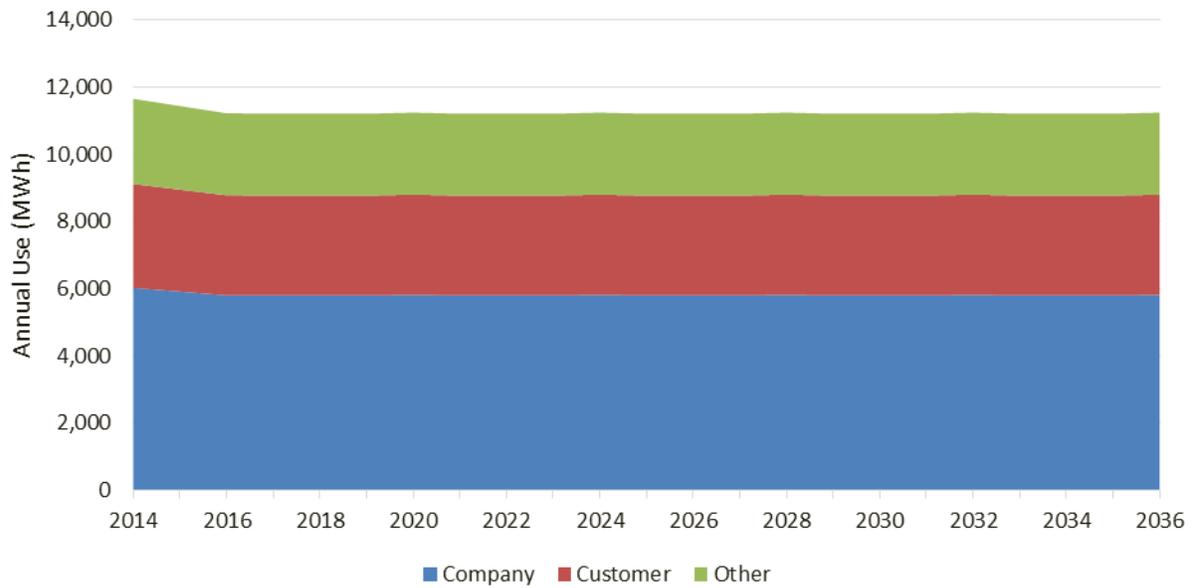
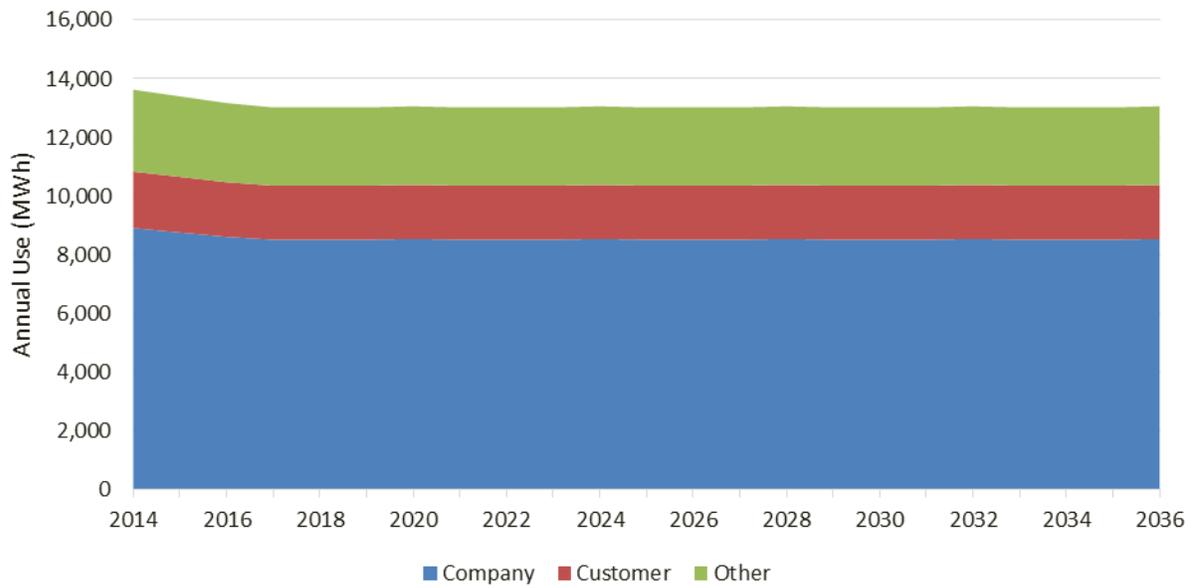


Figure B-36 Wyoming Street Lighting Baseline Projection by Segment (MWh)



BASELINE PROJECTION PIE CHARTS BY STATE, SECTOR, AND SEGMENT

This section presents pie charts that show the baseline projections of energy consumption for each state territory and sector in the study, broken down by market segment in 2036.

Figure B-37 California Residential Baseline Projection by Segment, 2036

Total: 406,234 MWh

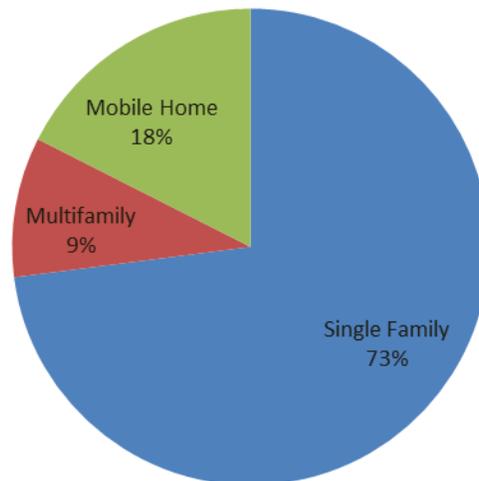


Figure B-38 Idaho Residential Baseline Projection by Segment, 2036

Total: 901,752 MWh

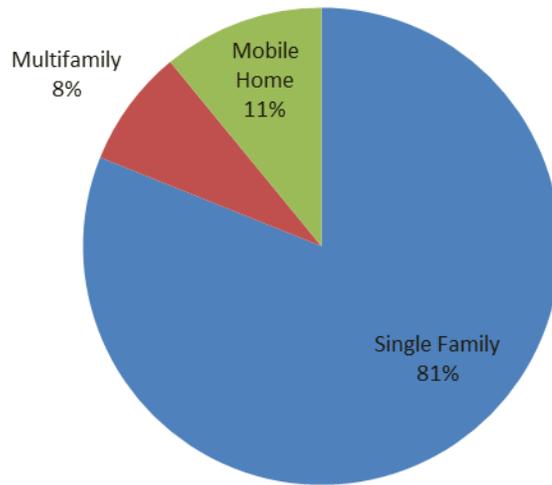


Figure B-39 Utah Residential Baseline Projection by Segment, 2036

Total: 9,176,669 MWh

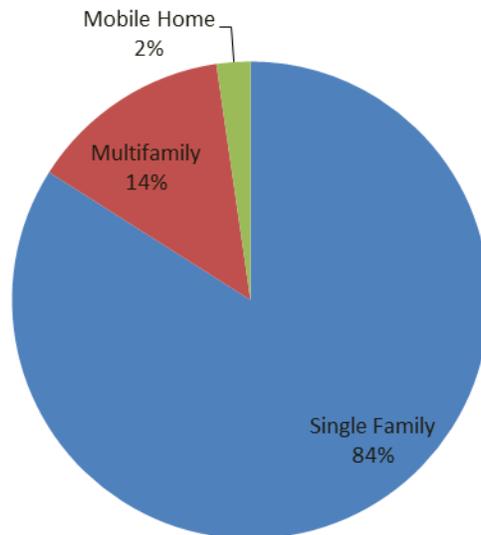


Figure B-40 Washington Residential Baseline Projection by Segment, 2036

Total: 1,722,625 MWh

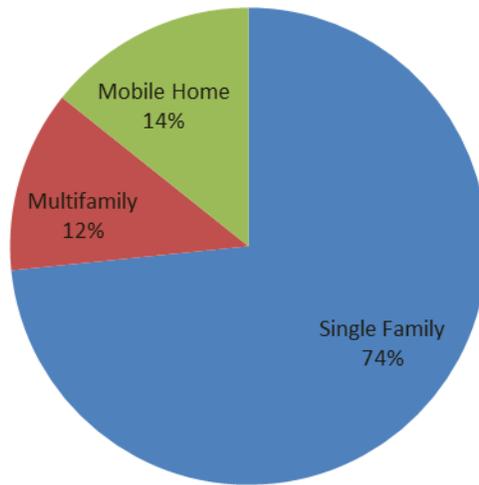


Figure B-41 Wyoming Residential Baseline Projection by Segment, 2036

Total: 1,168,825 MWh

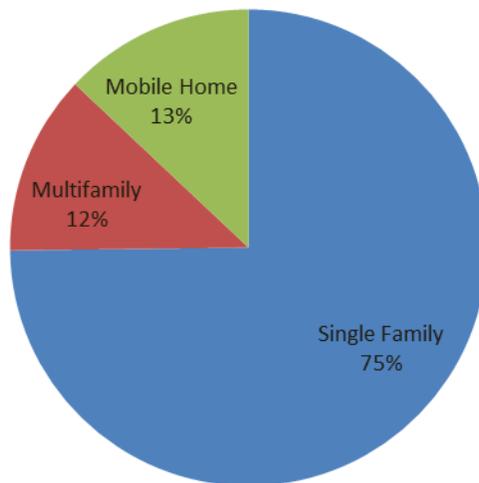


Figure B-42 California Commercial Baseline Projection by Segment, 2036

Total: 210,226 MWh

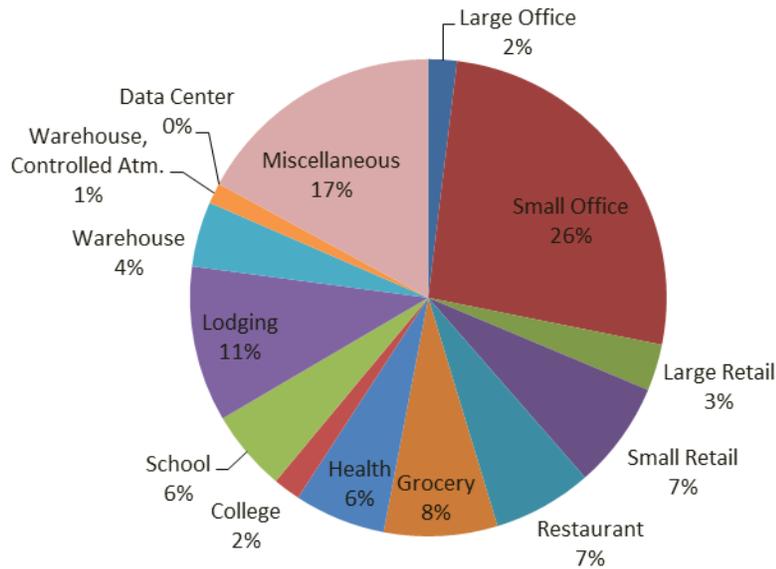


Figure B-43 Idaho Commercial Baseline Projection by Segment, 2036

Total: 923,520 MWh

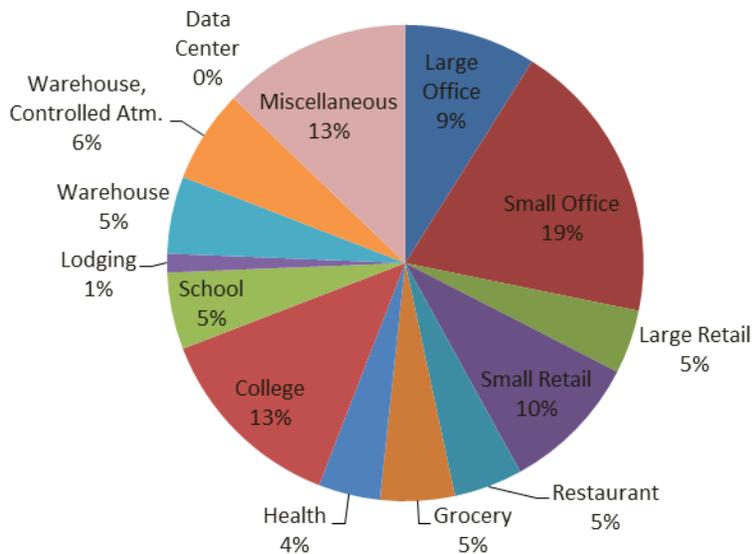


Figure B-44 Utah Commercial Baseline Projection by Segment, 2036

Total: 12,151,616 MWh

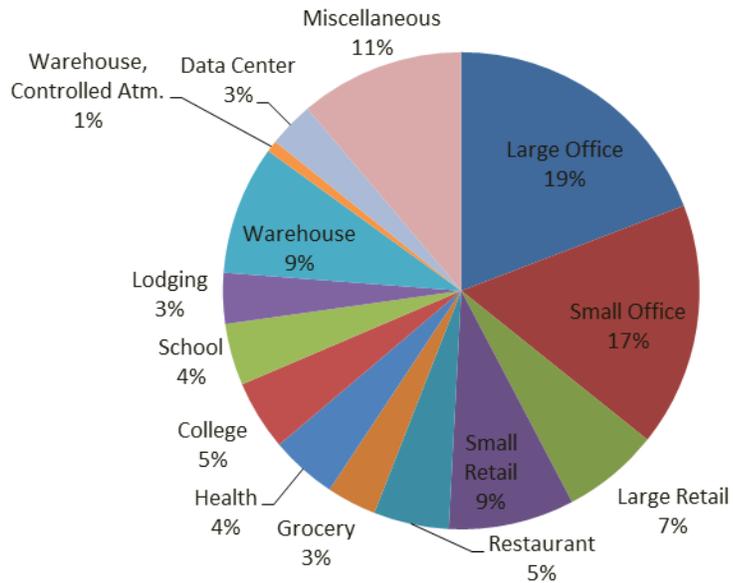


Figure B-45 Washington Commercial Baseline Projection by Segment, 2036

Total: 1,850,920 MWh

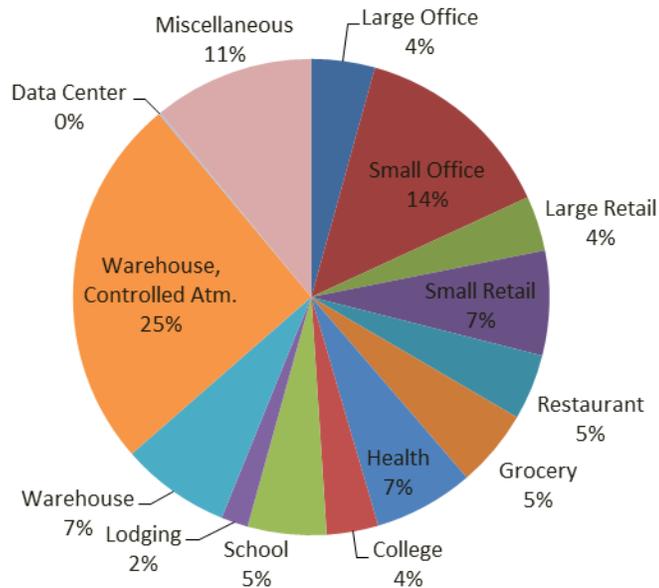


Figure B-46 Wyoming Commercial Baseline Projection by Segment, 2036

Total: 2,035,406 MWh

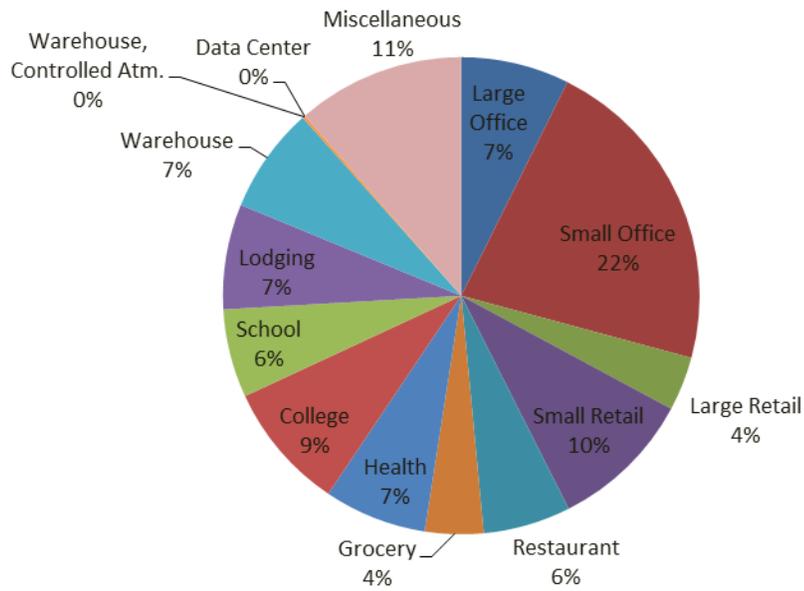


Figure B-47 California Industrial Baseline Projection by Segment, 2036

Total: 69,563 MWh

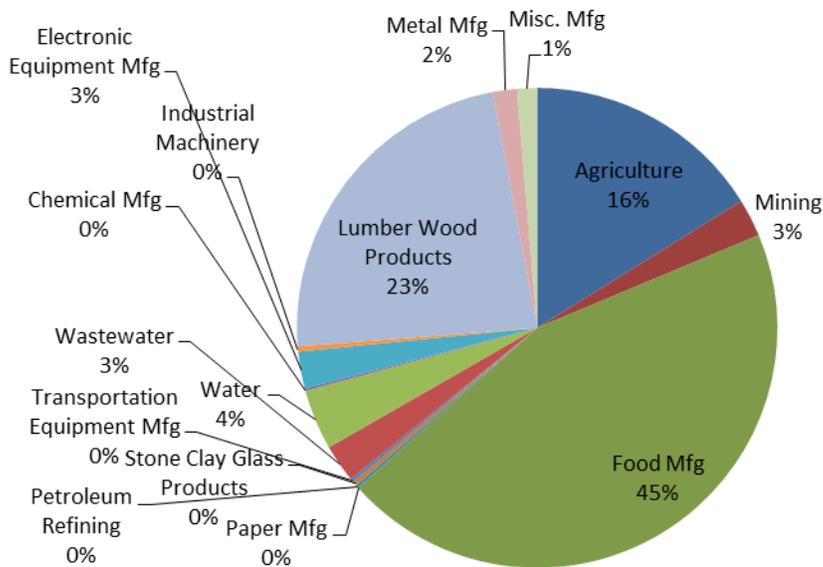


Figure B-48 Idaho Industrial Baseline Projection by Segment, 2036

Total: 361,618 MWh

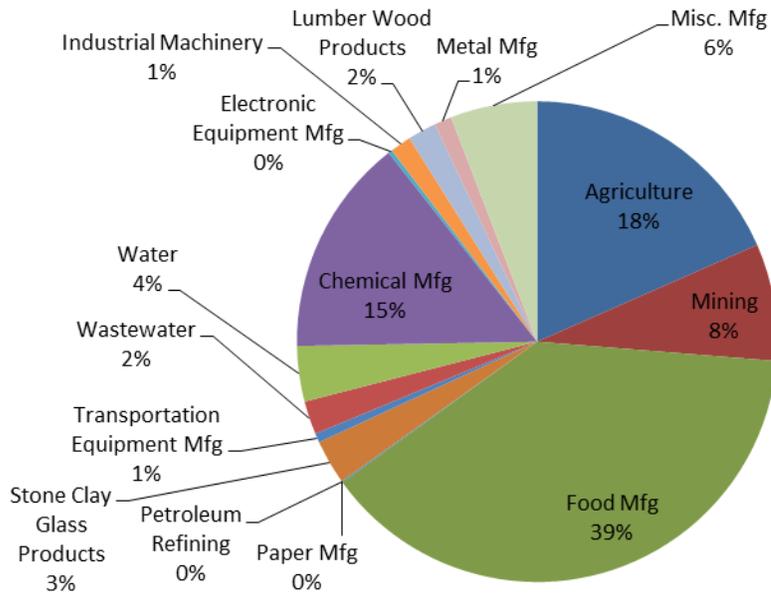


Figure B-49 Utah Industrial Baseline Projection by Segment, 2036

Total: 9,148,121 MWh

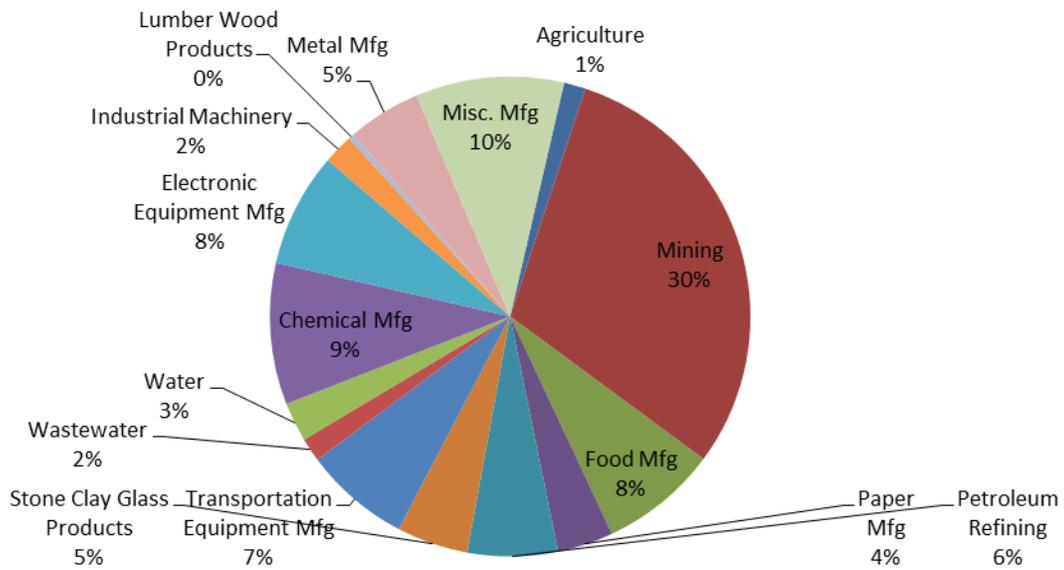


Figure B-50 Washington Industrial Baseline Projection by Segment, 2036

Total: 580,957 MWh

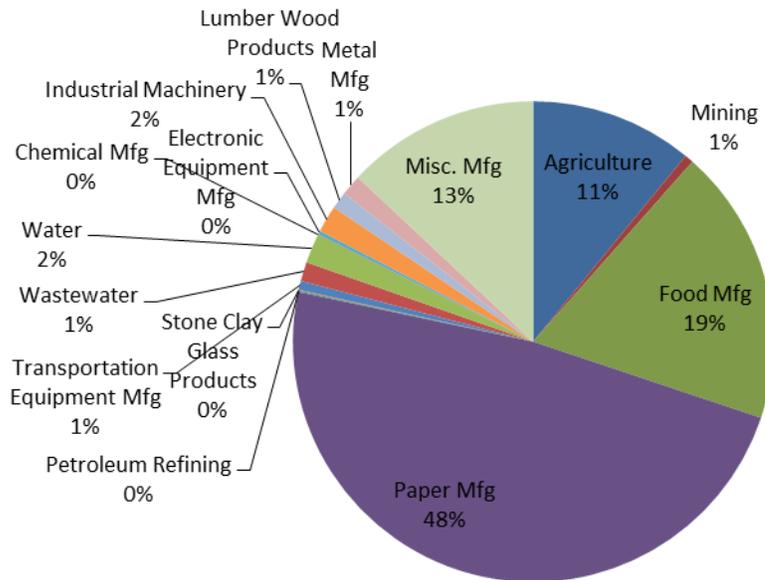


Figure B-51 Wyoming Industrial Baseline Projection by Segment, 2036

Total: 9,246,032 MWh

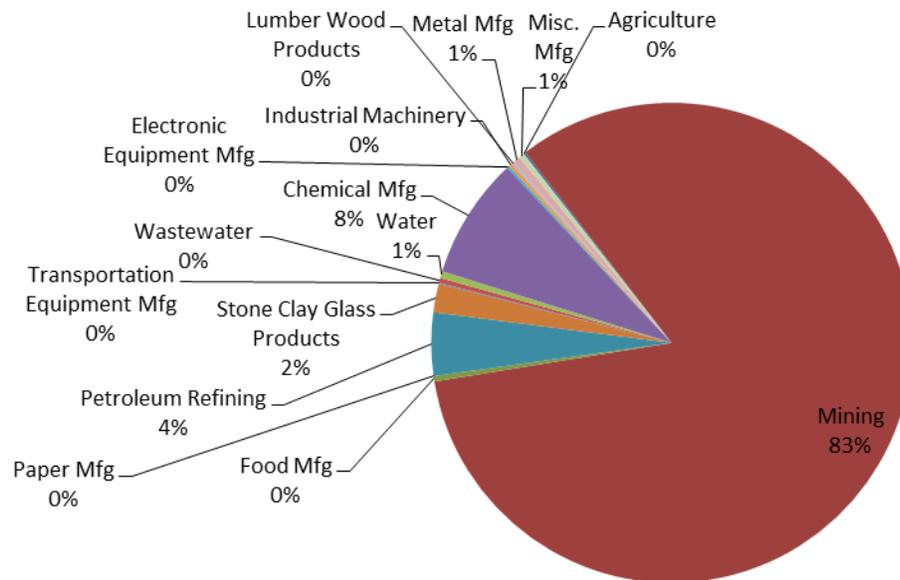


Figure B-52 California Irrigation Baseline Projection by Segment, 2036

Total: 108,224 MWh

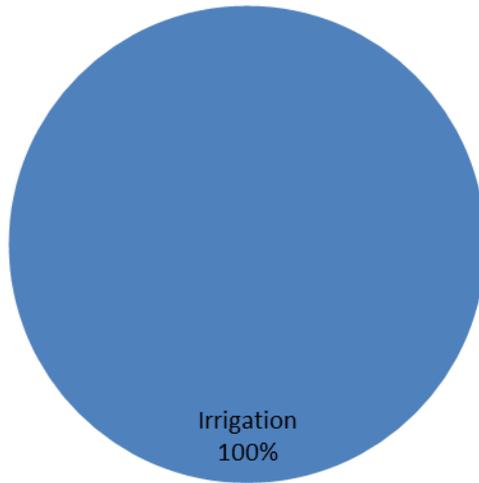


Figure B-53 Idaho Irrigation Baseline Projection by Segment, 2036

Total: 660,279 MWh

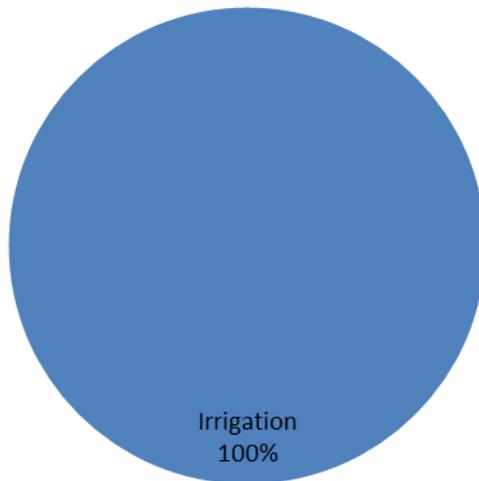


Figure B-54 Utah Irrigation Baseline Projection by Segment, 2036

Total: 213,885 MWh

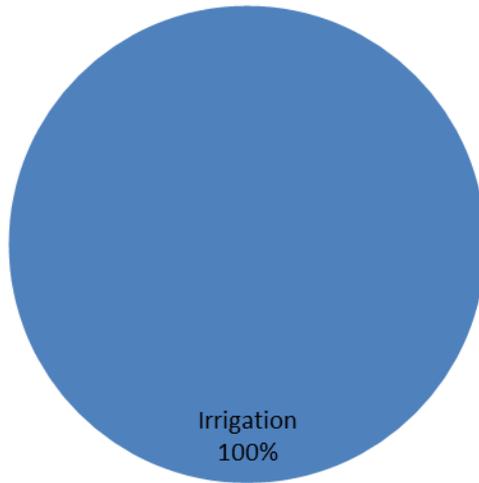


Figure B-55 Washington Irrigation Baseline Projection by Segment, 2036

Total: 174,884 MWh

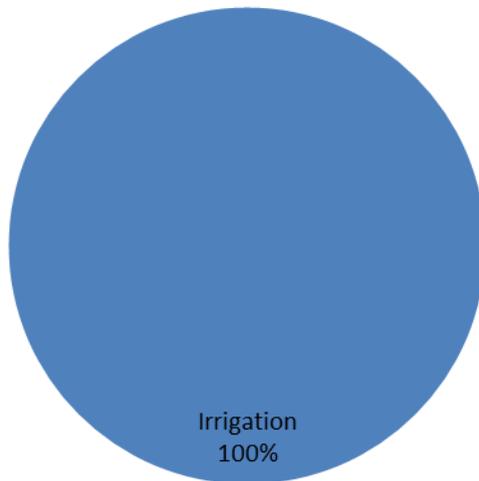


Figure B-56 Wyoming Irrigation Baseline Projection by Segment, 2036

Total: 25,181 MWh

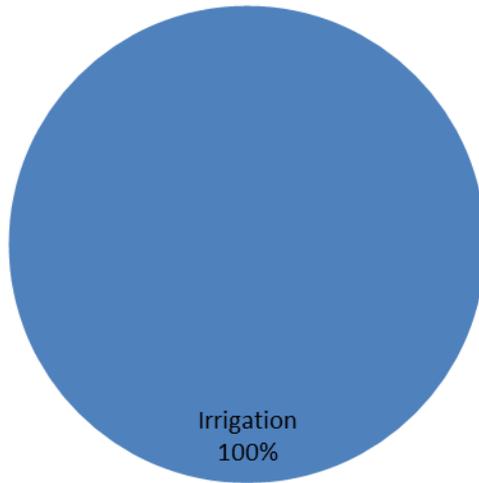


Figure B-57 California Street Lighting Baseline Projection by Segment, 2036

Total: 2,669 MWh

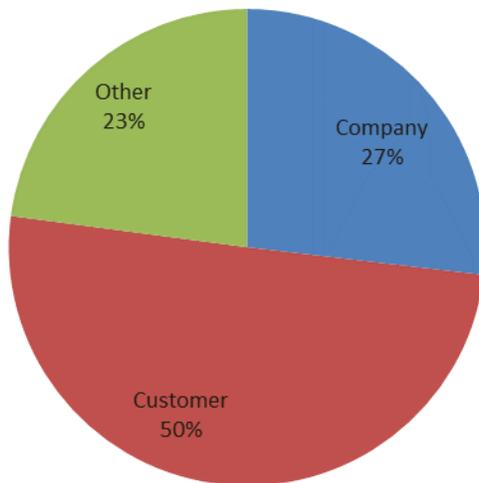


Figure B-58 Idaho Street Lighting Baseline Projection by Segment, 2036

Total: 2,944 MWh

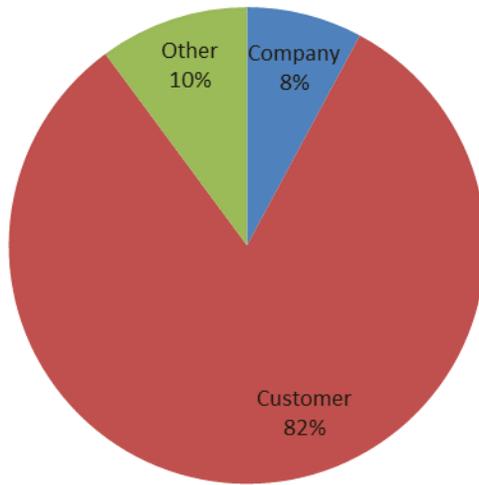


Figure B-59 Utah Street Lighting Baseline Projection by Segment, 2036

Total: 85,714 MWh

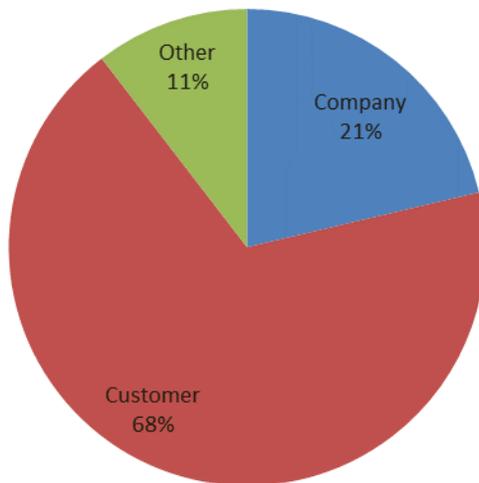


Figure B-60 Washington Street Lighting Baseline Projection by Segment, 2036

Total: 11,248 MWh

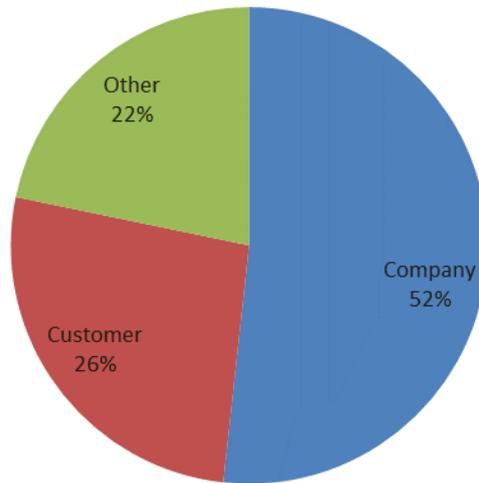
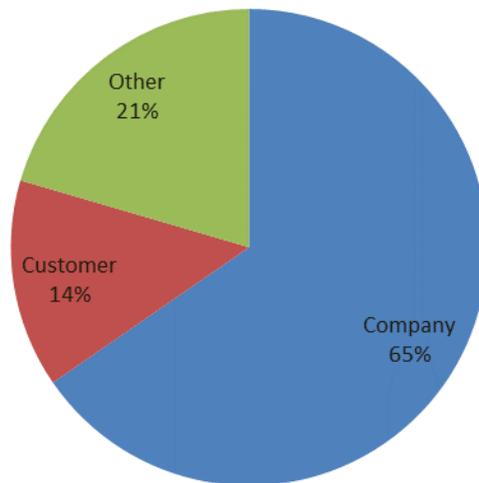


Figure B-61 Wyoming Street Lighting Baseline Projection by Segment, 2036

Total: 13,062 MWh



BASELINE PROJECTIONS PIE CHARTS BY STATE, SECTOR, AND END USE

This section presents pie charts that show the baseline projections of energy consumption for each state territory and sector in the study, broken down by end use in 2036.

Figure B-62 California Residential Baseline Projection by End Use, 2036

Total: 406,234 MWh

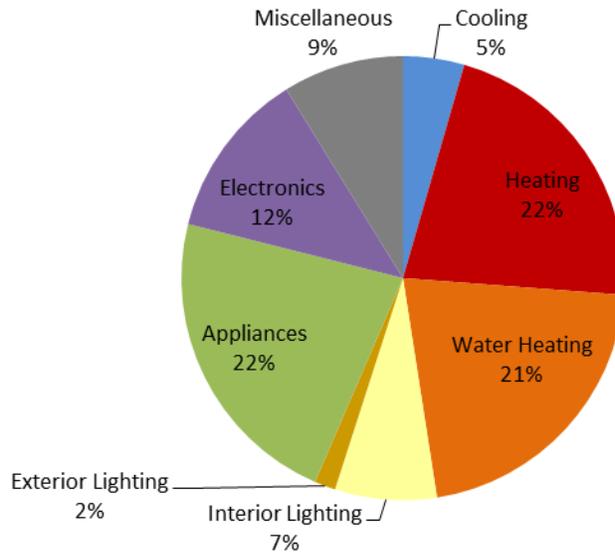


Figure B-63 Idaho Residential Baseline Projection by End Use, 2036

Total: 901,752 MWh

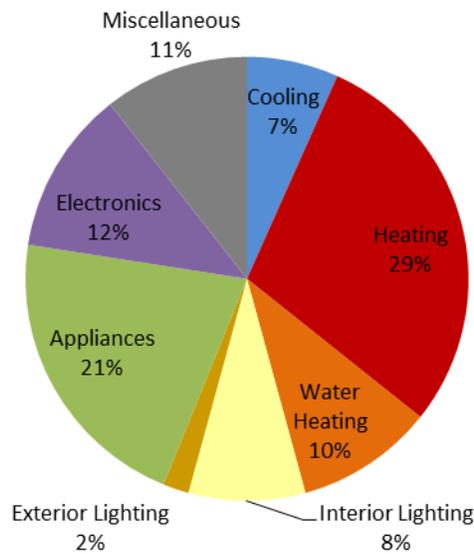


Figure B-64 Utah Residential Baseline Projection by End Use, 2036

Total: 9,176,669 MWh

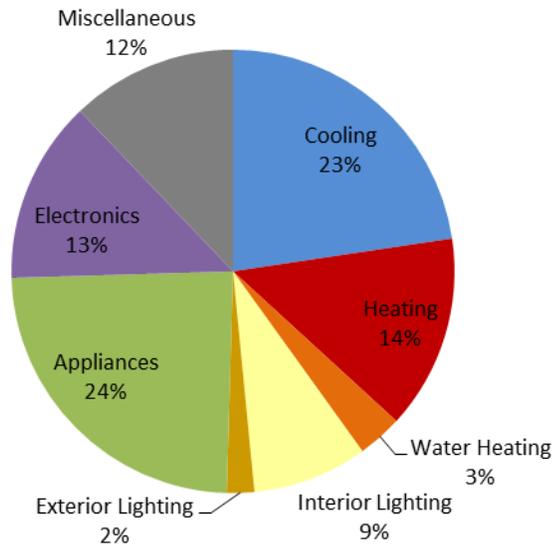


Figure B-65 Washington Residential Baseline Projection by End Use, 2036

Total: 1,722,625 MWh

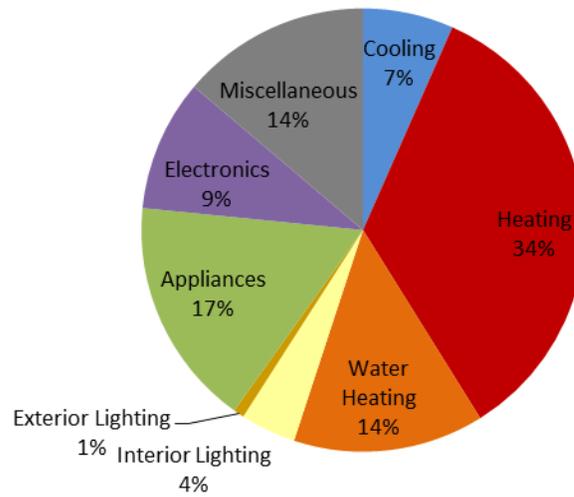


Figure B-66 Wyoming Residential Baseline Projection by End Use, 2036

Total: 1,168,825 MWh

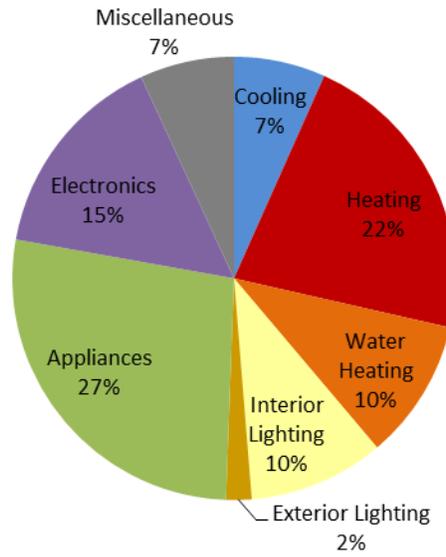


Figure B-67 California Commercial Baseline Projection by End Use, 2036

Total: 210,226 MWh

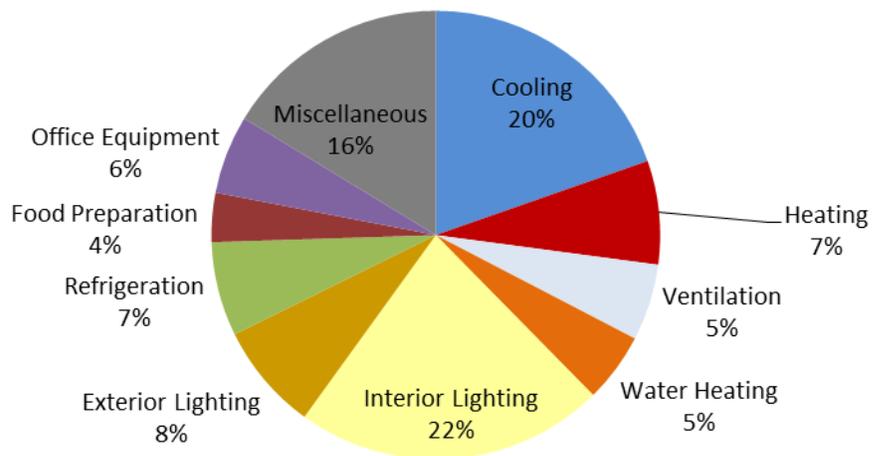


Figure B-68 Idaho Commercial Baseline Projection by End Use, 2036

Total: 923,520 MWh

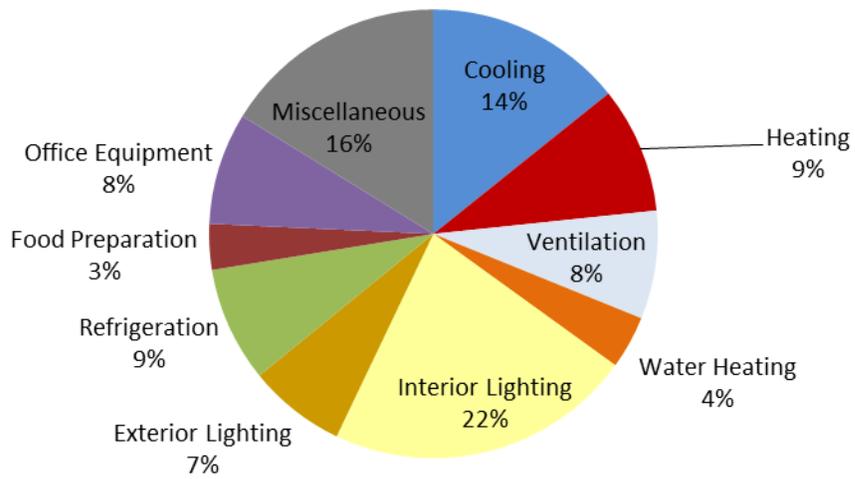


Figure B-69 Utah Commercial Baseline Projection by End Use, 2036

Total: 12,151,616 MWh

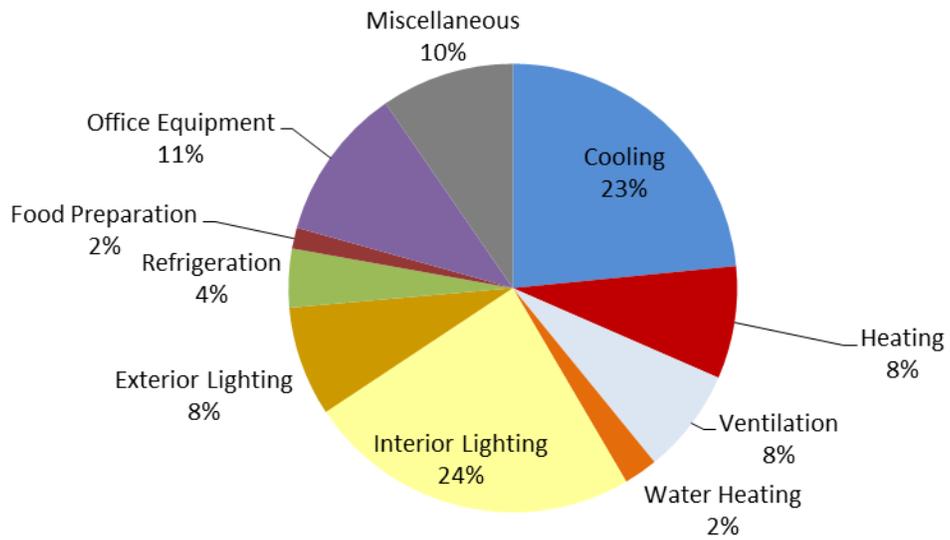


Figure B-70 Washington Commercial Baseline Projection by End Use, 2036

Total: 1,850,920 MWh

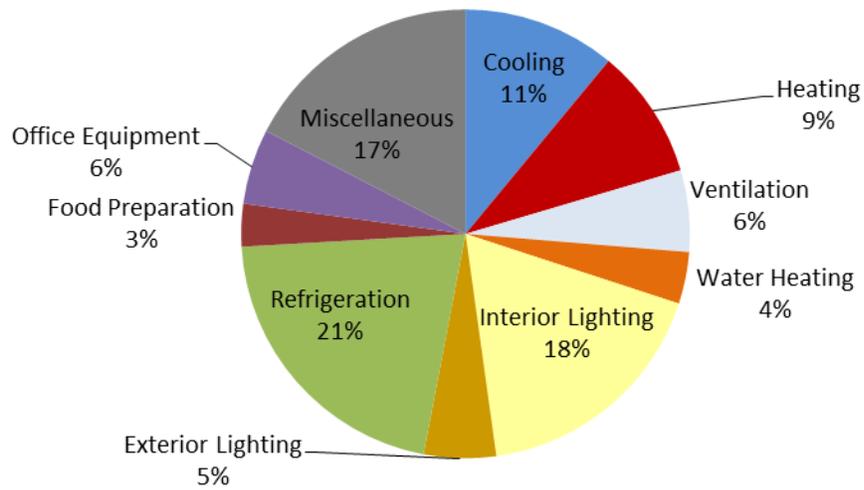


Figure B-71 Wyoming Commercial Baseline Projection by End Use, 2036

Total: 2,035,406 MWh

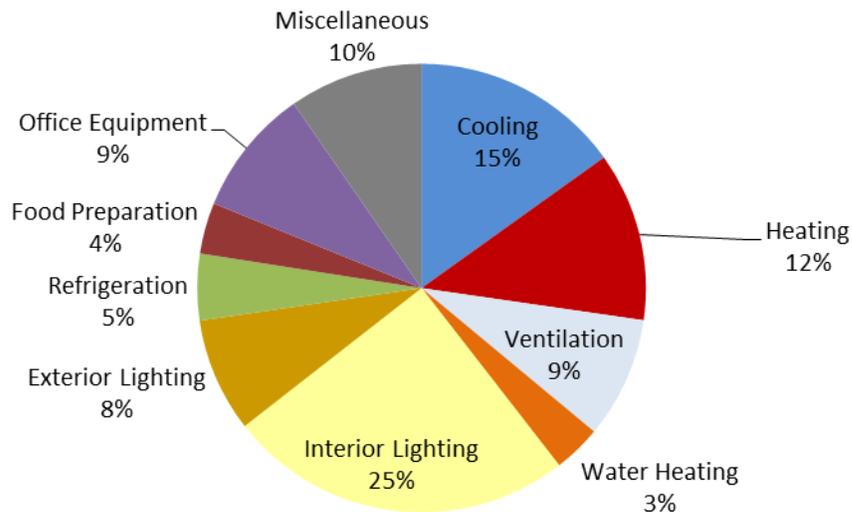


Figure B-72 California Industrial Baseline Projection by End Use, 2036

Total: 69,563 MWh

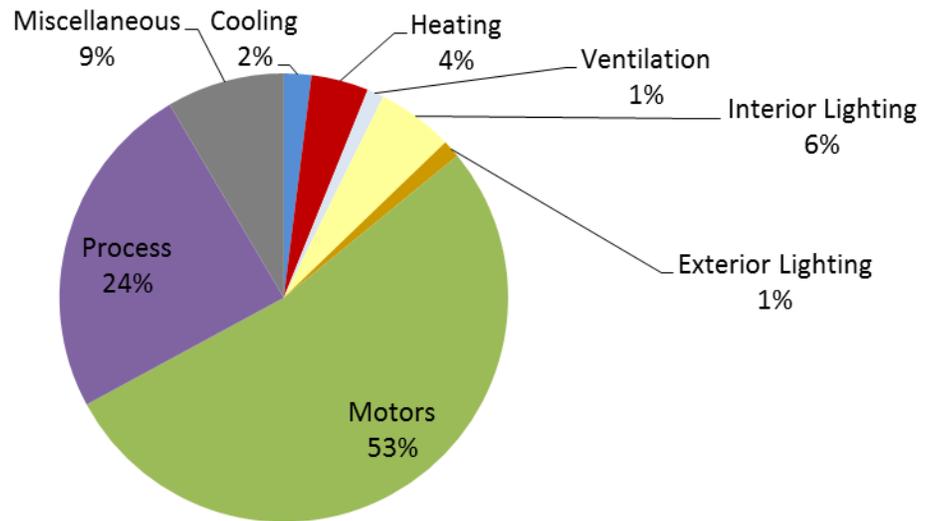


Figure B-73 Idaho Industrial Baseline Projection by End Use, 2036

Total: 361,618 MWh

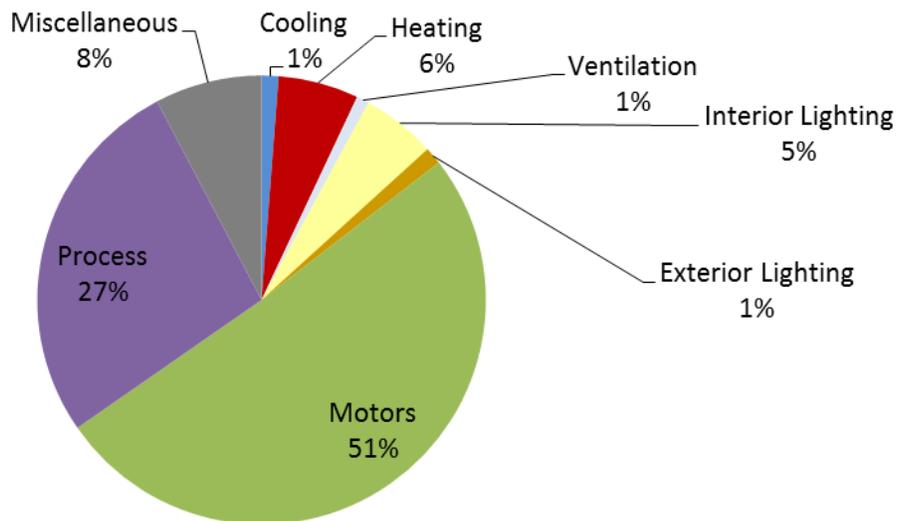


Figure B-74 Utah Industrial Baseline Projection by End Use, 2036

Total: 9,148,121 MWh

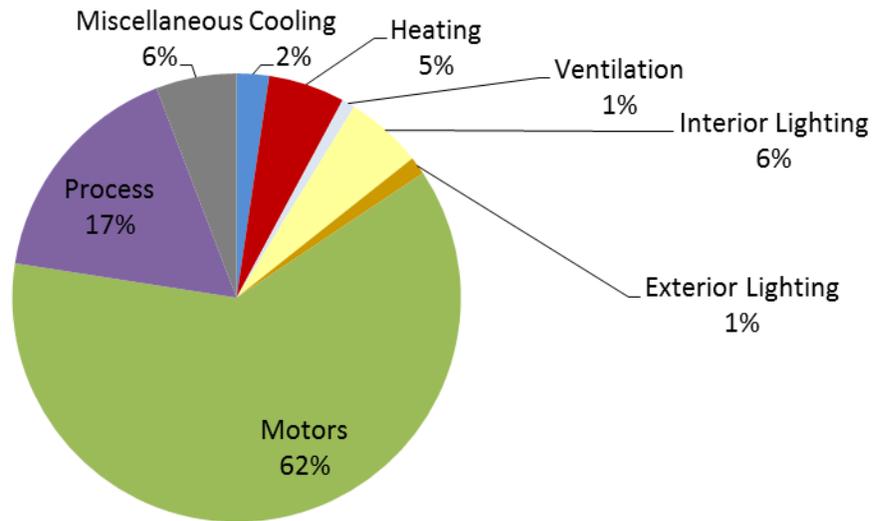


Figure B-75 Washington Industrial Baseline Projection by End Use, 2036

Total: 581,547 MWh

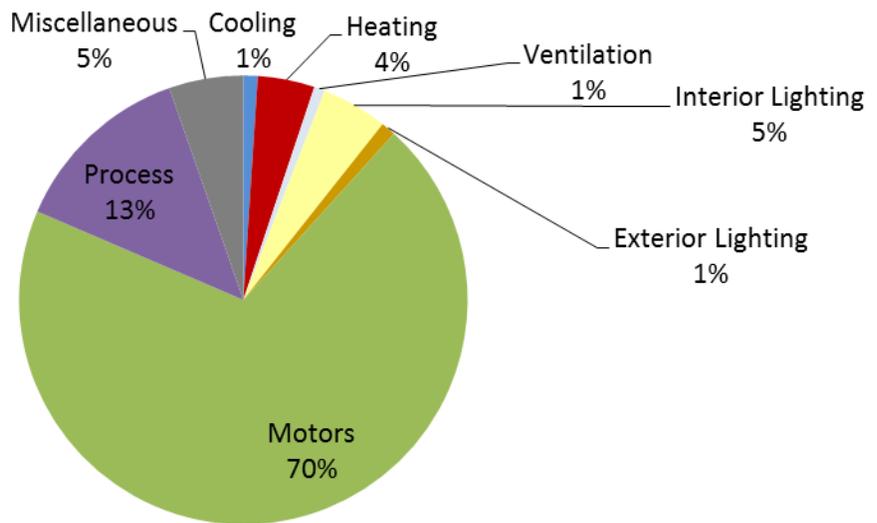


Figure B-76 Wyoming Industrial Baseline Projection by End Use, 2036

Total: 9,246,032 MWh

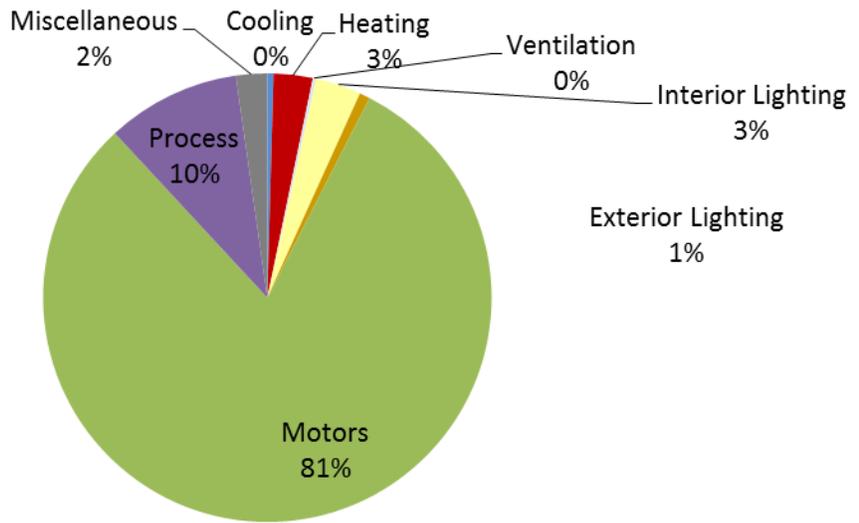


Figure B-77 California Irrigation Baseline Projection by End Use, 2036

Total: 108,224 MWh

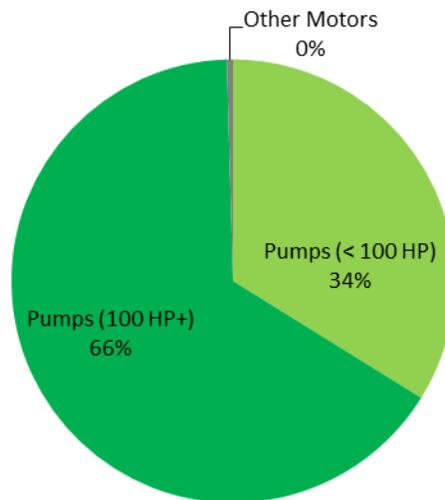


Figure B-78 Idaho Irrigation Baseline Projection by End Use, 2036

Total: 660,279 MWh

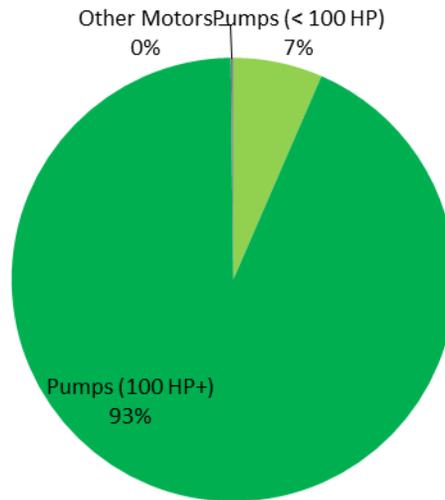


Figure B-79 Utah Irrigation Baseline Projection by End Use, 2036

Total: 213,885 MWh

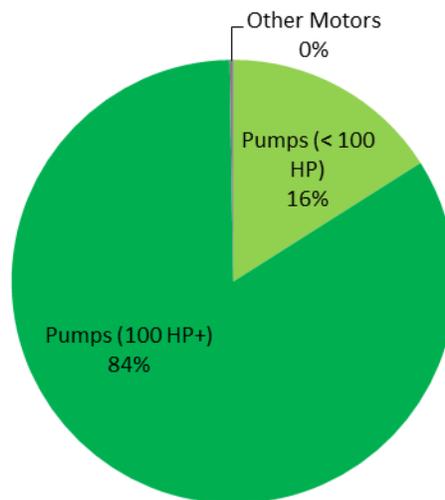


Figure B-80 Washington Irrigation Baseline Projection by End Use, 2036

Total: 174,884 MWh

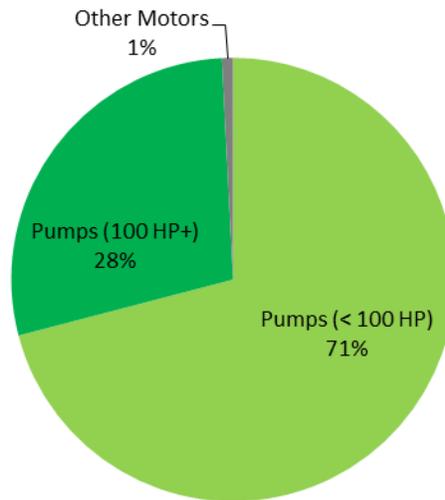
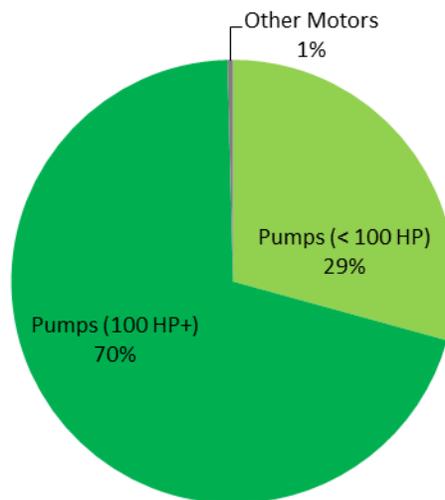


Figure B-81 Wyoming Irrigation Baseline Projection by End Use, 2036

Total: 25,181 MWh



Street Lighting consists of a single end use and is not shown here.

ACHIEVABLE TECHNICAL POTENTIAL PIE CHARTS

This section provides pie charts that show the Achievable Technical Potential for each state territory and sector in the study, broken down by end use in 2036.

Figure C-1 California Residential Achievable Potential by End Use, 2036

Total: 96,625 MWh

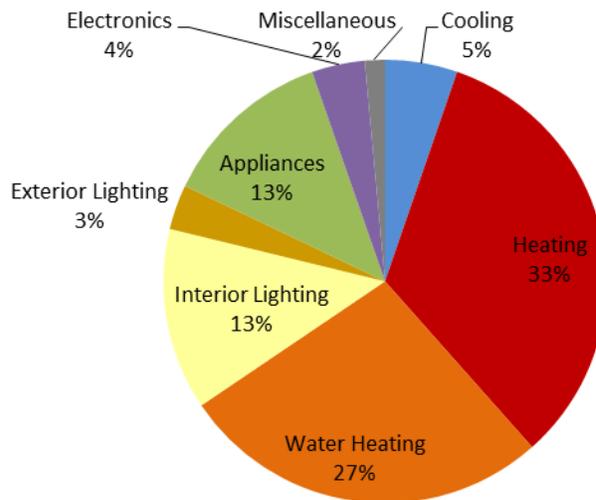


Figure C-2 Idaho Residential Achievable Potential by End Use, 2036

Total: 168,158 MWh

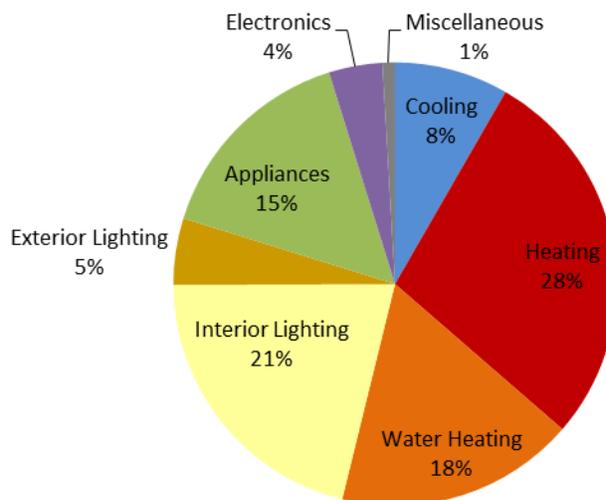


Figure C-3 Utah Residential Achievable Potential by End Use, 2036

Total: 1,547,355 MWh

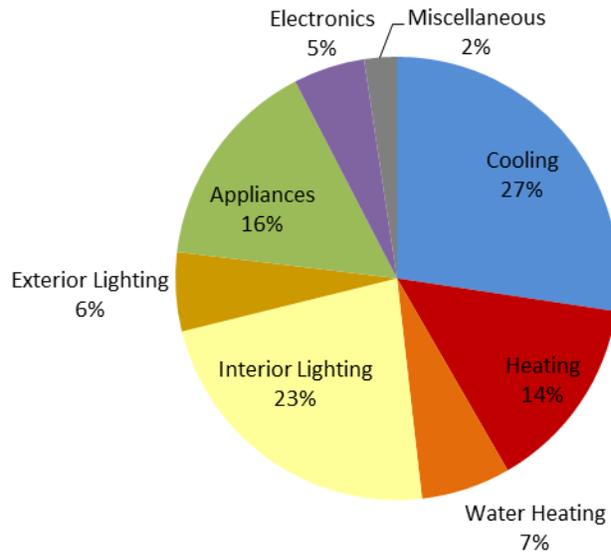


Figure C-4 Washington Residential Achievable Potential by End Use, 2036

Total: 347,281 MWh

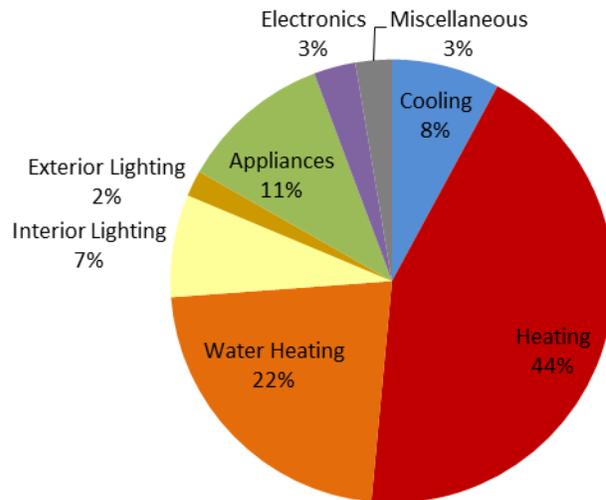


Figure C-5 Wyoming Residential Achievable Potential by End Use, 2036

Total: 219,045 MWh

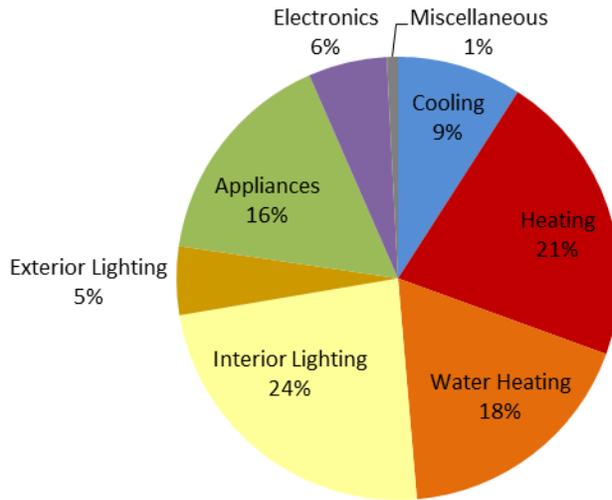


Figure C-6 California Commercial Achievable Potential by End Use, 2036

Total: 54,812 MWh

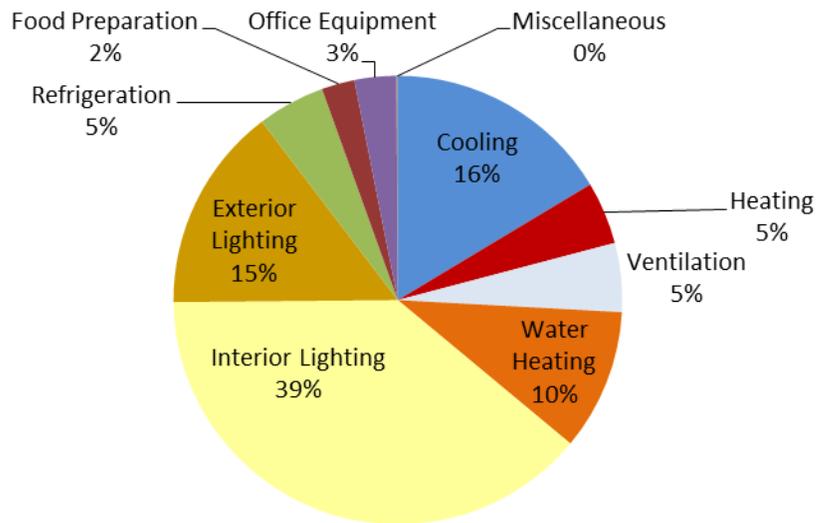


Figure C-7 Idaho Commercial Achievable Potential by End Use, 2036

Total: 233,592 MWh

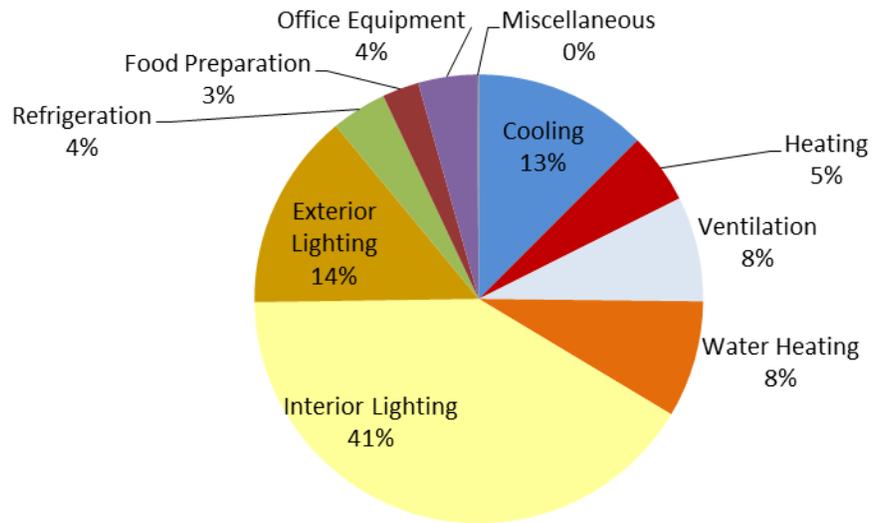


Figure C-8 Utah Commercial Achievable Potential by End Use, 2036

Total: 3,251,218 MWh

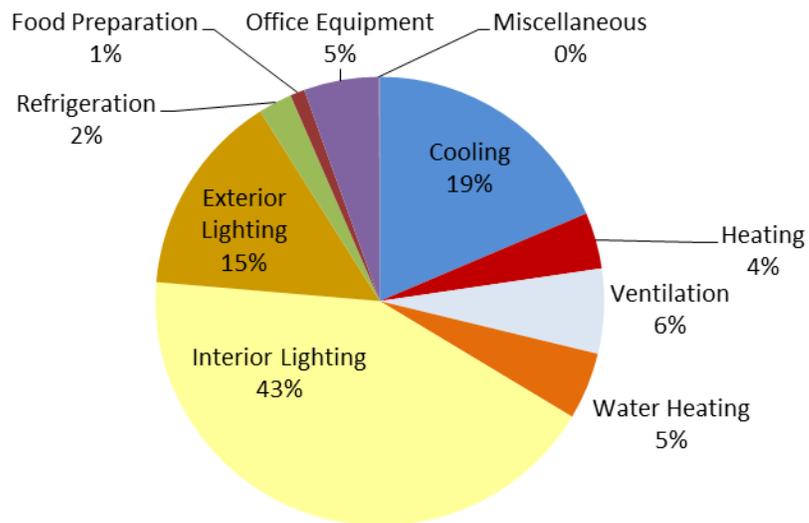


Figure C-9 Washington Commercial Achievable Potential by End Use, 2036

Total: 402,599 MWh

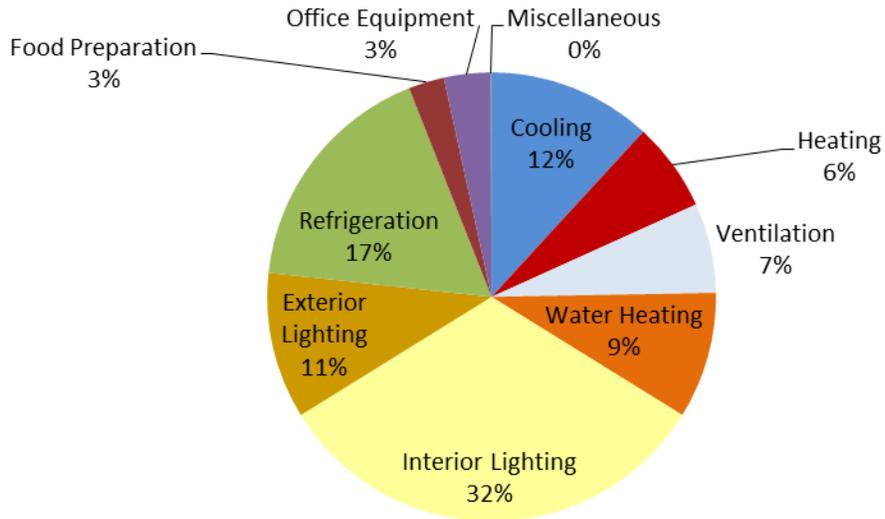


Figure C-10 Wyoming Commercial Achievable Potential by End Use, 2036

Total: 580,920 MWh

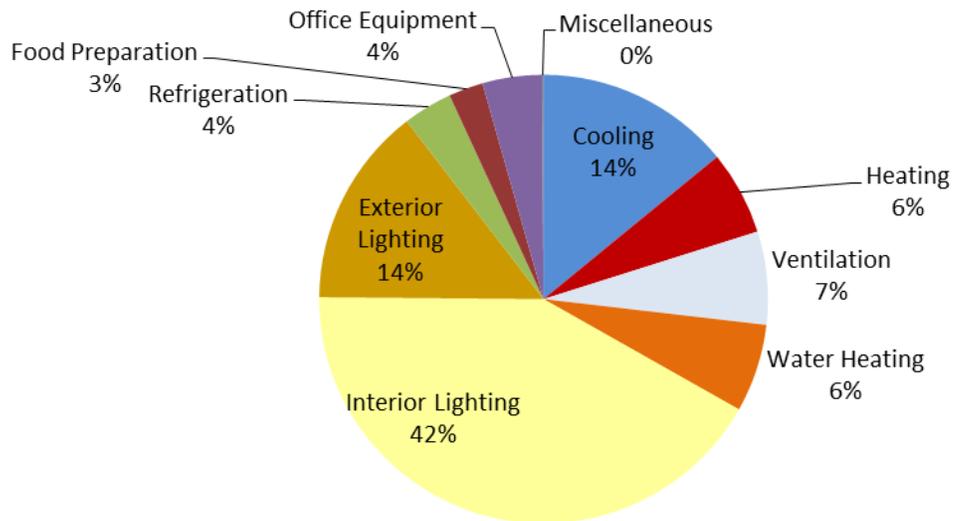


Figure C-11 California Industrial Achievable Potential by End Use, 2036

Total: 7,225 MWh

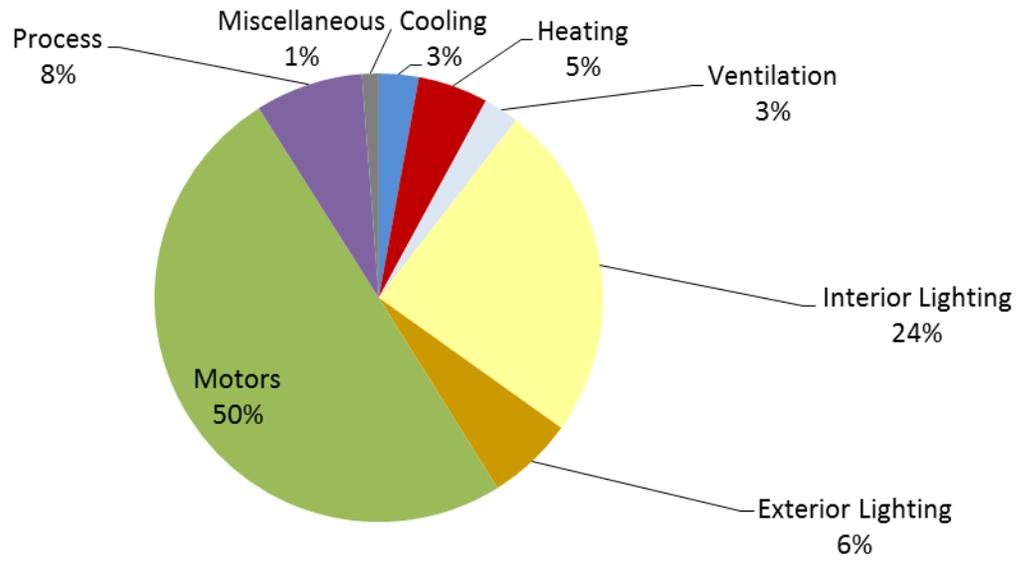


Figure C-12 Idaho Industrial Achievable Potential by End Use, 2036

Total: 37,037 MWh

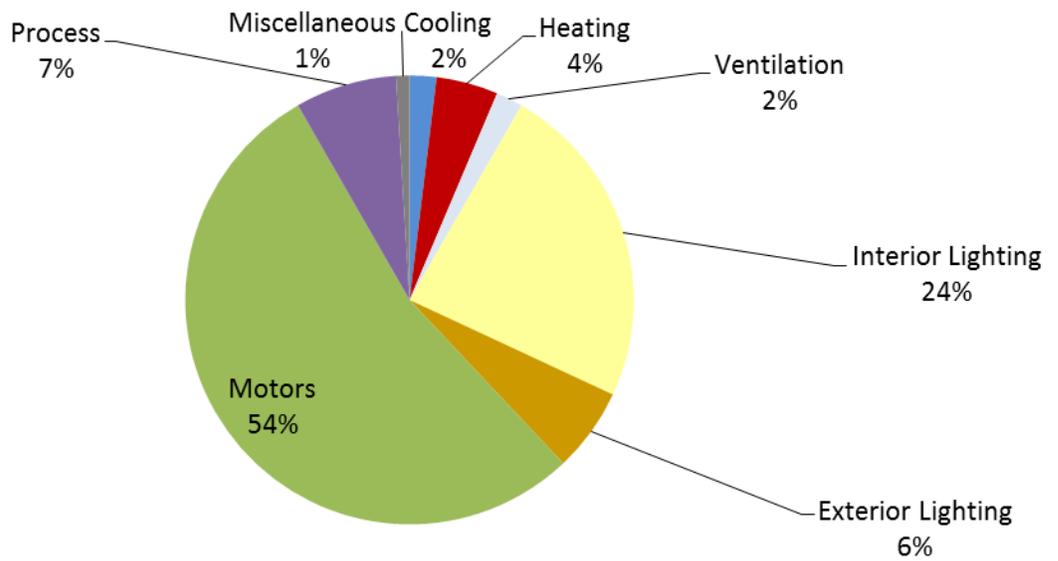


Figure C-13 Utah Industrial Achievable Potential by End Use, 2036

Total: 918,749 MWh

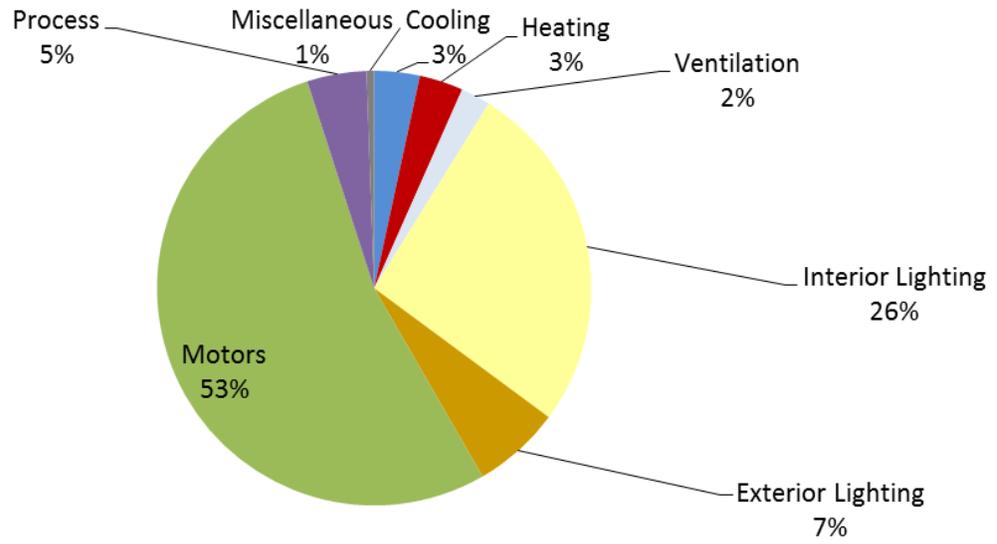


Figure C-14 Washington Industrial Achievable Potential by End Use, 2036

Total: 73,480 MWh

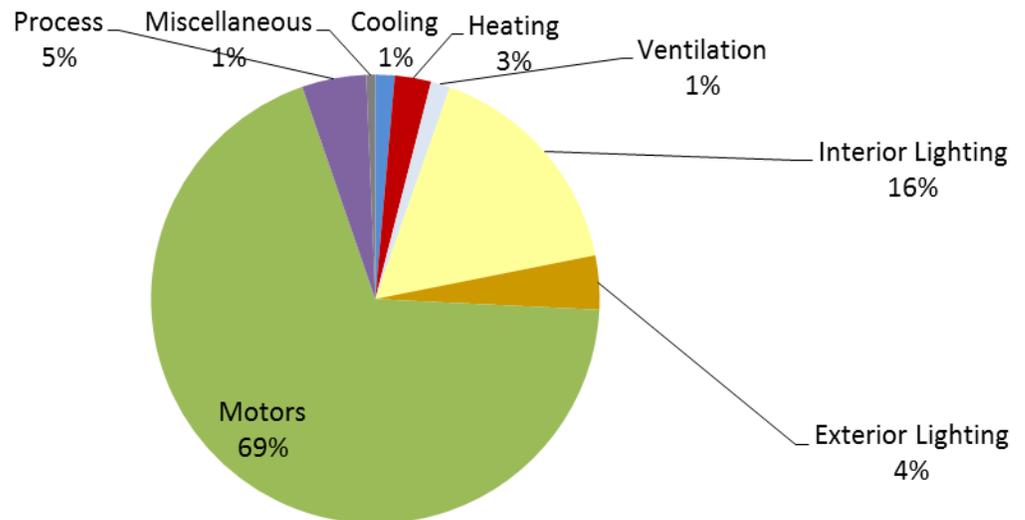


Figure C-15 Wyoming Industrial Achievable Potential by End Use, 2036

Total: 866,265 MWh

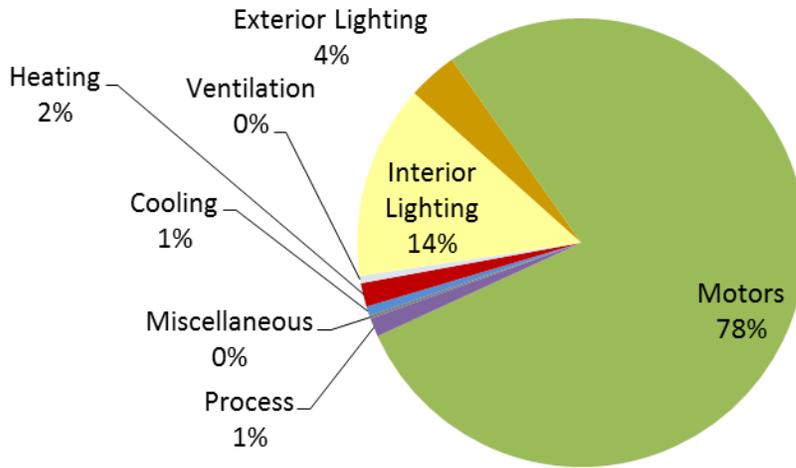


Figure C-16 California Irrigation Achievable Potential by End Use, 2036

Total: 8,254 MWh

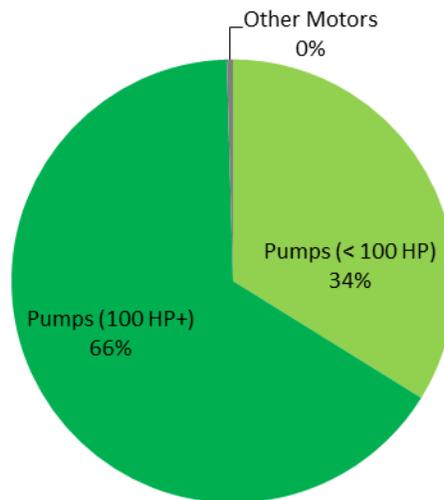


Figure C-17 Idaho Irrigation Achievable Potential by End Use, 2036

Total: 48,114 MWh

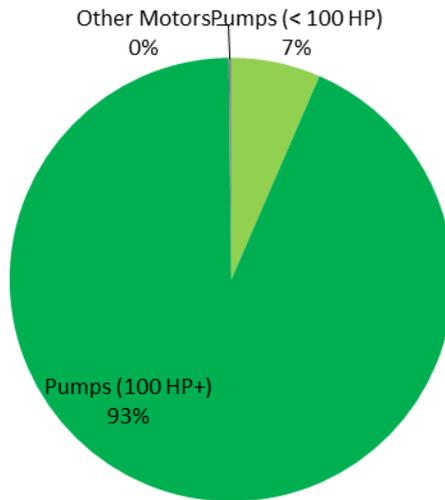


Figure C-18 Utah Irrigation Achievable Potential by End Use, 2036

Total: 16,959 MWh

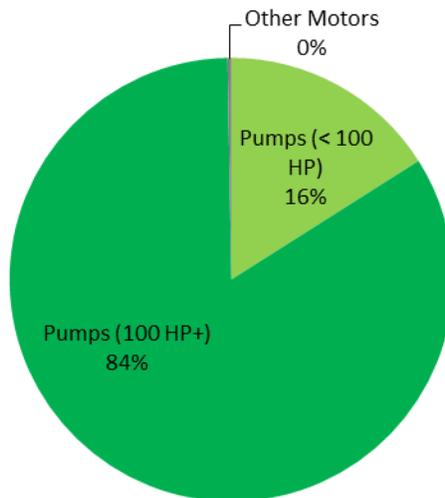


Figure C-19 Washington Irrigation Achievable Potential by End Use, 2036

Total: 13,717 MWh

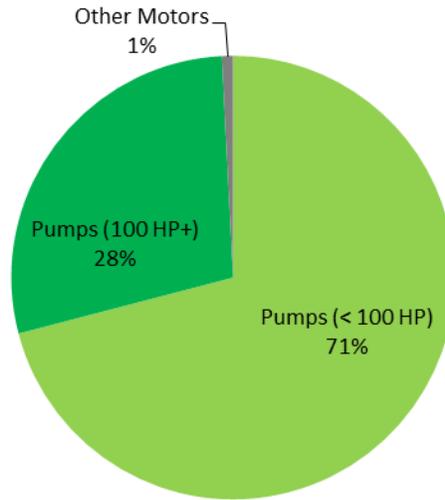
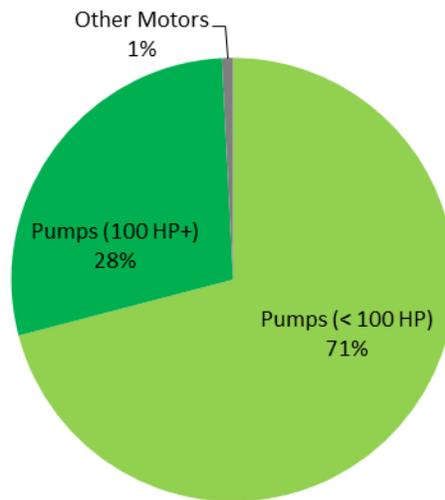


Figure C-20 Wyoming Irrigation Achievable Potential by End Use, 2036

Total: 1,906 MWh



Street Lighting consists of a single end use and is not shown here.

LIST OF CLASS 2 EMERGING TECHNOLOGY MEASURES

As described in Chapter 3 of Volume 2 of this report, AEG developed the Class 2 DSM measure list based on a comprehensive review of measures implemented in current industry best practice programs and exhaustive research into the pipeline of technologies that may become viable over the study time horizon. The emerging technologies selected for inclusion in the study (shown in Table D-1) are measures that have not yet gained mainstream adoption, but can reasonably be expected to reach commercial availability within the study time horizon.

Table D-1 Emerging Technology Measures Included in Class 2 DSM Analysis

Sector	Measure Name
Residential	Central AC - SEER 21.0
Residential	Air-Source Heat Pump - SEER 18.0 / HSPF 10.0 Variable Capacity (CEE)
Residential	Geothermal Heat Pump - EER 30.0 / COP 5.0
Residential	Water Heater (<= 55 Gal) - NEEA Tier 1 Heat Pump (EF 1.8)
Residential	Water Heater (<= 55 Gal) - NEEA Tier 2 Heat Pump (EF 2.0)
Residential	Water Heater (<= 55 Gal) - NEEA Tier 3 Heat Pump (EF 2.4)
Residential	General Service Screw-In - LED
Residential	Linear Lighting - LED
Residential	Exempted Screw-In - LED
Residential	Refrigerator - CEE Tier 3 (20% above standard)
Residential	Second Refrigerator - CEE Tier 3 (20% above standard)
Residential	Freezer - ENERGY STAR - Tier 5 (20-25% above standard)
Residential	Clothes Washer - CEE Tier 3 (IMEF 2.92 / WF 3.2)
Residential	Clothes Dryer - Heat Pump Tier 2 (UCEF 3.4)
Residential	Clothes Dryer - Heat Pump Tier 3 (UCEF 3.8)
Residential	Clothes Dryer - Heat Pump Tier 4 (UCEF 4.3)
Residential	Ductless Mini Split Heat Pump (Ducted Forced Air)
Residential	Space Heating - Heat Recovery Ventilator
Residential	Thermostat - WiFi/Interactive
Residential	Water Heater - Drainwater Heat Recovery
Residential	Water Heater - Desuperheater
Residential	Water Heater - Solar System
Residential	Advanced Power Strips - Load or Occupancy
Residential	Advanced Power Strips - IR Sensing
Residential	ENERGY STAR Home Design
Residential	Behavioral Programs
Commercial	RTU - EER 13.9, VRF
Commercial	Room AC - EER 13.0, VRF
Commercial	Air-Source Heat Pump - Ductless Multi-Split, VRF
Commercial	Geothermal Heat Pump - EER 27.8 (COP 4.9)

Sector	Measure Name
Commercial	Water Heater - EF 2.0 - Heat Pump
Commercial	Water Heater - EF 2.35 - Heat Pump
Commercial	Screw-in - LED
Commercial	Linear Lighting - LED
Commercial	High-Bay Fixtures - LED
Commercial	Area Lighting - LED
Commercial	Space Heating - Heat Recovery Ventilator
Commercial	Ventilation - Demand Controlled
Commercial	RTU - Advanced Controls
Commercial	Ductless Mini Split Heat Pump
Commercial	Thermostat - WiFi/Interactive
Commercial	Water Heater - Solar System
Commercial	Interior Lighting - Embedded Fixture Controls
Commercial	Interior Lighting - Networked Fixture Controls
Commercial	Interior Lighting - LEC Exit Lighting
Commercial	Office Equipment - Smart Power Strips
Commercial	Data Center - Cutting Edge Measures
Commercial	Optimized Variable Volume Lab Hood Design
Industrial	Screw-in - LED
Industrial	High-Bay Fixtures - LED
Industrial	Linear Fluorescent style - Tubular LED
Industrial	High Intensity Discharge (HID) applications - LED
Industrial	Interior Lighting - Daylighting Controls
Industrial	Motors - Magnetic Adjustable Speed Drives
Industrial	Motors - Synchronous Timing Belts
Industrial	Strategic Energy Management
Industrial	RTU - EER 13.9, VRF
Industrial	Air-Source Heat Pump - Ductless Multi-Split, VRF
Industrial	Geothermal Heat Pump - EER 27.8 (COP 4.9)
Industrial	Screw-in - LED
Industrial	Linear Lighting - LED
Industrial	High-Bay Fixtures - LED
Irrigation	Center Pivot - Low Energy Spray Application
Irrigation	Scientific Irrigation Practices
Street Lighting	Smart Dimming Controller

Certain technologies reviewed were still in the laboratory stage without reliable estimates of cost or operating characteristics at the time of the analysis, and were thus excluded from the estimation of Class 2 DSM potential in this assessment. In addition, the savings that would be attributed to some of these measures, specifically efficient lighting, are already captured through other technologies included in the assessment, and therefore, including these emerging technologies would not have had a material, net impact on the identified potential. Table D-2 provides a list of measures falling into this category, along with a brief explanation on why each was excluded from the analysis.

Table D-2 Emerging Technology Measures Excluded from Class 2 DSM Analysis

Sector	Measure Name	Rationale for Exclusion
Residential	Hybrid Halogen / CFL bulbs	Potential covered by LED in study
Residential	Electron Stimulated Luminescence Lighting	Potential covered by LED in study
Residential	Microplasma Lighting	Experimental, insufficient definition of savings and/or costs
Residential	OLED Lighting	Experimental, insufficient definition of savings and/or costs
Residential	Magnetic Refrigeration	Experimental, insufficient definition of savings and/or costs
Residential	Ultraviolet Germicidal Irradiation of HVAC Coils	Experimental, insufficient definition of savings and/or costs. Potential covered by Maintenance measures in study.
Residential	Condensing Residential Clothes Dryers	Experimental, insufficient definition of savings and/or costs
Residential	Domestic Water Heating from Condensing Air Conditioners	Experimental, insufficient definition of savings and/or costs
Residential	Insulated Heat Tape for Freeze Protection	Experimental, insufficient definition of savings and/or costs. Potential covered by Pipe Insulation in study.
Residential	Embedded HVAC Diagnostics	Insufficient definition of savings and/or costs
Residential	Color-Tunable General Lighting	Insufficient definition of savings and/or costs
Residential	Membrane Dehumidifier Cooling	Experimental, insufficient definition of savings and/or costs
Residential	Low-cost stable, switchable mirrors - electrochromic window shading	Experimental, insufficient definition of savings and/or costs
Residential	Solar Pre-heater for Ventilation Air	Insufficient definition of savings and/or costs
Commercial	Hybrid Halogen / CFL bulbs	Potential covered by LED in study
Commercial	Electron Stimulated Luminescence Lighting	Potential covered by LED in study
Commercial	Microplasma Lighting	Experimental, insufficient definition of savings and/or costs
Commercial	OLED Lighting	Experimental, insufficient definition of savings and/or costs
Commercial	Embedded HVAC Diagnostics	Insufficient definition of savings and/or costs
Commercial	Data Center - High Efficiency UPS	Low market uptake and prohibitive costs
Commercial	Office Equipment - Plug Load Occupancy Sensors	Potential covered by smart strips in study
Industrial	Hybrid Halogen / CFL bulbs	Potential covered by LED in study
Industrial	Electron Stimulated Luminescence Lighting	Potential covered by LED in study
Industrial	Microplasma Lighting	Experimental, insufficient definition of savings and/or costs
Industrial	OLED Lighting	Experimental, insufficient definition of savings and/or costs
Industrial	Embedded HVAC Diagnostics	Insufficient definition of savings and/or costs
Industrial	Motors - Magnetic Adjustable Speed Drives	More expensive version of traditional VFD, low applicability

CLASS 2 DSM RESOURCE RAMPING

This appendix presents the methods used by Applied Energy Group (AEG) and the Energy Trust of Oregon (Energy Trust) to develop reasonable estimates of annual Class 2 DSM (energy-efficiency) potential available for acquisition in PacifiCorp's service territory for consideration in PacifiCorp's 2017 Integrated Resource Plan (IRP). The Energy Trust's method is applied to resources in Oregon while AEG's method applies to the other five states PacifiCorp serves. Though the mechanics of the two methods differ, the objectives are the same – to estimate the amount of reasonably achievable Class 2 DSM potential in each year of the 20-year study period. The general method is presented below, with additional detail on AEG and Energy Trust methods following.

GENERAL METHODOLOGY

Both AEG and the Energy Trust begin by estimating the technical potential for Class 2 DSM resources in the given territory. That is, the amount of energy that could be saved in the absence of market barriers and cost-effectiveness considerations. This technical potential is then translated to annual achievable technical potential by applying achievability factors and “ramp rates,” representing the rate at which these resources could be achieved in each market. The application of achievability factors and ramp rates is consistent with the method used by the Northwest Power and Conservation Council (Council) in its Seventh Northwest Conservation and Electric Power Plan (7th Plan). The resulting quantities are then presented as “annual achievable technical” potential, allowing PacifiCorp's IRP model to determine the amount of achievable technical potential that is cost-effective in a given year, which informs PacifiCorp's acquisition targets in each state.

Both AEG and the Energy Trust assume that Class 2 DSM measure acquisition is ramped (i.e., acquired) over the planning horizon depending on market availability. In general, market availability is dictated by the existence of programs, customer awareness, technology availability, and other considerations. The intent of this ramp rate is to establish a path to full market maturity for each measure or technology group and ensure that resource planning selections don't overstep acquisition capabilities. Class 2 DSM resources are divided into two categories, each of which has its own timing and achievability considerations:

- *Lost Opportunity Resources* are opportunities at the time of equipment burnout or new construction. When equipment is replaced, a unique opportunity exists to upgrade efficiency at incremental (above standard equipment), rather than full cost. If standard equipment is installed, the high-efficiency equipment would not be installed until the new equipment reaches the end of its normal life cycle, without early replacement (usually requiring a significantly higher incremental cost). The same applies for opportunities at the time of new construction.
- *Discretionary Resources* are retrofit opportunities in existing building stock that are not subject to such stringent timing constraints and can, theoretically, be acquired at any point in the planning period assuming customer willingness and necessary delivery infrastructure.

The timing challenges created by lost opportunities make these resources more difficult to acquire than discretionary opportunities. As detailed in the AEG and Energy Trust methodology sections below, both assume that 85% of discretionary potential can be acquired over the planning period, but estimate a lower achievable rate for lost opportunity resources depending on the measure life,

equipment stock turnover, and other factors. These assumptions are consistent with those used in the Council's 7th Plan.

In addition to the timing considerations for each measure, it is important to recognize the interaction between the two resource classes. For example, if a functioning, but inefficient, refrigerator is replaced before the end of its useful life (a discretionary opportunity), then those savings should not also be counted as an equipment replacement opportunity when the original unit would have needed to be replaced (lost opportunity). Similarly, if a home is weatherized (discretionary), upgrading the heating or cooling equipment will save less than it would have in absence of weatherization.

Both methods use recent state-specific program history to inform short-term achievable potential to account for the level of program infrastructure and awareness currently in place in each jurisdiction. This process is designed to avoid large increases or decreases in short-term acquisition, which are unlikely to occur in practice. The remainder of this appendix presents additional detail on AEG and Energy Trust methods for estimating annual achievable technical potential.

RESULTS

Though some of the specific methods used by AEG and Energy Trust to calculate annual achievable technical potential differ, the results are very similar. AEG estimates that across all Class 2 DSM resources, 79% of total technical potential is achievable over 20 years and that 54% of this achievable technical potential would come from lost opportunity resources. Energy Trust estimates that 90% of the technical potential can be achieved over 20 years with 68% of this achievable potential coming from discretionary resources.

APPLIED ENERGY GROUP'S METHODOLOGY

This subsection describes AEG's process for applying ramp rates. The analysis distinguishes between measure ramping, which reflects the technical limitations of acquiring individual measures, and market ramping, which accounts for the level of delivery infrastructure in specific markets in PacifiCorp's jurisdictions. Measure and market ramp rates are provided in Table E-1 at the end of this section. Annual values for lost opportunity measure ramp rates indicate the share of the annual opportunity deemed achievable, whereas discretionary values indicate the cumulative share of the 20-year opportunity assumed to be achievable by a given year.

Measure Ramp Rates

The study applied measure ramp rates to determine the annual availability of the identified potential lost opportunity and discretionary resources, interpreting and applying these rates differently for each class (as described below). Measure ramp rates generally matched those used in the Council's 7th Power Plan, although the study incorporated additional considerations for Class 2 DSM measure acquisition:

- For lost opportunity measures, the second year of the 7th Power Plan ramp rates (2017) was aligned with the study's first year (2017). Discretionary measures were aligned with the first year of the 7th Power Plan ramp rates (2016).
- For measures not included in the 7th Power Plan, the study assigned a ramp rate considered appropriate for that technology (i.e., the same ramp rate as a similar measure in 7th Power Plan).

Lost Opportunity Resources

Lost opportunity energy efficiency measures correspond to equipment measures, which follow a natural equipment turnover cycle, as well as non-equipment measures in new construction

instances that are fundamentally different and typically easier to implement during the construction process as opposed to after construction has been completed.

In addition to natural timing constraints imposed by equipment turnover and new construction rates, the AEG team applied measure ramp rates to reflect other resource acquisition limitations over the study horizon, such as market availability. These measure ramp rates have a maximum value of 85%, reflecting the Council's assumption that, on average, up to 85% of technical potential could be achieved in a given year by the end of a 20-year planning horizon. Per Council methodology, emerging technology measures on the "LOMax60" rate will instead reach a maximum value of 55%. When combined with the effects of stock turnover for lost opportunity measures, this equates to 20-year potential savings that are lower than 85% of the technical opportunity. In AEG's model, this is implicitly accounted for in equipment measures, but for non-equipment measures in new construction applications, a maximum value of 65% is applied to the measure ramp rates. This approximates the effect of the stock accounting model and produces an equivalent end point for the potential modeling as the equipment model. Overall, this results in achievability of 73% of the lost opportunity technical potential over the 20-year study period.

To calculate annual achievable technical potential for each lost opportunity measure, the study multiplied the number of units turning over or available in any given year by the adoption factor provided by the ramp rate, consistent with the Council's methodology. Because of the interactions between the equipment turnover and new construction, the lost opportunities of measure availability until the next life cycle, and the timeframe limit at 20 years, the Council methodology for these measures produces potential less than 85% of technical potential.

Discretionary Resources

Discretionary resources differ from lost opportunity resources due to their acquisition availability at any point within the study horizon. From a theoretical perspective, all achievable technical potential for discretionary resources could be acquired in the study's first year. However, from a practical perspective, this outcome is realistically impossible to achieve due to infrastructure and budgetary constraints as well as customer preferences and considerations.

As a result, the study addresses technical potential for discretionary resources by spacing the acquisition according to the ramp rates specified for a given measure, thus creating annual, incremental values. To assess achievable technical potential, AEG then applies the 85% market achievability limit defined by the Council. Per Council methodology, emerging technology measures on the "RetroMax60" rate will instead reach a maximum value of 55%.

Market Ramp Rates

The 2015 assessment applied market ramp rates on top of measure ramp rates to reflect state-specific considerations affecting acquisition rates, such as age of programs, small and rural markets, and current delivery infrastructure. This mechanism was used solely in the Wyoming industrial sector to reflect that program momentum is still building. The current assessment utilizes the same "Emerging" market ramp rate used in the 2015 assessment for Wyoming's industrial sector.

ENERGY TRUST OF OREGON METHODOLOGY

Energy Trust begins by assessing the available technical potential in each year of a twenty-year study period, based on a "frozen efficiency" baseline of commercially available technical resources, except in instances of known changes to energy codes and standards or emerging technologies expected to become available over the 20-year study period.. The annual amounts of technical potential are then translated into annual achievable acquisitions by applying an achievable percentage and annual acquisition rates. Determining the optimum annual breakdown of individual measures is a function of several considerations, which are detailed below:

Consistent with the AEG method presented above, the Energy Trust resource assessment distinguishes between discretionary and lost opportunity resources to capture timing and interactive considerations to ensure that savings from retrofit and replacement measures are not double-counted in instances where they compete.

Lost Opportunity Resources

Like the AEG method, Energy Trust uses equipment turnover and new construction rates to calculate the technical potential in each year of the planning period. Equipment turnover is assumed to be inversely proportionate to the effective useful life (EUL) and new construction rates are tied to PacifiCorp's customer forecasts and an assumed demolition rate. Next, the technical potential is adjusted for expected achievability, based on market conditions and program experience. On average, 92% and 85% of new construction and equipment replacement opportunities, respectively, are assumed to be achievable over the 20-year study period.

Discretionary Resources

Again like the AEG method, the Energy Trust calculates the achievable technical potential for retrofit opportunities by first applying the regionally accepted 85% achievability factor to its identified technical potential. The total achievable potential is then distributed across the years of the study by applying ramp rates reflecting what Energy Trust believes to be reasonable deployment rates accounting for current program activity among other market factors. Note that discretionary measures apply to the entire market, rather than turnover in the lost opportunity case. Accordingly, the sum of the ramp rates in all years will equate to 85% unless otherwise noted below.

Deployment Rates

The deployment rates for lost opportunity and discretionary resources are informed by:

- **Delivery market expansion/contraction** - Changes in year-to-year acquisition create volatility in the delivery market and years of boom and bust which is not ideal for businesses installing measures or customers receiving ever-changing messages about program offerings and funding availability. Therefore, creating reasonable transitions from year to year is important and is captured in the deployment rates.
- **Portfolio management** - The mix of measure types deployed each year needs to balance other long standing goals of providing equity for all customer types so there is something available for everyone. For example, deploying all industrial resource in one year but all residential and commercial in the following year may result in consistent savings from year to year, but a lack of balance in each individual year.
- **Expected Program Activity** - In some instances, Energy Trust's near-term budget goals, which are established as part of Energy Trust's annual budget development process, exceed the estimated resource available for that year. In these cases, a ramp rate higher than 100% is used in order to align with expected program activity levels.

The resulting annual achievable potential, also called the Energy Trust deployment scenario, is informed in the first two years by the program delivery team. That is, achievable quantities are based on what program managers believe can be acquired in the short term. Ramp rates for the subsequent 18 years are informed through discussion between the planning department and program managers, allocating the remaining resource according to the considerations listed above. The application of these ramp rates is comparable to those used in the AEG study, described above. That is, they are an estimate of the total available resource that can be acquired in that year considering practical limitations to Energy Trust program implementation. The Energy Trust assumes that 90% of the technical potential is achievable over the 20-year study period. Approximately 68% of the achievable potential is discretionary, with the remaining 32% from lost opportunity resources.

Energy Trust's deployment rates are provided in Table E-2. Lost opportunity ramp rate (new construction and replacement) values represent the percent of the identified annual achievable technical opportunity assumed to be acquired. Retrofit ramp rate values represent the percent of the 20-year achievable technical opportunity assumed to be acquired in each year of the forecast period.

Table E-1 Measure and Market Ramp Rates Used in AEG's Analysis

Ramp Rate Name	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
LO12Med	19%	28%	37%	47%	55%	62%	67%	71%	75%	78%	80%	82%	83%	84%	85%	85%	85%	85%	85%	85%
LO5Med	8%	13%	20%	27%	35%	45%	54%	63%	71%	76%	81%	83%	84%	85%	85%	85%	85%	85%	85%	85%
LO1Slow	1%	1%	3%	5%	7%	11%	16%	22%	29%	37%	46%	54%	62%	69%	75%	79%	82%	84%	85%	85%
LO50Fast	56%	68%	76%	81%	83%	84%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
LO20Fast	32%	42%	49%	55%	61%	65%	69%	72%	75%	78%	79%	81%	82%	83%	84%	84%	84%	85%	85%	85%
LOEven20	9%	13%	17%	21%	26%	30%	34%	38%	43%	47%	51%	55%	60%	64%	68%	72%	77%	81%	85%	85%
LOMax60*	3%	5%	8%	12%	16%	20%	24%	28%	31%	34%	37%	40%	42%	45%	47%	49%	51%	53%	55%	55%
LO3Slow	1%	3%	5%	9%	15%	22%	31%	40%	49%	57%	65%	71%	75%	79%	81%	83%	84%	85%	85%	85%
Retro12Med ^D	9%	19%	28%	37%	47%	55%	62%	67%	71%	75%	78%	80%	82%	83%	84%	85%	85%	85%	85%	85%
Retro5Med ^D	4%	8%	13%	20%	27%	35%	45%	54%	63%	71%	76%	81%	83%	84%	85%	85%	85%	85%	85%	85%
Retro1Slow ^D	0%	1%	1%	3%	5%	7%	11%	16%	22%	29%	37%	46%	54%	62%	69%	75%	79%	82%	84%	85%
Retro50Fast ^D	38%	56%	68%	76%	81%	83%	84%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Retro20Fast ^D	19%	32%	42%	49%	55%	61%	65%	69%	72%	75%	78%	79%	81%	82%	83%	84%	84%	84%	85%	85%
RetroEven20 ^D	4%	9%	13%	17%	21%	26%	30%	34%	38%	43%	47%	51%	55%	60%	64%	68%	72%	77%	81%	85%
RetroMax60* ^D	1%	3%	5%	8%	12%	16%	20%	24%	28%	31%	34%	37%	40%	42%	45%	47%	49%	51%	53%	55%
Retro3Slow ^D	0%	1%	3%	5%	9%	15%	22%	31%	40%	49%	57%	65%	71%	75%	79%	81%	83%	84%	85%	85%
CustomBehav-CA ^{D***}	22%	78%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
CustomBehav-ID ^{D***}	0%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
CustomBehav-UT ^{D***}	61%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
CustomBehav-WA ^{D***}	61%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
CustomBehav-WY ^{D***}	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
LightingPPA	28%	51%	68%	79%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
NewConstruct_LostOp **	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Wyoming Ind. Market	46%	49%	52%	55%	57%	60%	63%	66%	69%	72%	74%	77%	80%	83%	86%	89%	91%	94%	97%	100%

^D Indicates discretionary measure ramp rate

* Assumption of 55% maximum achievability from Council's 7th Power Plan

** Modeled as 65% of available opportunity in new construction every year to reflect Council's assumption that less than 85% of lost opportunities are achievable over 20 years.

***Behavioral program savings are highly dependent on implementation practices. These custom ramp rates were developed to correspond with PacifiCorp's planned implementation schedule over the next two to three years. The Washington market is assumed fully saturated before study period.

Table E-2 Energy Trust Deployment Rates

	Ramp Rate Name	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Residential	RES-NEW*	134%	113%	112%	100%	100%	95%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
	RES-RET ^D	4%	7%	11%	15%	20%	24%	29%	33%	38%	43%	48%	53%	58%	63%	68%	74%	80%	86%	93%	100%	
	RES-ROB	139%	129%	138%	130%	120%	110%	100%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
	RES-CFL	10%	16%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	RES-LED	10%	16%	20%	23%	27%	30%	33%	37%	40%	44%	47%	51%	54%	58%	61%	65%	68%	72%	75%	79%	
Commercial	Com-NEW*	138%	152%	214%	175%	150%	150%	140%	130%	120%	110%	100%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%
	Com-RET ^D	11%	22%	33%	42%	49%	53%	58%	62%	66%	70%	73%	76%	79%	82%	85%	88%	91%	94%	97%	100%	
	Com-ROB*	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Industrial	Ind-RET ^D	11%	21%	32%	41%	49%	56%	61%	66%	70%	74%	78%	81%	84%	87%	89%	92%	94%	96%	98%	100%	
	Ind-ROB	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%

^D Indicates discretionary measure ramp rate

* Energy Trust's commercial New Buildings program and residential new construction program expect higher savings in 2017 than is currently predicted by the resource assessment model. Values above 100% is used here to align 2017 deployment with program expectations.

COMPARISON OF MEASURES TO THE ENERGY TRUST OF OREGON RESOURCE ASSESSMENT

The Energy Trust of Oregon (Energy Trust) assesses potential energy efficiency and renewable energy measures to inform electricity and natural gas utility planning efforts. Applied Energy Group reviewed the electric measures analyzed by the Energy Trust and compiled a list of the comparable PacifiCorp measure names.

The following three tables present comparisons of residential, commercial, and industrial measure names included in the two assessments. Each table includes the sector, Energy Trust measure name, and comparable PacifiCorp measure name. Notes in the far right column provide additional detail where relevant. Please note that irrigation and street lighting measures are included as part of industrial in the Energy Trust assessment, while the PacifiCorp study breaks these sectors out separately.

Table F-1 Comparison of Energy Trust and PacifiCorp Residential Measure Names

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Residential	Res-Behavior Savings (NEW)	Behavioral Programs	New vintage
Residential	Res-Behavior Savings (RET)	Behavioral Programs	Existing vintage
Residential	Res - CFL (Screw In)	Interior Lighting - General Service CFLs	
Residential	Res - CFL (Screw In) (NEW ONLY)	Interior Lighting - General Service CFLs	New vintage
Residential	Res - CFL Specialty Lights	Interior Lighting - Exempted CFLs	
Residential	Res - CFL Specialty Lights (NEW ONLY)	Interior Lighting - Exempted CFLs	New vintage
Residential	Res - Dmd Ctrl Recirc.	Water Heater (<= 55 Gal)	
Residential	Res - Duct Sealing, Elec SH, Z1	Ducting - Repair and Sealing	
Residential	Res - Duct Sealing, Elec SH, Z2	Ducting - Repair and Sealing	
Residential	Res - Duct Sealing, Gas SH, Z1	Ducting - Repair and Sealing	
Residential	Res - Duct Sealing, Gas SH, Z2	Ducting - Repair and Sealing	
Residential	Res - Elec Hi-eff Clothes Washer - Elec DHW	Clothes Washer	
Residential	Res - Elec Hi-eff Clothes Washer - Gas DHW	Clothes Washer	
Residential	Res - Elec Hi-eff Dishwasher - Elec DHW	Dishwasher	
Residential	Res - Elec Hi-eff Dishwasher - Elec DHW - SF	Dishwasher	
Residential	Res - Energy Star New Home BOP 1 - ER SH	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - ER SH, Z1	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - ER SH, Z2	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - Gas SH	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - Gas SH, Z1	ENERGY STAR Home Design	

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Residential	Res - Energy Star New Home BOP 1 - Gas SH, Z2	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - HP SH	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - HP SH, Z1	ENERGY STAR Home Design	
Residential	Res - Energy Star New Home BOP 1 - HP SH, Z2	ENERGY STAR Home Design	
Residential	Res - ER SH to Heat Pump, ET, Z1	Furnace - Conversion to Air-Source Heat Pump	
Residential	Res - ER SH to Heat Pump, ET, Z2	Furnace - Conversion to Air-Source Heat Pump	
Residential	Res - ER SH to Heat Pump, Z1	Furnace - Conversion to Air-Source Heat Pump	
Residential	Res - ER SH to Heat Pump, Z2	Furnace - Conversion to Air-Source Heat Pump	
Residential	Res - ER SH to Heat Pump, Z2 - MH	Furnace - Conversion to Air-Source Heat Pump	
Residential	Res - ER SH to Mini-split ductless heat pump, Z1	Ductless Mini Split Heat Pump (Zonal)	
Residential	Res - ER SH to Mini-split ductless heat pump, Z1 - MH	Ductless Mini Split Heat Pump (Zonal)	
Residential	Res - ER SH to Mini-split ductless heat pump, Z2	Ductless Mini Split Heat Pump (Zonal)	
Residential	Res - Heat Pump (HP Upgrade), ET, Z1	Air-Source Heat Pump	
Residential	Res - Heat Pump (HP Upgrade), ET, Z2	Air-Source Heat Pump	
Residential	Res - Heat Pump Controls, Z1	Central Heat Pump - Controls and Commissioning	
Residential	Res - Heat Pump Controls, Z1 - MH	Central Heat Pump - Controls and Commissioning	
Residential	Res - Heat Pump Controls, Z2	Central Heat Pump - Controls and Commissioning	
Residential	Res - Heat Pump Controls, Z2 - MH	Central Heat Pump - Controls and Commissioning	
Residential	Res - HP Dryer	Clothes Dryer – Heat Pump	
Residential	Res - HRV, Elec SH, Z1	Space Heating - Heat Recovery Ventilator	
Residential	Res - HRV, Elec SH, Z2	Space Heating - Heat Recovery Ventilator	
Residential	Res - LED Screw In (CFL Base)	General Service Screw-In - LED	
Residential	Res - LED Screw In (CFL Base)(NEW)	General Service Screw-In - LED	New vintage
Residential	Res - LED Screw In (CFL Base), ET	General Service Screw-In - LED	
Residential	Res - LED Screw In (Inc Base)	General Service Screw-In - LED	
Residential	Res - LED Screw In (Inc Base) (NEW ONLY)	General Service Screw-In - LED	New vintage
Residential	Res - LED Screw In (Inc Base), ET	General Service Screw-In - LED	
Residential	Res - LED Screw In (Inc Base), ET (NEW ONLY)	General Service Screw-In - LED	New vintage
Residential	Res - LED Specialty Lights	Exempted Screw-In - LED	
Residential	Res - LED Specialty Lights (NEW ONLY)	Exempted Screw-In - LED	New vintage

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Residential	Res - Linear Fluorescent - Premium T8s	Linear Lighting - HPT8	
Residential	Res - LowPowerMode Appliances	Various Appliance Measures	
Residential	Res - MF Common Area Lighting Controls	Interior Lighting - Occupancy Sensors	
Residential	Res - Recycle Freezer	Freezer - Decommissioning and Recycling	
Residential	Res - Recycle Refrigerator	Refrigerator - Decommissioning and Recycling	
Residential	Res - Smart Strips	Advanced Power Strips - Tier 1	
Residential	Res - Smart Tstat	Thermostat - WiFi/Interactive	
Residential	Res - Window Replacement (U<.20), Elec SH, Z1	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U<.20), Elec SH, Z1 (NEW ONLY)	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U<.20), Elec SH, Z1, MH	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U<.20), Elec SH, Z2	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U<.20), Elec SH, Z2 (NEW ONLY)	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U<.20), Elec SH, Z2, MH	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U=.30), Elec SH, Z1, MH	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Window Replacement (U=.30), Elec SH, Z2, MH	Windows - High Efficiency/ENERGY STAR	AEG modeled U-0.22 windows
Residential	Res - Wx insulation (ceiling), Elec SH, Z1	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (ceiling), Elec SH, Z2	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (ceiling), NEW, ET, Elec SH, Z1	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (ceiling), NEW, ET, Elec SH, Z2	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (ceiling), RET, ET, Elec SH, Z1	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (ceiling), RET, ET, Elec SH, Z2	Insulation - Ceiling Installation	
Residential	Res - Wx insulation (floor), Elec SH, Z1	Insulation - Floor Installation	
Residential	Res - Wx insulation (floor), Elec SH, Z2	Insulation - Floor Installation	
Residential	Res - Wx insulation (wall), Elec SH, Z1	Insulation - Wall Cavity Installation	
Residential	Res - Wx insulation (wall), Elec SH, Z2	Insulation - Wall Cavity Installation	
Residential	Res - Wx insulation (wall), NEW, ET, Elec SH, Z1	Insulation - Wall Cavity Installation	
Residential	Res - Wx insulation (wall), NEW, ET, Elec SH, Z2	Insulation - Wall Cavity Installation	
Residential	Res - Wx insulation (wall), RET, ET, Elec SH, Z1	Insulation - Wall Cavity Installation	

Comparison of Measures to the Energy Trust of Oregon Resource Assessment

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Residential	Res - Wx insulation (wall), RET, ET, Elec SH, Z2	Insulation - Wall Cavity Installation	
Residential	Res Advanced CO2 Heat Pump Water Heater-Z1	NEEA Tier 3 Heat Pump (EF 2.4)	
Residential	Res Advanced CO2 Heat Pump Water Heater-Z1 (NEW ONLY)	NEEA Tier 3 Heat Pump (EF 2.4)	New vintage
Residential	Res Advanced CO2 Heat Pump Water Heater-Z2	NEEA Tier 3 Heat Pump (EF 2.4)	
Residential	Res Advanced CO2 Heat Pump Water Heater-Z2 (NEW ONLY)	NEEA Tier 3 Heat Pump (EF 2.4)	New vintage
Residential	Res Bathroom Faucet Aerators, 1.0 gpm-Electric	Water Heater - Faucet Aerators	
Residential	Res Kitchen Faucet Aerators, 1.5 gpm-Electric	Water Heater - Faucet Aerators	
Residential	Res Showerheads - Elec DHW	Water Heater - Low-Flow Showerheads	
Residential	Res Showerheads - Gas DHW	Water Heater - Low-Flow Showerheads	
Residential	Res Smart Devices Home Automation (NEW)	Advanced Power Strips - Tier 2 and Thermostat - WiFi/Interactive	New vintage
Residential	Res Smart Devices Home Automation (RET)	Advanced Power Strips - Tier 2 and Thermostat - WiFi/Interactive	Existing vintage
Residential	Res Tier 1 Heat Pump Water Heater- Z1	NEEA Tier 1 Heat Pump (EF 1.8)	
Residential	Res Tier 1 Heat Pump Water Heater- Z2	NEEA Tier 1 Heat Pump (EF 1.8)	
Residential	Res Tier 2 Heat Pump Water Heater-Z1	NEEA Tier 2 Heat Pump (EF 2.0)	
Residential	Res Tier 2 Heat Pump Water Heater-Z1 (NEW ONLY)	NEEA Tier 2 Heat Pump (EF 2.0)	New vintage
Residential	Res Tier 2 Heat Pump Water Heater-Z2	NEEA Tier 2 Heat Pump (EF 2.0)	
Residential	Res Tier 2 Heat Pump Water Heater-Z2 (NEW ONLY)	NEEA Tier 2 Heat Pump (EF 2.0)	New vintage

Table F-2 Comparison of Energy Trust and PacifiCorp Commercial Measure Names

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Commercial	Com - Advanced Refrigeration Controls - Commercial	Multiple grocery and refrigeration measures	
Commercial	Com - Advanced Ventilation Controls	Multiple ventilation measures	
Commercial	Com - Ceramic Metal Halide	High-Bay Fixtures - LED	
Commercial	Com - CFL (9W)	Screw-in - LED	
Commercial	Com - CFL (9W), New	Screw-in - LED	New vintage
Commercial	Com - DDC HVAC Controls	Multiple energy management measures	
Commercial	Com - Demand Control Ventilation	Ventilation - Demand Controlled	
Commercial	Com - Desktop/Laptop Power Management	Office Equipment - Smart Power Strips	
Commercial	Com - Economizer Diagnostic, Damper Repair & Reset	Office Equipment - Smart Power Strips	
Commercial	Com - Efficient Standalone Refrigeration	Multiple refrigeration measures	
Commercial	Com - Elec. Combi Oven	Oven	
Commercial	Com - Elec. Conv. Oven	Oven	
Commercial	Com - Elec. Fryer	Fryer	
Commercial	Com - Elec. HFHC	Hot Food Container	
Commercial	Com - Elec. Showerhead	Water Heater - Low-Flow Showerheads	
Commercial	Com - Elec. Steamer	Steamer	
Commercial	Com - EMS (New)	Multiple refrigeration measures	New vintage
Commercial	Com - EMS (Retrofit)	Multiple refrigeration measures	Existing vintage
Commercial	Com - Energy Recovery Ventilator - Cooling	Space Heating - Heat Recovery Ventilator	
Commercial	Com - Energy Recovery Ventilator - Elec Heating	Space Heating - Heat Recovery Ventilator	
Commercial	Com - Exit Signs	Interior Lighting - LEC Exit Lighting	
Commercial	Com - Floating Heat Pressure Controls	Refrigeration - Floating Head Pressure	
Commercial	Com - Gas Combi Oven	Oven	
Commercial	Com - Gas Showerhead	Water Heater - Low-Flow Showerheads	
Commercial	Com - Gas Steamer	Steamer	
Commercial	Com - High Bay LED, ET	High-Bay Fixtures - LED	
Commercial	Com - High Bay T8	Linear Lighting - LED	
Commercial	Com - High Efficiency Chiller	Air-Cooled Chiller	
Commercial	Com - High Efficiency Heat Pump	Air-Source Heat Pump	
Commercial	Com - HP T8 (T12 baseline)	Linear Lighting - LED	
Commercial	Com - HP T8 (T8 baseline)	Linear Lighting - LED	
Commercial	Com - HVAC Occ. Sensor	Thermostat - WiFi/Interactive	
Commercial	Com - HVAC System Commissioning	Commissioning	
Commercial	Com - Hybrid IDEC	Evaporative AC	

Comparison of Measures to the Energy Trust of Oregon Resource Assessment

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Commercial	Com - Hybrid IDEC - RET	Evaporative AC	Existing vintage
Commercial	Com - LED	Screw-in - LED	
Commercial	Com - LED (Exterior)	Screw-in - LED	
Commercial	Com - LED (Exterior), ET	Screw-in - LED	
Commercial	Com - LED (Troffer), T12 baseline, ET2	Linear Lighting - LED	
Commercial	Com - LED (Troffer), T8 baseline, ET	Linear Lighting - LED	
Commercial	Com - LED Streetlights	Area Lighting - LED	
Commercial	Com - LED, ET	Screw-in - LED	
Commercial	Com - LED, ET, New	Screw-in - LED	New vintage
Commercial	Com - LED, New	Screw-in - LED	New vintage
Commercial	Com - Lighting Controls (Daylight)	Interior Lighting - Embedded Fixture Controls	
Commercial	Com - Lighting Controls (OCC), New	Interior Lighting - Embedded Fixture Controls	New vintage
Commercial	Com - Lighting Controls (OCC), RET	Interior Lighting - Embedded Fixture Controls	Existing vintage
Commercial	Com - Refrigeration Bundle	Multiple refrigeration measures	
Commercial	Com - Refrigeration Auto Closers (Reach-in)		Considered standard practice
Commercial	Com - Refrigeration Auto Closers (Walk-in)		Considered standard practice
Commercial	Com - SEM	Strategic Energy Management	
Commercial	Com - Server Virtualization	Data Center - Best Practice Measures	
Commercial	Com - Smart Plug Power Strips	Office Equipment - Smart Power Strips	
Commercial	Com - Supermarket Max Tech Refrigeration	Multiple refrigeration measures	
Commercial	Com - Transformers		More suited for industrial applications
Commercial	Com - VFD Venth Hood	Cooking - Exhaust Hoods with Sensor Control	
Commercial	Com - VSD on HVAC Motors	Ventilation - Variable Speed Control	
Commercial	Com - Window Film	Windows - High Efficiency Glazing	
Commercial	Com - Work Station Plug Load Occupancy Sensor	Office Equipment - Smart Power Strips	
Commercial	Com -Elec. Griddle	Oven	Oven/Range

Table F-3 Comparison of Energy Trust and PacifiCorp Industrial Measure Names

Sector	Energy Trust Measure Name	PacifiCorp Measure Name	Notes
Industrial	Ind- Adv LED Lighting Retrofits	High-Bay Fixtures - LED	
Industrial	Ind- Air Abatement	Fan System - Equipment Upgrade	
Industrial	Ind- Air Compressor- VFD and controls	Compressed Air - System Controls	
Industrial	Ind- Air Compressor Demand Reduction	Compressed Air - Leak Management Program	
Industrial	Ind- Air Compressor Equipment Upgrade	Compressed Air - Equipment Upgrade	
Industrial	Ind- Air Compressor Heat Recovery	Compressed Air - Heat of Compression Dessicant Dryer	
Industrial	Ind- Chiller Heat Recovery	Strategic Energy Management	
Industrial	Ind- Clean Room Upgrade	Clean Room: Clean Room HVAC	
Industrial	Ind- Demand Control Ventilation	Ventilation - Demand Controlled	
Industrial	Ind- Efficient Chiller Upgrade	Air-Cooled Chiller	
Industrial	Ind- Efficient Lighting Retrofits	High-Bay Fixtures - LED	
Industrial	Ind- Fan Equipment Upgrade	Fan System - Equipment Upgrade	
Industrial	Ind- Fan System- VFD	Fan System - Variable Speed Drive	
Industrial	Ind- Green Motor Rewind	Motors - Green Rewind (<100 HP)	
Industrial	Ind- HVAC O&M	RTU - Maintenance	
Industrial	Ind- Lighting Controls	Interior Lighting - Embedded Fixture Controls	
Industrial	Ind- Mechanical Conveyor	Material Handling - Variable Speed Drive	
Industrial	Ind- Pneumatic Conveyor	Wood: Replace Pneumatic Conveyor	
Industrial	Ind- Pump Equipment Upgrade	Pumping System - Equipment Upgrade	
Industrial	Ind- Pump Systems- Sequencing Controls	Pumping System - System Optimization	
Industrial	Ind- Pump VFD	Pumping System - Variable Speed Drive	
Industrial	Ind- Refrigeration O&M	Retrocommissioning	
Industrial	Ind- Refrigeration System Upgrade	Refrigeration - System Optimization	
Industrial	Ind- Strategic Energy Management	Strategic Energy Management	
Industrial	Ind- Switched reluctance motors	Multiple VFD measures	Switched reluctance is a special kind of motor controller included in the superset of VFD measures
Industrial	Ind - Advanced Refrigeration Controls - Industrial	Refrigeration - System Optimization	
Industrial	Ind - High Eff. Xfmr.	Transformer - High Efficiency	
Irrigation	Ind - Low Pressure Irr.	Low Pressure Regulators	
Irrigation	Ind- Agriculture: Gasket Replacement	Wheel/Hand - Gasket Replacement	

COMPARISON OF WASHINGTON MEASURES TO THE COUNCIL'S 7TH PLAN AND THE REGIONAL TECHNICAL FORUM

In compliance with Chapter 19.285 of the Revised Code of Washington (RCW), Chapter 480-109 of the Washington Administrative Code (WAC), and as described in Volume 2 of this report, this study employs methodologies consistent with the Northwest Power and Conservation Council's (Council's) Northwest Conservation and Electric Power Plan to estimate available Class 2 DSM (energy-efficiency) potential in PacifiCorp's Washington territory. Additionally, AEG conducted a thorough review of baseline and measure assumptions used by the Council or by the Regional Technical Forum (RTF); these included costs, savings, applicability, and base year saturation. Although this study relies on data specific to PacifiCorp's service territory wherever possible, Council/RTF assumptions were incorporated where appropriate.

Since the completion of the Council's 7th Plan,¹ the RTF has continued to review baseline and measure assumptions. Thus, there may be measures used in the 7th Plan which been updated based on more recent data. Therefore, AEG used RTF assumptions where available and 7th Plan assumptions if an RTF update had not been completed as of January 31, 2016. A comparison to Council/RTF unit energy savings (UES) values is shown in the following tables.

As part of this multi-state study, measures were mapped, where possible, to RTF and 7th Plan measures. However, not all measure names, measure-efficiency tiers, measure iterations, and measure savings will directly mirror the RTF or 7th Plan. These differences account for changes in federal equipment efficiency standards, the latest version of Washington energy code(s), and characteristics specific to PacifiCorp's territory, where appropriate. For certain measures, due to the overall complexity of updating the RTF and Council measure savings to current code and standards directly, the measure savings were calculated as a percent of end-use consumption and assumed to apply as such throughout the analysis time horizon.

RESIDENTIAL SECTOR

Differences between AEG and Council/RTF UES values in the residential sector are primarily driven by inputs to building simulation modeling, measures referencing PacifiCorp evaluation results, and updates reflecting recent ENERGY STAR specifications and/or changes in energy code and equipment efficiency standards. To develop estimates of energy consumption and savings for weather-sensitive equipment and measures (e.g., central air conditioning, heat pumps, and insulation) in single-family, multifamily, and manufactured homes, the Council and RTF use the Simple Energy and Enthalpy Model (SEEM), whereas AEG used its in-house Building Energy Simulation Tool (BEST), which is based on the DOE-2 building simulation tool. Model inputs were adjusted for PacifiCorp's territory, customizing parameters such as building square feet and climate zones to match customer-specific data. Thus, the methodology to estimate savings is comparable to that employed by the Council and RTF, but the actual savings may differ due to unique characteristics of homes within PacifiCorp's service territory compared to Northwest regional averages. A comparison of residential UES values and explanations of differences, where material, are provided in Table G-1 below.

COMMERCIAL SECTOR

For the commercial sector, RTF and Council measure savings were represented in the model as a percentage of end-use consumption. RTF and Council measure workbooks may contain multiple savings values based on the capacity, efficiency, fuel type, climate zone, etc. Therefore, weighted averages were used to develop a single savings value that is specific to PacifiCorp's service territory, where possible.

¹ Although the final 7th Power Plan was published in February 2016, the analysis supporting the plan was materially completed in 2015.

In addition, there are some measures that exist in the residential sector but not in the commercial sector. For example, residential-sized clothes washers and dishwashers are applied in commercial buildings, but no RTF workbook exists. In these cases, AEG used the residential sector workbook, adjusted to reflect how these units are used in commercial buildings.

The major differences between commercial RTF/Council savings values and those developed for Washington in this assessment are driven by the use of PacifiCorp evaluation results, Washington building codes and/or efficiency standards, and updates reflecting recent changes in ENERGY STAR specifications. See Table G-2 for a measure-level comparison of savings values and explanations of key drivers of differences, where present.

INDUSTRIAL, IRRIGATION, AND STREET LIGHTING SECTORS

For the industrial sector, the end use savings assumptions again relied heavily on the RTF and the Council's industrial analysis in the 7th Plan. Updates were made based on recent energy savings assumptions from the U.S. Department of Energy's (DOE) Industrial Assessment Center (IAC) Database, Northwest Energy Efficiency Alliance's (NEEA's) 2014 Industrial Facilities Site Assessment (IFSA), PacifiCorp's Market Characterization studies (2011 and 2012), and other industrial sources. Primary differences in industrial savings between this study and the region are driven by PacifiCorp's specific mix of industry and facility types and the use of a recently updated United Nations Industrial Development Organization study on industrial measure improvements. See Table G-3 for a measure-level comparison of savings values and explanations of key drivers of differences, where present.

The irrigation sector savings assumptions are largely based off agriculture measure workbooks in the 7th Plan, adapted to use throughout PacifiCorp's service territory. See Table G-4 for a measure-level comparison of savings values and explanations of key drivers of differences, where present.

The street lighting sector relied on PacifiCorp's current inventory of existing equipment and replacement options. Measure and baseline efficiencies are territory-specific based on PacifiCorp's data and differ from Council assumptions in some cases. See Table G-5 for a measure-level comparison of savings values and explanations of key drivers of differences, where present.

Table G-1 Comparison of 7th Plan and RTF Residential Measures in Washington

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
Single Family	Air-Source Heat Pump	Cooling	Installation	153.2	148.1	res-sf_hp-7p_v4p	
Single Family	Air-Source Heat Pump	Heating	Installation	549.4	575.0	res-sf_hp-7p_v4p	
Multifamily	Air-Source Heat Pump	Cooling	Installation	61.2	0.9	res-mh_hp-7p_v2p	7th Plan assumes savings in an average home across entire PNW, whereas AEG assumes savings only for homes where the end use is installed.
Multifamily	Air-Source Heat Pump	Heating	Installation	162.7	65.2	res-mh_hp-7p_v2p	7th Plan assumes upgrade to SEER 14/9 HSPF, AEG assumes upgrade to SEER 18/12 HSPF
Single Family	Geothermal Heat Pump	Cooling	Installation	582.3	78.6	res-gshp-7p_v2p	7th Plan assumes savings in an average home across entire PNW, whereas AEG assumes savings only for homes where the electric end use is present.
Single Family	Geothermal Heat Pump	Heating	Installation	1,026.3	681.8	res-gshp-7p_v2p	7th Plan assumes savings in an average home across entire PNW, whereas AEG assumes savings only for homes where the electric end use is present.
Single Family	Water Heater - Desuperheater	Water Heating	Installation	1,350.8	1,611.5	res-gshp-7p_v2p	7 th Plan value is calculated from compressor superheat rejection. AEG assumes small saturation of heat pump water heaters, where calculated heat rejection value does not apply due to COPs of greater than one.
All Residential	Water Heater (<= 55 Gal) - NEEA Tier 1 Heat Pump (EF 1.8)	Water Heating	Installation	1,053.6	1,044.5	res-hpwh-7p_v3p	
All Residential	Water Heater (<= 55 Gal) - NEEA Tier 2 Heat Pump (EF 2.0)	Water Heating	Installation	1,157.9	189.9	res-hpwh-7p_v3p	7th Plan savings appear incremental to Tier 1, AEG savings incremental to code
All Residential	Water Heater (> 55 Gal) - NEEA Tier 2 Heat Pump (EF 2.0)	Water Heating	Installation	252.1	189.9	res-hpwh-7p_v3p	
All Residential	General Service Screw-In - LED	Interior Lighting	Lamp	9.2	8.3	res-lighting-7p_v3p	
All Residential	Exempted Screw-In - LED	Interior Lighting	Lamp	20.4	27.8	RTF: ResLightingCFLandLEDLamps v	Updated market baseline stock, raising baseline efficiency

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Residential	Screw-in - LED	Exterior Lighting	Lamp	20.4	27.8	RTF: ResLightingCFLandLEDLamps v	Less efficient baseline than interior GSL, higher hours of use
All Residential	Interior Lighting - General Service CFLs	Interior Lighting	Lamp	7.7	11.8	res-lighting_ppa-7p_v4p	Updated market baseline stock, raising baseline efficiency
All Residential	Interior Lighting - Exempted CFLs	Interior Lighting	Lamp	9.7	11.8	res-lighting_ppa-7p_v4p	Updated market baseline stock, raising baseline efficiency
All Residential	Refrigerator	Appliances	Installation	106.5	112.4	res-refrigfreezer-7p_v3p	AEG analysis separates primary and secondary units, whereas 7 th Plan analysis uses average value across use cases.
All Residential	Second Refrigerator	Appliances	Installation	149.3	112.4	res-refrigfreezer-7p_v3p	AEG analysis separates primary and secondary units, whereas 7 th Plan analysis uses average value across use cases.
All Residential	Freezer	Appliances	Installation	129.8	95.2	res-refrigfreezer-7p_v3p	
All Residential	Clothes Washer	Appliances	Installation	9.2	6.2	res-clotheswasher-7p_v2p	
All Residential	Clothes Dryer	Appliances	Installation	154.7	180.0	res-clothesdryer-7p_v2p	
All Residential	Dishwasher	Appliances	Installation	2.1	3.4	res-dishwasher-7p_v3p	
All Residential	Stove/Oven	Appliances	Installation	58.0	58.03	res-oven-7p_v3p	Values reflect the weighted average of self-cleaning (45%) and non self-cleaning (55%) models
All Residential	Microwave	Appliances	Installation	8.1	8.7	res-microwave-7p_v3p	
All Residential	Personal Computers	Electronics	Installation	57.3	63.6	res-computers-7p_v4	
All Residential	Monitor	Electronics	Installation	56.1	29.7	res-computers-7p_v4	LoadMAP value reflects a per applicable home value of near two units, whereas 7 th Plan is per unit.
All Residential	Laptops	Electronics	Installation	13.9	18.4	res-computers-7p_v4	

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Residential	Electric Vehicles	Miscellaneous	Installation	116.7	116.7	res-evcharger-7p_v2p	
Single Family	Insulation - Ceiling Installation	Cooling	square foot	0.2	0.2	res-sf_wx-7p_v5p	Weighted average of savings by saturation of HVAC technology within the PacifiCorp service territory
Single Family	Insulation - Ceiling Installation	Heating	square foot	1.6	1.6	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Ceiling Upgrade	Cooling	square foot	0.0	0.0	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Ceiling Upgrade	Heating	square foot	0.4	0.4	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Wall Cavity Installation	Cooling	square foot	0.0	0.0	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Wall Cavity Installation	Heating	square foot	1.5	1.5	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Floor Installation	Cooling	square foot	0	0	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Insulation - Floor Installation	Heating	square foot	0.6	0.7	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Windows - CL30	Cooling	square foot	0.5	0.6	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Windows - CL30	Heating	square foot	6.4	6.9	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Windows - CL30 to CL22	Cooling	square foot	0.0	0.0	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Windows - CL30 to CL22	Heating	square foot	0.7	0.8	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Building Shell - Infiltration Control	Cooling	square foot	0.0	0.0	res-sf_wx-7p_v5p	Weighted average by saturation
Single Family	Building Shell - Infiltration Control	Heating	square foot	0.3	0.4	res-sf_wx-7p_v5p	Weighted average by saturation
Multifamily	Insulation - Ceiling Installation	Cooling	square foot	0.1	-	res-mf_wx-7p_v5p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Multifamily	Insulation - Ceiling Installation	Heating	square foot	0.6	0.6	res-mf_wx-7p_v5p	Weighted average by saturation
Multifamily	Insulation - Wall Cavity Installation	Cooling	square foot	0.0	-	res-mf_wx-7p_v5p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
Multifamily	Insulation - Wall Cavity Installation	Heating	square foot	1.3	1.3	res-mf_wx-7p_v5p	Weighted average by saturation
Multifamily	Insulation - Floor Installation	Cooling	square foot	0	-	res-mf_wx-7p_v5p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Multifamily	Insulation - Floor Installation	Heating	square foot	0.7	0.8	res-mf_wx-7p_v5p	Weighted average by saturation
Multifamily	Windows - CL30	Cooling	square foot	0.2	-	res-mf_wx-7p_v5p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Multifamily	Windows - CL30	Heating	square foot	3.0	17.1	res-mf_wx-7p_v5p	7th Plan savings greater than equipment UEC, substituted Single Family values
Multifamily	Windows - CL30 to CL22	Cooling	square foot	0.0	-	res-mf_wx-7p_v5p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Multifamily	Windows - CL30 to CL22	Heating	square foot	1.8	1.9	res-mf_wx-7p_v5p	Weighted average by saturation
Manufactured Home	Insulation - Ceiling Installation	Cooling	square foot	0.3	-	res-mh_wx-7p_v3p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Manufactured Home	Insulation - Ceiling Installation	Heating	square foot	0.2	0.3	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Insulation - Ceiling Upgrade	Cooling	square foot	0.0	-	res-mh_wx-7p_v3p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Manufactured Home	Insulation - Ceiling Upgrade	Heating	square foot	0.1	0.1	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Insulation - Floor Installation	Cooling	square foot	0	-	res-mh_wx-7p_v3p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Manufactured Home	Insulation - Floor Installation	Heating	square foot	0.3	0.4	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Insulation - Floor Upgrade	Cooling	square foot	-	-	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Insulation - Floor Upgrade	Heating	square foot	0.1	0.2	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Windows - CL30	Cooling	square foot	0.7	-	res-mh_wx-7p_v3p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption
Manufactured Home	Windows - CL30	Heating	square foot	3.7	4.7	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Windows - CL30 to CL22	Cooling	square foot	0.1	-	res-mh_wx-7p_v3p	Cooling savings not provided in 7th Plan, AEG used % of end use consumption

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
Manufactured Home	Windows - CL30 to CL22	Heating	square foot	1.5	1.6	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Building Shell - Infiltration Control	Cooling	square foot	0.0	-	res-mh_wx-7p_v3p	Weighted average by saturation
Manufactured Home	Building Shell - Infiltration Control	Heating	square foot	0.2	0.2	res-mh_wx-7p_v3p	Weighted average by saturation
All Residential	Ducting - Repair and Sealing	Cooling	Household	48.9	58.1	res-duct_seal-7p_v3p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Ducting - Repair and Sealing	Heating	Household	628.3	698.0	res-duct_seal-7p_v3p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
Single Family	Ductless Mini Split Heat Pump (Zonal)	Cooling	Installation	96.8	117.2	res-sf_hp-7p_v4p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
Single Family	Ductless Mini Split Heat Pump (Zonal)	Heating	Installation	1,935.9	2,240.1	res-sf_hp-7p_v4p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
Single Family	Ductless Mini Split Heat Pump (Ducted Forced Air)	Cooling	Installation	96.4	117.2	res-faf_to_dhp-7p_v2p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
Single Family	Ductless Mini Split Heat Pump (Ducted Forced Air)	Heating	Installation	3,187.7	3,592.3	res-faf_to_dhp-7p_v2p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
Single Family	Furnace - Conversion to Air-Source Heat Pump	Heating	Installation	2,351.5	2,610.4	res-sf_hp-7p_v4p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Space Heating - Heat Recovery Ventilator	Cooling	Installation	6.8	8.5	res-hrv-7p_v1p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Space Heating - Heat Recovery Ventilator	Heating	Installation	562.6	671.3	res-hrv-7p_v1p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Central Heat Pump - Controls and Commissioning	Cooling	Household	0.5	0.7	res-ccs-7p_v3p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Central Heat Pump - Controls and Commissioning	Heating	Household	607.4	687.2	res-ccs-7p_v3p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Thermostat - WiFi/Interactive	Cooling	Household	56.5	67.3	res-wifitstat-7p_v3	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Residential	Thermostat - WiFi/Interactive	Heating	Household	423.9	477.6	res-wifitstat-7p_v3	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Water Heater - Drainwater Heat Recovery	Water Heating	Installation	200.4	238.8	res-gfx-7p_v3p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Water Heater - Faucet Aerators	Water Heating	Aerator	100.8	114.7	res-aerator-7p_v4p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Water Heater - Low-Flow Showerheads	Water Heating	Showerhead	219.1	255.4	res-showerhead-7p_v4p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Water Heater - Solar System	Water Heating	Installation	1,001.2	1,204.0	res-swh-7p_v1p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Advanced Power Strips - Tier 1	Electronics	Installation	28.0	30.0	res-powerstrips-7p_v5p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe
All Residential	Advanced Power Strips - Tier 2	Electronics	Installation	176.8	185.0	res-powerstrips-7p_v5p	Lower savings in LoadMAP reflect projected equipment efficiency improvements over study timeframe

Table G-2 Comparison of 7th Plan and RTF Commercial Measures in Washington

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Commercial	Water Heater	Water Heating	Installation	188.5	173.8	com-whtanks-7p_v5p	
All Commercial	Screw-in	Interior Lighting	Lamp	84.3	203.0	com-lightinginterior-7p_v36p	7th Plan value is for Halogen baseline, AEG utilizes market baseline which includes CFLs
All Commercial	Linear Lighting	Interior Lighting	Fixture	47.8	70.8	com-lightinginterior-7p_v36p	7th Plan value is for standard T8 baseline, AEG utilizes market baseline which includes HPT8s
All Commercial	High-Bay Fixtures	Interior Lighting	Fixture	169.3	248.1	com-lightinginterior-7p_v36p	7 th Plan value is for metal halide baseline, AEG utilizes market baseline which includes linear fluorescents.
All Commercial	Area Lighting	Exterior Lighting	Fixture	973.5	1,298.1	com-exteriorlighting-7p_v14p	7 th Plan value is for metal halide baseline, AEG utilizes market baseline which includes linear fluorescents.
All Commercial	Fryer	Food Preparation	Installation	2,881.1	2,881.1	RTF: ComCookingFryer v2.0	
All Commercial	Hot Food Container	Food Preparation	Installation	802.2	802.2	RTF: ComCookingHotFoodCabinet v2.0	Weighted average of half and full sizes
All Commercial	Steamer	Food Preparation	Installation	66,188.8	67,983.8	RTF: ComCookingSteamer v2.0	
All Commercial	Oven	Food Preparation	Installation	15,104.8	15,104.8	RTF: ComCookingCombinationOven v2.0	Weighted average of pan sizes
All Commercial	Desktop Computer	Office Equipment	Installation	123.5	123.5	com-computers-7p_v2p	
All Commercial	Laptop	Office Equipment	Installation	36.9	36.9	com-computers-7p_v2p	
All Commercial	Monitor	Office Equipment	Installation	30.7	30.7	com-computers-7p_v2p	

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Commercial	Windows - High Efficiency Glazing	Cooling	square foot	5.8	2.3	com-windowsgs-7p_v3p	
All Commercial	Windows - High Efficiency Glazing	Heating	square foot	19.2	26.0	com-windowsgs-7p_v3p	
All Commercial	Windows - High Efficiency Glazing	Ventilation	square foot	7.0	8.7	com-windowsgs-7p_v3p	
All Commercial	Ventilation - ECM on VAV Boxes	Ventilation	square foot	0.6	0.6	com-ecm-vav-7p_v3p	
All Commercial	Ventilation - Demand Controlled	Ventilation	square foot	0.04	0.04	com-dcv-7p_v3p	
All Commercial	RTU - Advanced Controls	Cooling	square foot	0.1	0.1	com-rooftopcontroller-7p_v5p	
All Commercial	Thermostat - WiFi/Interactive	Cooling	square foot	0.5	0.6	com-wept-7p_v1	
All Commercial	Thermostat - WiFi/Interactive	Heating	square foot	0.8	0.9	com-wept-7p_v1	
All Commercial	Thermostat - WiFi/Interactive	Ventilation	square foot	0.5	0.2	com-wept-7p_v1	
All Commercial	Water Heater - Low-Flow Showerheads	Water Heating	Installation	151.6	151.6	com-showerhead-7p_v3p	
All Commercial	Water Heater - Pre-Rinse Spray Valve	Water Heating	Installation	102.2	102.2	com-prerinsespray-7p_v3p	
All Commercial	Interior Lighting - Embedded Fixture Controls	Interior Lighting	square foot	0.4	0.4	com-interiorlightingcontrols-7p_v6p	
All Commercial	Interior Lighting - Networked Fixture Controls	Interior Lighting	square foot	0.6	0.6	com-interiorlightingcontrols-7p_v6p	
All Commercial	Interior Lighting - LEC Exit Lighting	Interior Lighting	Installation	20.2	29.7	com-exitsign-7p_v2p	

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Commercial	Interior Fluorescent - Bi-Level Fixture	Interior Lighting	Installation	294.3	294.3	com-bi-level-stairwell-7p_v3p	
Grocery	Refrigeration - Anti-Sweat Heater	Refrigeration	Fridge Feet	305.4	305.4	com-grocery-7p_v6p	
Grocery	Refrigeration - Evaporator Fan Controls	Refrigeration	Fridge Case	293.6	293.6	com-grocery-7p_v6p	
Grocery	Refrigeration - Floating Head Pressure	Refrigeration	Fridge HP	731.3	731.3	com-grocery-7p_v6p	
Grocery	Refrigeration - Strip Curtain	Refrigeration	WalkIn Door	147.3	147.3	com-grocery-7p_v6p	
Grocery	Grocery - Display Case - LED Lighting	Refrigeration	Fridge Ltg Ft	70.9	70.9	com-grocery-7p_v6p	
Grocery	Grocery - Display Case Motion Sensors	Refrigeration	Fridge Feet	12.7	12.7	com-grocery-7p_v6p	
Grocery	Grocery - ECMs for Display Cases	Refrigeration	Fridge Case	293.6	293.6	com-grocery-7p_v6p	
Restaurant	Cooking - Exhaust Hoods with Sensor Control	Ventilation	Installation	5,035.5	5,035.5	com-dcv-kitchenvent-7p_v2	
All Commercial	Office Equipment - Smart Power Strips	Office Equipment	Installation	118.5	118.5	com-powerstrips-7p_v4p	
Data Center	Data Center - Best Practice Measures	Office Equipment	square foot	22.1%	22.1%	com-datacenters-7p_v5p	
Data Center	Data Center - Commercially Available Measures	Cooling	square foot	0.3%	0.3%	com-datacenters-7p_v5p	
Data Center	Data Center - Commercially Available Measures	Ventilation	square foot	0.2%	0.2%	com-datacenters-7p_v5p	
Data Center	Data Center - Commercially Available Measures	Interior Lighting	square foot	1.1%	1.1%	com-datacenters-7p_v5p	

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
Data Center	Data Center - Commercially Available Measures	Office Equipment	square foot	5.2%	5.2%	com-datacenters-7p_v5p	
Data Center	Data Center - Cutting Edge Measures	Cooling	square foot	1.2%	1.2%	com-datacenters-7p_v5p	
Data Center	Data Center - Cutting Edge Measures	Office Equipment	square foot	1.8%	1.8%	com-datacenters-7p_v5p	
All Commercial	Optimized Variable Volume Lab Hood Design	Ventilation	Installation	8,500	8,500	com-fumehood-7p_v2p	
All Commercial	ENERGY STAR Water Cooler	Miscellaneous	Installation	26.2%	26.2%	com-watercooler-7p_v4p	
All Commercial	Retrocommissioning	HVAC	square foot	0.5	0.3	com-em-7p_v4p	AEG used data from the PacifiCorp study on Retrocommissioning completed in 2012

Table G-3 Comparison of 7th Plan and RTF Industrial Measures in Washington

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Industrial	Interior Lighting - Embedded Fixture Controls	Interior Lighting		29.3%	28.2%	Industrial_tool_7thPlan v05p	
All Industrial	Interior Lighting - Networked Fixture Controls	Interior Lighting		41.0%	51.0%	Industrial_tool_7thPlan v05p	Utilized more conservative savings value from commercial
All Industrial	Strategic Energy Management	All		4.3%	12%-50%	Industrial_tool_7thPlan v05p	AEG used data from the PacifiCorp study on Strategic Energy Management completed in 2012
All Industrial	Pumping System - Equipment Upgrade	Pumps		20.0%	20.0%	Industrial_tool_7thPlan v05p	
All Industrial	Pumping System - System Optimization	Pumps		15.0%	50.0%	Industrial_tool_7thPlan v05p	AEG utilized UNIDO industrial projects study
All Industrial	Fan System - Equipment Upgrade	Fans & Blowers		11.0%	35.0%	Industrial_tool_7thPlan v05p	AEG utilized UNIDO industrial projects study
All Industrial	Fan System - Flow Optimization	Fans & Blowers		13.0%	50.0%	Industrial_tool_7thPlan v05p	AEG utilized UNIDO industrial projects study
All Industrial	Compressed Air - Equipment Upgrade	Compressed Air		35.0%	35.0%	Industrial_tool_7thPlan v05p	
All Industrial	Compressed Air - System Controls	Compressed Air		8.0%	50.0%	Industrial_tool_7thPlan v05p	AEG utilized UNIDO industrial projects study
All Industrial	Compressed Air - Leak Management Program	Compressed Air		20.0%	20.0%	Industrial_tool_7thPlan v05p	
All Industrial	Material Handling - Variable Speed Drive	Material Handling		18.7%	18.7%	Industrial_tool_7thPlan v05p	
All Industrial	Motors - Green Rewind (<100 HP)	All Motors		0.9%	0.9%	Industrial_tool_7thPlan v05p	
All Industrial	Motors - Green Rewind (100 HP+)	All Motors		0.5%	0.5%	Industrial_tool_7thPlan v05p	
All Industrial	Motors - Synchronous Belts	All Motors		2.0%	2.0%	Industrial_tool_7thPlan v05p	
All Industrial	Clean Room: Change Filter Strategy	Process		40.0%	40.0%	Industrial_tool_7thPlan v05p	

Comparison of Washington Measures to the Council's 7th Plan and the Regional Technical Forum

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Industrial	Clean Room: Chiller Optimize	Process		14.8%	14.8%	Industrial_tool_7thPlan v05p	
All Industrial	Clean Room: Clean Room HVAC	Process		9.0%	9.0%	Industrial_tool_7thPlan v05p	
All Industrial	Elec Chip Fab: Solidstate Chiller	Process		9.0%	90.0%	Industrial_tool_7thPlan v05p	90% savings is not at the end use level
All Industrial	Elec Chip Fab: Eliminate Exhaust	Process		5.0%	5.0%	Industrial_tool_7thPlan v05p	
All Industrial	Elec Chip Fab: Exhaust Injector	Process		10.0%	100.0%	Industrial_tool_7thPlan v05p	100% savings is not at the end use level
All Industrial	Elec Chip Fab: Reduce Gas Pressure	Process		10.0%	10.0%	Industrial_tool_7thPlan v05p	
All Industrial	Panel: Hydraulic Press	Process		28.0%	28.0%	Industrial_tool_7thPlan v05p	
All Industrial	Wood: Replace Pneumatic Conveyor	Process		29.0%	29.0%	Industrial_tool_7thPlan v05p	
All Industrial	Metal: New Arc Furnace	Process		45.0%	45.0%	Industrial_tool_7thPlan v05p	
All Industrial	Paper: Premium Control Large Material	Process		18.7%	18.7%	Industrial_tool_7thPlan v05p	
All Industrial	Paper: Efficient Pulp Screen	Process		15.0%	15.0%	Industrial_tool_7thPlan v05p	
All Industrial	Kraft: Effluent Treatment System	Process		15.0%	15.0%	Industrial_tool_7thPlan v05p	
All Industrial	Kraft: Efficient Agitator	Process		50.0%	50.0%	Industrial_tool_7thPlan v05p	
All Industrial	Mech Pulp: Premium Process	Process		0.2%	0.2%	Industrial_tool_7thPlan v05p	
All Industrial	Mech Pulp: Refiner Plate Improvement	Process		0.4%	0.4%	Industrial_tool_7thPlan v05p	
All Industrial	Transformer - High Efficiency	All		1.5%	1.5%	Industrial_tool_7thPlan v05p	

Table G-4 Comparison of 7th Plan and RTF Irrigation Measures in Washington

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Irrigation	Wheel/Hand - Flow Control Nozzle Replacement	Motors	per acre	70.9	70.9	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel/Hand - Nozzle Replacement	Motors	per acre	70.9	70.9	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel/Hand - Impact Sprinkler Maintenance	Motors	per acre	62.3	62.3	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel/Hand - Gasket Replacement	Motors	per acre	372.9	372.9	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel/Hand - Drain Replacement	Motors	per acre	386.5	386.5	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel/Hand - Pipe Maintenance	Motors	per acre	185.6	185.6	ag-irr_hardware-7p_v4p	
All Irrigation	Thunderbird - Hub Replacement	Motors	per acre	321.2	321.2	ag-irr_hardware-7p_v4p	
All Irrigation	Wheel Line - Leveler Maintenance	Motors	per acre	92.5	92.5	ag-irr_hardware-7p_v4p	
All Irrigation	Center Pivot/Linear - New Sprinkler Package	Motors	per acre	122.6	122.6	ag-irr_hardware-7p_v4p	
All Irrigation	Center Pivot/Linear - New Goosenecks	Motors	per acre	9.4	9.4	ag-irr_hardware-7p_v4p	
All Irrigation	Center Pivot/Linear - New Drop Tubes	Motors	per acre	9.4	9.4	ag-irr_hardware-7p_v4p	
All Irrigation	Center Pivot/Linear - Boot Gasket Replacement	Motors	per acre	15.6	15.6	ag-irr_hardware-7p_v4p	

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Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Irrigation	Center Pivot/Linear - Tower Gasket Replacement	Motors	per acre	3.9	3.9	ag-irr_hardware-7p_v4p	
All Irrigation	Center Pivot - Low Energy Spray Application	Motors	per acre	36.6%	36.6%	ag-irr_eff-7p_v2p	
All Irrigation	Low Pressure Regulators	Motors	per acre	482.3	482.3	ag-convert_p_irr-7p_v3p	Average of four applications
All Irrigation	Scientific Irrigation Practices	Motors	per acre	5.7%	10.0%	ag-irr_water-mgmt-7p_v2	Council research indicates that 10% is too aggressive, utilized value from prior study which was sourced from Council presentation on SIS
All Irrigation	Green Motor Rewind	Motors	motor	1,039.5	1,039.5	ag-irr_motor-7p_v3p	

Table G-5 Comparison of 7th Plan and RTF Street Lighting Measures in Washington

Segment	Measure Name	End Use	Unit Definition	Average Savings per Unit (Annual kWh @meter)	7th Plan/RTF Savings per Unit (Annual kWh @meter)	Reference 7PP/RTF Workbook	Notes
All Street Lighting	100W Fixture	Street Lighting	fixture	250.6	305.3	com-streetlight-7p_v9p	This group includes fixtures with less than 100W baseline power draw, lowering savings
All Street Lighting	150W Fixture	Street Lighting	fixture	355.5	350.5	com-streetlight-7p_v9p	Average of 150W and 200W
All Street Lighting	250W Fixture	Street Lighting	fixture	659.2	666.5	com-streetlight-7p_v9p	
All Street Lighting	400W Fixture	Street Lighting	fixture	1,067.2	1,152.4	com-streetlight-7p_v9p	
All Street Lighting	1000W Fixture	Street Lighting	fixture	1,185.4	2,919.7	com-streetlight-7p_v9p	Average wattage in PacifiCorp's service territory is significantly lower than 1000W, lowering savings

ABOUT APPLIED ENERGY GROUP (AEG)

Founded in 1982, AEG is a multi-disciplinary technical, economic and management consulting firm that offers a comprehensive suite of demand-side management (DSM) services designed to address the evolving needs of utilities, government bodies, and grid operators worldwide. Hundreds of such clients have leveraged our people, our technology, and our proven processes to make their energy efficiency (EE), demand response (DR), and distributed generation (DG) initiatives a success. Clients trust AEG to work with them at every stage of the DSM program lifecycle – assessing market potential, designing effective programs, supporting the implementation of the programs, and evaluating program results.

The AEG team has decades of combined experience in the utility DSM industry. We provide expertise, insight and analysis to support a broad range of utility DSM activities, including: potential assessments; end-use forecasts; integrated resource planning; EE, DR, DG, and smart grid pilot and program design and administration; load research; technology assessments and demonstrations; project reviews; program evaluations; and regulatory support.

Our consulting engagements are managed and delivered by a seasoned, interdisciplinary team comprised of analysts, engineers, economists, business planners, project managers, market researchers, load research professionals, and statisticians. Clients view AEG's experts as trusted advisors, and we work together collaboratively to make any DSM initiative a success.

Applied Energy Group
500 Ygnacio Valley Road, Suite 450
Walnut Creek, CA 94596

P: 925.482.2000
F: 925.284.3147