Energy Resource and Usage Information

Energy Resources

Where does HL&P get its power?

HL&P receives energy from many different power generation facilities. The company's power portfolio includes hydropower, wind, solar, geothermal, natural gas, coal, and market power purchases. To best plan for future resource needs, the company's Integrated Resource Plan is updated on a regular basis to ensure that the company's portfolio is diverse and that it incorporates demand-side management and new technologies as they become feasible. Resources that offer reliability and rate stability are given priority, as are renewable energy resources.

Upper Snake Creek Hydropower Plant

The Upper Snake Creek Hydropower Plant is powered by a hydroelectric turbine generator providing valuable renewable energy to HL&P customers. Power generation at the Upper Plant commenced in 1949 and continues to operate much the same as it did seventy years ago. The output of the plant ranges from 750 kilowatts in the summer to 250 kilowatts in the winter.

Lower Snake Creek Hydropower Plant

The Lower Snake Creek Hydropower Plant is located downstream for the Upper Snake Creek Plant and was acquired by HL&P in 2010 from Rocky Mountain Power. Located two-miles below the Upper Plant, it utilizes the same water flows and generates up to 1500 kilowatts of energy.

Lake Creek Hydropower Plant

The Lake Creek Hydroelectric Power Plant was built by HL&P employees in 1981 to fulfill the growing energy requirements of the Heber Valley. The plant has a peak generating capacity of 1500 kilowatts and continues to efficiently provide clean renewable energy to HL&P's customers.

Jordanelle Hydropower Project

The Jordanelle Hydroelectric Power Plant (JDPP) is a 12-megawatt project made possible by a public and private partnership between the Department of Interior, the Central Utah Water Conservancy District, and HL&P.

Operation of the plant began in 2008 with a lease agreement giving HL&P the rights to market and use the power generated by the two turbine generator units. The JDPP is a green project providing power generation that is secondary to controlling water flows. The manner of operation qualifies the facility to be certified as a low impact hydro by the Low Impact Hydro Power Institute.

Renewable Energy Credits (REC) for the energy generated by the Jordanelle Hydro have been retained since 2016 to ensure that HL&P customers receive this renewable energy resource.

Federal Hydropower

The Colorado River Storage Project (CRSP) includes renewable hydropower generated by the Glen Canyon Dam and the Flaming Gorge Dam. HL&P has a firm allocation of CRSP capacity and energy up to nine megawatts that is purchased pursuant to an Integrated Contract for Electric Service. In summer months, HL&P also receives up to 600 kilowatts per hour from the Deer Creek Hydro through the Federal All Hydropower Project. CRSP is owned by the United States of America and is operated by the United States Bureau of Reclamation. Western Area Power Administration is responsible for the marketing and the transmission of the renewable Federal hydropower.

Pleasant Valley Wind

HL&P purchases power from the Pleasant Valley Wind Farm located in Uintah County, Wyoming. Wind purchases are made by UAMPS members through the Firm Power Supply Project which supplies UAMPS members with energy from various power supplies. This wind farm is the largest in Wyoming with 80 Vesta V80, 1.8-megawatt wind turbines capable of generating 144 megawatts.

Horse Butte Wind Farm

The Horse Butte Wind Farm is a 57.6-megawatt project located in Bonneville County, Idaho. The entire output from the farm is purchased by UAMPS with HL&P receiving up to one megawatt. The facility began commercial operation on August 15, 2012, providing HL&P with a long-term supply of renewable electric energy and all the associated environmental attributes.

Patua Geothermal & Solar

In 2018, HL&P added geothermal and solar energy to the portfolio. Located in Hazen, Nevada, the Patua Power Plant includes a base-load geothermal facility that can generate up to 25 megawatts and a 10-megawatt solar installation. The geothermal power plant is comprised of a binary facility with three Turbine Air Systems Organic Rankine Cycle (ORC) air-cooled units using Atlas Copco Turbines. HL&P is entitled to between zero and twelve megawatts of energy an hour, depending on plant generation.

Natural Gas

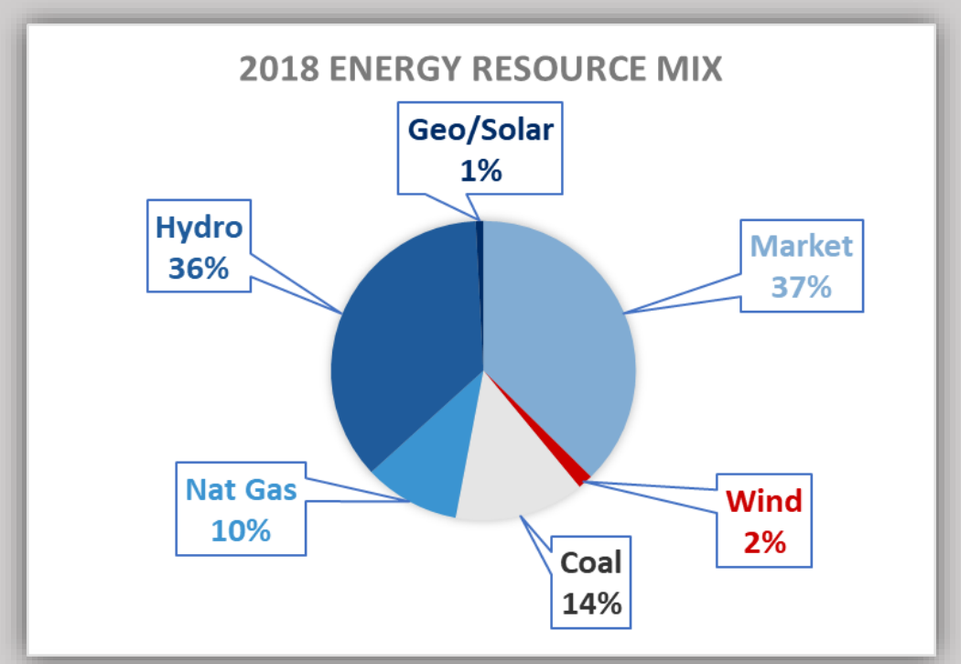
HL&P owns and operates three natural gas power plants producing up to 13 megawatts of electricity. Natural Gas generation allows the company to meet the system's various load requirements through the day. The plants operate beneath the limits of a strict minor pollutant source permit regulated of the Department of Air Quality.

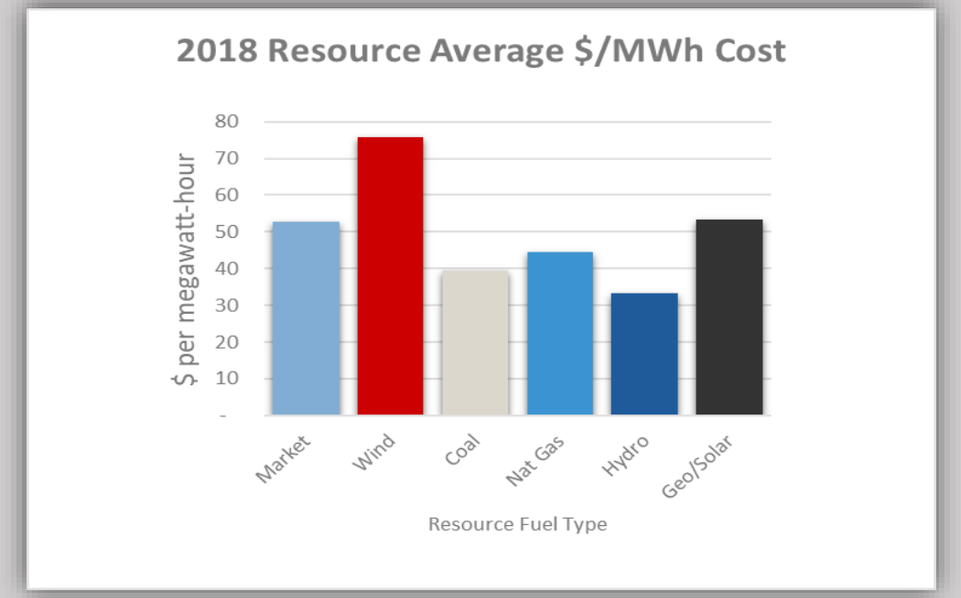
Coal

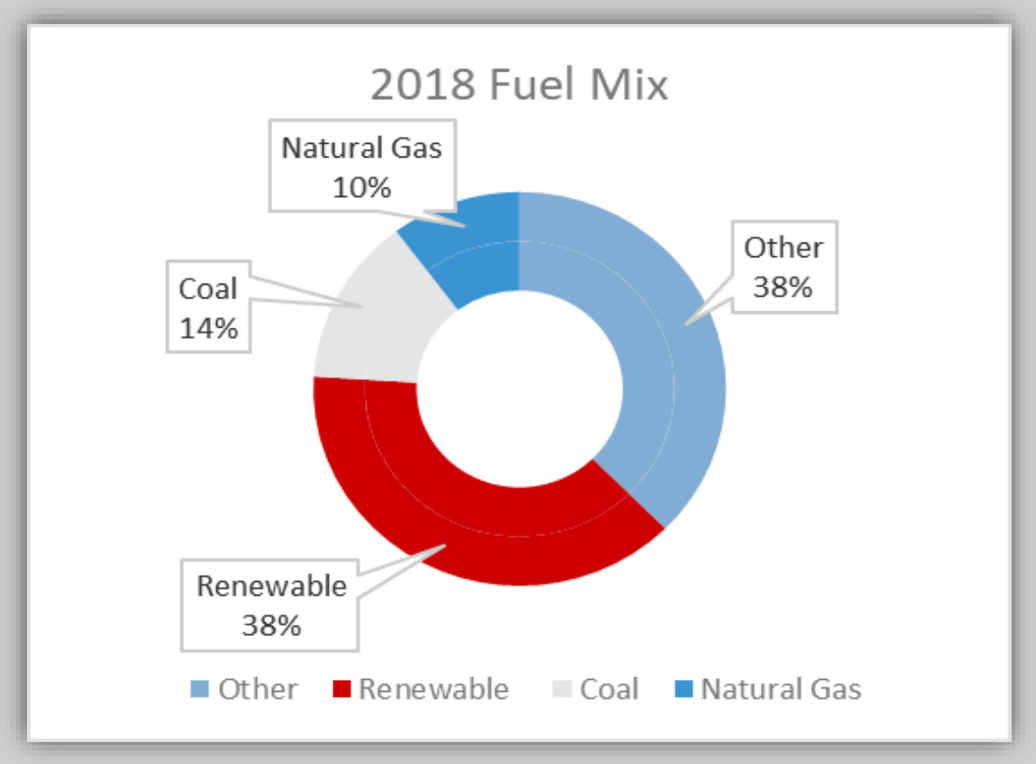
HL&P currently meets load with energy produced by the Hunter II coal-fired steam electric generating unit located at the Hunter Station in Emery County. The unit is jointly owned by PacifiCorp, Deseret Generation & Transmission, and Utah Area Power Administration (UAMPS). As a member of UAMPS, HL&P is entitled to six percent of UAMPS's total share of energy.

Intermountain Power Project

Intermountain Power Agency (IPA) is a political subdivision of the state of Utah organized in 1977 by 23 municipalities. IPA's Intermountain Power Project (IPP) includes a two-unit, coal-fired, steam-electric generating station with a net capacity of 1,800 megawatts. The generating station is in Delta, Utah. HL&P has an entitlement share of up to 11 megawatts which allows the company to tale the energy, if it is ever needed.


2018 ENERGY RESOURCE MIX
Geo/Solar 1%
Market 37%
Wind 2%
Coal 14%
Nat Gas 10%
Hydro 36%


2018 Resource Average $/MWh Cost
$ per megawatt-hour
80
70
60
50
40
30
20
10
-
Market
Wind
Coal
Nat Gas
Hydro
Geo/Solar
Resource Fuel Type

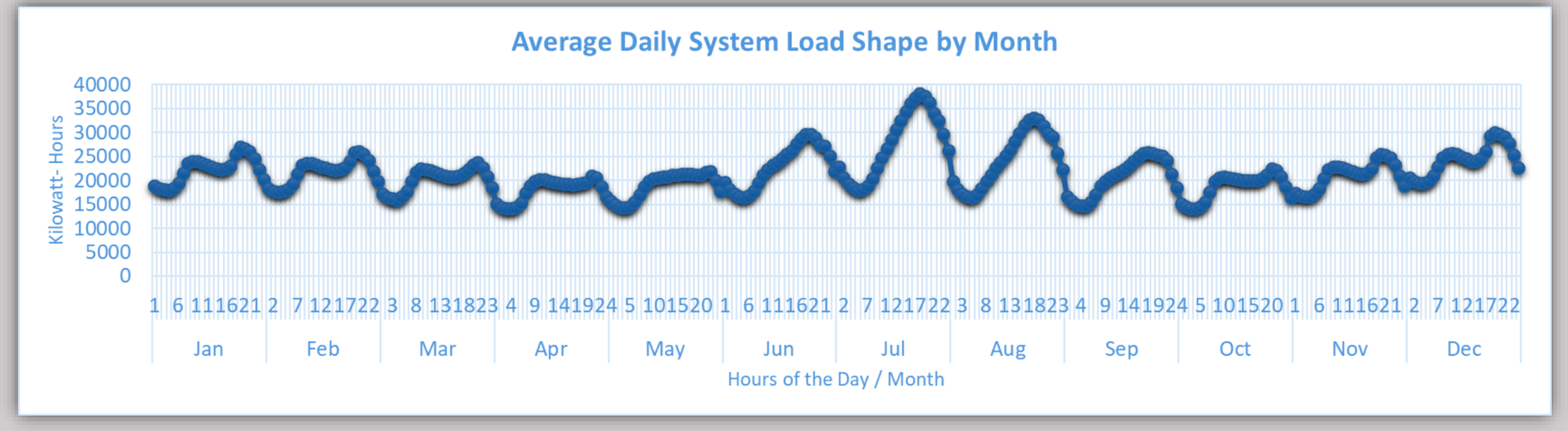

2018 Fuel Mix
Natural Gas 10%
Other 38%
Coal 14%
Renewable 38%
Other
Renewable
Coal
Natural Gas

Heber Light and Power Energy Resource Descriptions

Project	Location	Total Project Capacity	Capacity Available to Heber	Fuel	Heber Percent Ownership	History
Federal Hydro Power	Colorado River/Upper Basin States	10395 MW	Seasonal Contract Rate of Delivery (9.45 MW Winter/ 7 MW Summer)	Federal Hydro and Other	None	Agreement as of March 27, 2007. Renews in 2025.
Hunter	Hunter, UT	1320 MW	PPA 6.0334% of UAMPS share (3.783 MW)	Coal	None	Agreement as of June 1, 1981. Ends upon plant retirement or 2032.
IPP	Delta, UT	1800 MW	0.627% (1 MW)	Coal	None	Agreement as of December 1, 1980. Retrofit to Nat Gas in 2025.
Pleasant Valley Wind	Uinta County Wyoming	144 MW	0.02% (.726MW)	Wind	None	Agreement active 2004 - 2029
Horse Butte Wind	Bonneville County Idaho	57.6 MW	0.0176	Wind	0.0176	Plant operation commenced August 15, 2012.
Heber Owned Nat Gas Gen	Wasatch County	13 MW	1	Natural Gas	1	Plant in service since 1986
Jordanelle	Wasatch County	13 MW	1/3 plant generation (0-4.3MW)	Run of River Hydro	None	Plant in service since 2008
Heber Light & Power Hydros	Wasatch County	4.1 MW	100% (0-4MW)	Run of Stream Hydro	1	Plants in service since 1982 L.C. 1942 S.C. Est.
Patua Geothermal/Solar	Nevada	25 MW Geothermal 10 MW Solar	0-12 MW	Binary Geothermal & Solar PV	None	Geothermal Plant Commissioned in 2013 Solar commissioned in 2017 Heber PPA active Nov 2018 - November 2033
Market Power Purchases	Market Contract	Varies	3 MW HLH/ 3 MW Flat/ Seasonal Shaped Varies	Misc.	None	April 2017- March 2022/ Seasonal Shaped as Needed
CFPP	Idaho	720 MW	10 MW	Small Modular Nuclear Reactor		Possible in-service date in 2030
Red Mesa Tapaha Solar Project	Navajo Nation	66 MW	7.5758% entitlement share (5 MW)	Solar	None	Scheduled Commercial Operation ~June 1, 2022 - 25-year delivery term

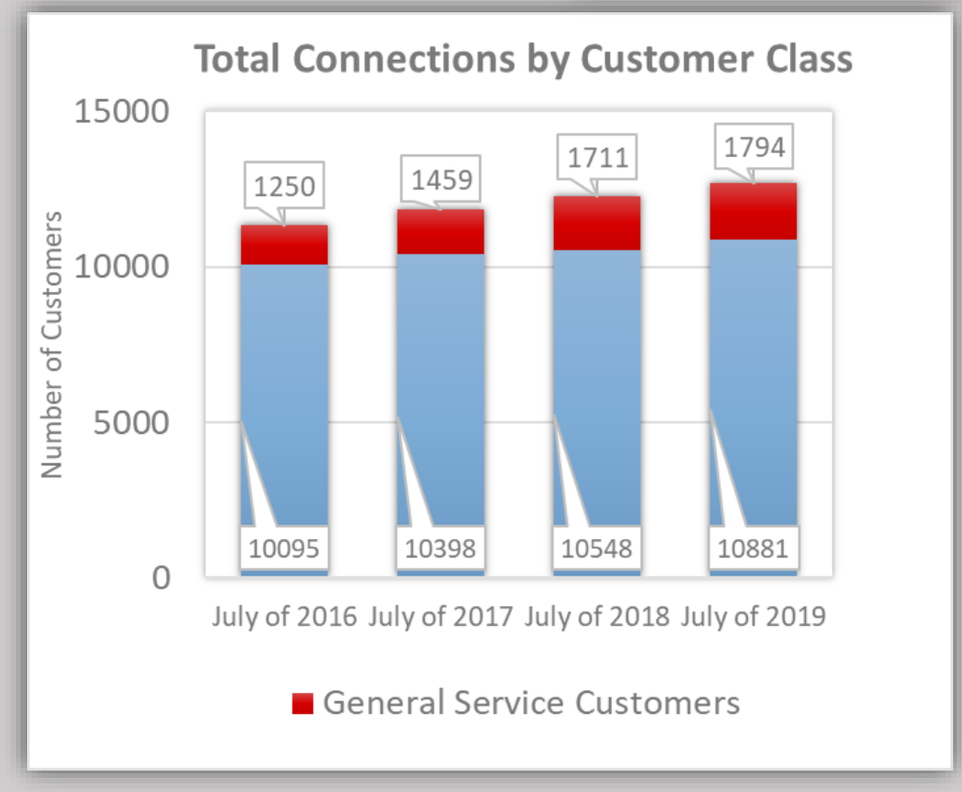
System Load

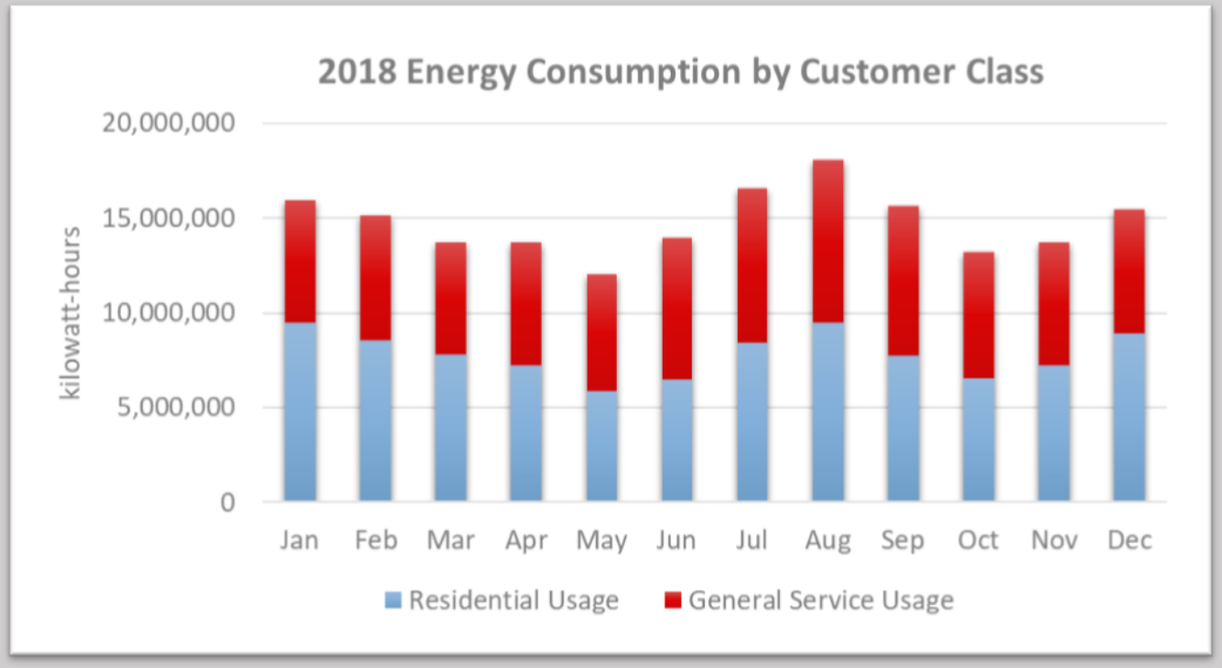
The system load is the total electric power consumed by all users connected to the Heber Light & Power distribution system. Load shape patterns tend to change based on the season, with higher usage patterns observed in the summer and winter months. Most months of the year exhibit a spike in usage during the evening hours.



Customer Count & Energy Usage

NUMBER OF RESIDENTIAL CONNECTIONS	10,881
NUMBER OF GENERAL SERVICE CONNECTIONS	1,794
AVERAGE RESIDENTIAL USAGE PER MONTH (KILOWATT HOURS)	687
AVERAGE GENERAL SERVICE USAGE PER MONTH (KILOWATT HOURS)	4,057
NET METERING CUSTOMERS	199
*DATA AS OF EOM JULY 2019	





Energy Efficiency Savings

Heber Light & Power's Energy Efficiency Program supports customers wishing to save energy by investing in energy efficiency products and appliances. Each year the program offerings are adjusted to ensure that each dollar invested is getting a high return in energy savings. The company's commercial lighting program has been very successful with customers reporting that they notice significant savings on their power bills after they invest in new lighting.

2018 Energy Efficiency Rebates	# of Units	Total kWh Savings Over Product Life	Total Cost Converted to $/MWh
Central A/C	5	40,871	$17.35
Dish Washers	5	1,794	$55.75
Clothes Washers	4	7,936	$25.20
Lighting Fixtures	386	224,368	$17.20
Commercial Lighting	5500	3,196,953	$47.79
Refrigerator Recycling	16	83,011	$19.27
Freezers	1	2,209	$22.64
Ductless Heat Pumps	1	93,899	$13.84
Gas Furnaces	2	17,371	$23.03
Smart Thermostats	15	145,731	$5.15
Total	5,935	3,814,144	$24.72