

## Generic Electric Resource Costs

2018 \$/kW	2017 IRP			2019 IRP			Change in costs from 2019 IRP to 2017 IRP		
	EPC Cost	Owner's Costs + Interconnection	Total Costs	EPC Cost	Owner's Costs + Interconnection	Total Costs	EPC Cost	Owner's Costs + Interconnection	All in Costs
CCCT	\$1,020	\$358	\$1,378	\$898	\$269	\$1,167	(\$122)	(\$89)	(\$211)
Frame Peaker (Fuel Fuel)	\$526	\$172	\$698	\$554	\$271	\$825	\$28	\$99	\$127
Recip Engine (NG only)	\$1,030	\$312	\$1,341	\$842	\$350	\$1,192	(\$188)	\$38	(\$149)
WA Wind	\$1,548	\$656	\$2,204	\$1,656	\$386	\$2,042	\$108	(\$270)	(\$162)
MT Wind	\$1,471	\$1,312	\$2,783	\$1,633	\$1,111	\$2,744	\$162	(\$201)	(\$39)
Solar	\$1,497	\$874	\$2,371	\$1,352	\$570	\$1,922	(\$145)	(\$304)	(\$449)
Biomass	\$4,084	\$207	\$4,291	\$7,036	\$2,659	\$9,695	\$2,952	\$2,452	\$5,404
Offshore Wind	\$5,717	\$1,795	\$7,512	\$5,000	\$1,547	\$6,547	(\$717)	(\$248)	(\$965)
Li-Ion Battery 2-hr	\$1,313	\$342	\$1,655	\$1,331	\$599	\$1,930	\$18	\$257	\$275
Li-Ion Battery 4-hr	\$2,116	\$552	\$2,668	\$2,346	\$708	\$3,054	\$230	\$156	\$386
Flow Battery 4-hr	\$1,870	\$674	\$2,544	\$1,493	\$618	\$2,111	(\$377)	(\$56)	(\$433)
Flow Battery 6-hr	\$2,447	\$882	\$3,329	\$2,050	\$708	\$2,758	(\$397)	(\$174)	(\$571)
Pumped Storage	\$2,503	\$127	\$2,630	\$1,800	\$879	\$2,679	(\$703)	\$752	\$49