

<b>Western Montana Technology</b>	<b>Fuel (Type)</b>	<b>Nameplate Capacity (Nominal) (MW)</b>	<b>Design Life (Years)</b>	<b>Capital Cost<sup>2</sup> (\$/kW)</b>	<b>Fixed O&amp;M (Yr 1) (\$/kW-yr)</b>	<b>Variable O&amp;M (Yr 1) (\$/MWH)</b>	<b>Plant Heat Rate- Winter (Btu/kWH)</b>
<b>Combustion Turbine - Dry Cooling</b>							
Simple Cycle 1x0 CT - 50 MW Frame	NG	48.1	30	\$1,433	\$13.69	\$8.73	9,986
Simple Cycle 1x0 CT - 25 MW Aeroderivative	NG	28.1	30	\$1,659	\$21.06	\$5.58	9,902
Simple Cycle 1x0 CT - 50 MW Aeroderivative	NG	47.4	30	\$1,336	\$14.18	\$4.38	9,388
Simple Cycle 1x0 CT - 50 MW Aeroderivative (NG / Fuel Oil) <sup>4</sup>	NG / Fuel Oil	47.2	30	\$1,491	\$14.64	\$5.21	9,426
Simple Cycle 1x0 CT - 50 MW Aeroderivative (NG/LNG) <sup>4</sup>	NG / LNG	47.4	30	\$1,780	\$14.71	\$4.72	9,418
Combined Cycle 2x1 CT - Frame/Industrial CT	NG	133.3	30	\$1,323	\$26.52	\$6.30	7,210
Combined Cycle 2x1 CT - Frame/Industrial CT w/ DB- Unfired	NG	133.3	30	\$1,385	\$26.60	\$6.31	7,221
Combined Cycle 2x1 CT - Frame/Industrial CT w/ DB - Fired	NG	151.9	30	\$1,215	\$23.35	\$5.55	7,533
<b>Reciprocating Internal Combustion Engine</b>							
Simple Cycle 1x0 RICE - 18 MW Class NG Only	NG	19.4	30	\$1,833	\$23.26	\$4.68	8,329
Simple Cycle 1x0 RICE - 18 MW Class NG Only (NG / LNG) <sup>4</sup>	NG / LNG	19.4	30	\$2,149	\$23.62	\$5.02	8,357
Simple Cycle 1x0 RICE - 18 MW Class Dual Fuel	NG	17.9	30	\$2,080	\$25.31	\$5.77	8,463
Simple Cycle 1x0 RICE - 18 MW Dual Fuel (NG / Fuel Oil) <sup>4</sup>	NG / Fuel Oil	17.4	30	\$2,075	\$29.70	\$7.41	8,503
Simple Cycle 1x0 RICE - 9 MW Class NG Only	NG	9.6	30	\$2,324	\$54.62	\$4.55	8,103
<b>Solar Photovoltaic (PV)</b>							
Solar PV - Single Axis Tracking	N/A	105	20	\$1,330	\$21.60	N/A	N/A
<b>Wind Energy</b>							
Wind Energy	N/A	105	25	\$1,650	\$37.00	N/A	N/A
<b>Geothermal</b>							
Geothermal - Flash Steam	N/A	21	30	\$2,800	\$123.98	\$9.88	1,000
<b>Compressed Air Energy Storage (CAES)</b>							
CAES - Diabatic (8 Hour)	Elec. Grid / NG	105	30	\$1,500-\$2,300	\$15.27	\$8.53	4,500
<b>Pumped Hydro Energy Storage (PHES)</b>							
PHES - Closed Loop (9 Hour)	Elec. Grid / NG	525	30	\$1,700-\$3,000	\$14.55	\$0.90	N/A
<b>Battery Energy Storage System (BESS)</b>							
BESS - Lithium Ion (4 Hour)	N/A	26.3	20	\$2,070	\$39.61	\$7.00	N/A
BESS - Vanadium Flow (4 Hour)	N/A	26.3	20	\$1,700	\$34.01	N/A	N/A

<sup>1</sup> Thermal heat rates are presented on a higher heating value (HHV) basis.

<sup>2</sup> \$/kW capital cost metrics divide estimated project costs by the net winter

<sup>3</sup> Capacity factors for dispatchable technologies assumed in order to develop

<sup>4</sup> Dual fuel performance and costs are presented as a blend of NG and alternative fuel (NG or FO) operations (1,034 hours on NG and 263 hours on alternate fuel)