

Table 5-5: Coal and Natural Gas Prices (Nominal \$/mmBtu)

Year	Natural Gas ²³			Coal ²⁴		
	Low	Mid	High	Low	Mid	High
2022	2.019	3.192	4.167	1.436	1.670	1.864
2023	2.033	2.796	3.651	1.471	1.641	1.832
2024	2.048	2.702	3.528	1.525	1.680	1.876
2025	2.063	2.784	3.649	1.556	1.726	1.931
2026	2.077	2.865	3.771	1.551	1.733	1.941
2027	2.092	2.947	3.893	1.575	1.770	1.987
2028	2.107	3.029	4.014	1.560	1.765	1.984
2029	2.123	3.111	4.136	1.565	1.781	2.005
2030	2.138	3.192	4.258	1.576	1.803	2.032
2031	2.153	3.274	4.379	1.615	1.858	2.097
2032	2.169	3.356	4.501	1.640	1.895	2.141
2033	2.184	3.437	4.623	1.657	1.924	2.177
2034	2.200	3.519	4.744	1.697	1.979	2.242
2035	2.216	3.601	4.866	1.733	2.030	2.302
2036	2.232	3.682	4.988	1.768	2.080	2.361

Currently, there is no price associated with CO₂ emissions and no law or regulation is being seriously discussed that would explicitly put a price on such emissions. Instead, much focus recently has been on addressing CO₂ emissions indirectly via a Clean Energy Standard rather than through a CO₂ price or cap and trade scheme. During the Obama administration, the Clean Power Plan sought to reduce CO₂ emissions via state-administered programs that focused on either emission rates or mass reductions rather than through a CO₂ price. The Companies have no basis for assuming that a price on CO₂ emissions will or will not be part of any such regulations. For these reasons, the 2021 IRP does not evaluate resource expansion plans with an assumed price for CO₂ emissions.

²³ The natural gas price forecast reflects forecasted Henry Hub market prices. In 2022 through 2024, base natural gas prices are the forecast commodity prices at Henry Hub based on NYMEX market prices as of July 14, 2021. In subsequent years, the base forecast is interpolated to reach EIA’s High Oil and Gas Resource case from its 2021 Annual Energy Outlook (“AEO”) in 2050. The low Henry Hub price forecast begins with 2020’s actual spot price and escalates at half of the compound annual growth rate between 2021 and 2050 of the 2021 AEO’s EIA’s High Oil and Gas Supply case. The high Henry Hub gas price forecast reflects a smoothed version of the EIA’s reference case forecast from its 2021 AEO.

²⁴ The coal price forecast reflects Illinois Basin coal prices. In the first five years of the forecast, the base market price is a blend of prices based on coal bids received but not under contract and forecasts from independent third-party consultants. Beyond the fifth year, prices are increased at the annual growth rate reflected in the EIA’s 2021 AEO High Oil and Gas Supply case for “All Coals, Minemouth” price forecast. The high and low coal price forecasts reflect the historical relationship of changes in natural gas and ILB coal prices.

Table 8-7: Cost of Fuel (\$/MMBtu)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Brown 3	2.04	2.38	2.05	2.06	2.12	2.13	2.25	2.25	2.28	2.31	2.37	2.42	2.46	2.53	2.59	2.65
Brown 5, 8-11	3.11	3.11	2.71	2.62	2.70	2.78	2.86	2.94	3.03	3.11	3.19	3.27	3.36	3.44	3.52	3.60
Brown 6-7	3.11	3.11	2.71	2.62	2.70	2.78	2.86	2.94	3.03	3.11	3.19	3.27	3.36	3.44	3.52	3.60
Brown Solar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cane Run 7	3.10	3.11	2.71	2.61	2.70	2.78	2.86	2.94	3.03	3.11	3.19	3.27	3.36	3.44	3.52	3.60
Dix Dam 1-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ghent 1	1.91	2.36	1.91	1.97	1.95	2.00	2.07	2.08	2.10	2.13	2.19	2.23	2.27	2.33	2.39	2.44
Ghent 2	1.91	2.36	1.91	1.97	1.95	2.00	2.07	2.08	2.10	2.13	2.19	2.23	2.27	2.33	2.39	2.44
Ghent 3	1.91	2.36	1.91	1.97	1.95	2.00	2.07	2.08	2.10	2.13	2.19	2.23	2.27	2.33	2.39	2.44
Ghent 4	1.91	2.36	1.91	1.97	1.95	2.00	2.07	2.08	2.10	2.13	2.19	2.23	2.27	2.33	2.39	2.44
Haefling 1-2	5.98	5.99	5.59	5.50	5.58	5.66	5.74	5.82	5.91	5.99	6.07	6.15	6.24	6.32	6.40	6.48
Mill Creek 1	1.91	2.36	1.97	1.91	1.94	1.99	2.04	2.04	2.06	2.09	2.15	2.19	2.23	2.29	2.34	2.40
Mill Creek 2	1.91	2.36	1.97	1.91	1.94	1.99	2.04	2.04	2.06	2.09	2.15	2.19	2.23	2.29	2.34	2.40
Mill Creek 3	1.91	2.36	1.97	1.91	1.94	1.99	2.04	2.04	2.06	2.09	2.15	2.19	2.23	2.29	2.34	2.40
Mill Creek 4	1.91	2.36	1.97	1.91	1.94	1.99	2.04	2.04	2.06	2.09	2.15	2.19	2.23	2.29	2.34	2.40
Ohio Falls 1-8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paddy's Run 12	3.11	3.11	2.71	2.62	2.70	2.78	2.86	2.95	3.03	3.11	3.19	3.28	3.36	3.44	3.52	3.61
Paddy's Run 13	3.11	3.11	2.71	2.62	2.70	2.78	2.86	2.95	3.03	3.11	3.19	3.28	3.36	3.44	3.52	3.61
Trimble County 1	1.89	2.35	1.92	1.95	1.94	2.00	2.05	2.05	2.07	2.10	2.16	2.20	2.24	2.30	2.36	2.41
Trimble County 2	1.99	2.38	2.04	2.08	2.08	2.13	2.19	2.19	2.22	2.25	2.31	2.36	2.40	2.46	2.52	2.58
Trimble Co 5-10	3.11	3.11	2.71	2.62	2.70	2.78	2.86	2.94	3.03	3.11	3.19	3.27	3.36	3.44	3.52	3.60
Zorn 1	3.43	3.41	3.48	3.52	3.55	3.62	3.69	3.77	3.84	3.92	4.00	4.08	4.16	4.24	4.33	4.41
Simpsonville Solar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New SCCTs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.6
New Solar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Battery Storage	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 8-8: Capital Costs

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
New SCCTs																
\$/kW								703						766		
\$M								329						717		
New Solar																
\$/kW								1,048						986		
\$M								524						1,577		
New Battery Storage																
\$/kW															1,009	1,016
\$M															101	102

Capital cost assumptions in Table 8-8 are in nominal “overnight” dollars and are based on the “Moderate” case forecast in NREL’s 2021 ATB.

Table 8-9: Production Costs

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Variable and Fixed O&M Costs (\$M) ⁶⁵	1,016	998	985	998	1,019	1,060	1,097	1,092	1,107	1,139	1,158	1,196	1,224	1,222	1,253	1,290
Average Variable Production Costs (cents/kWh)	2.46	2.35	2.28	2.27	2.30	2.36	2.41	2.36	2.37	2.42	2.46	2.52	2.57	2.41	2.47	2.51
Total Electricity Production Costs (cents/kWh)	3.17	3.10	3.07	3.11	3.20	3.35	3.48	3.47	3.53	3.64	3.71	3.82	3.92	3.90	4.00	4.10

⁶⁵ Variable and fixed operating and maintenance costs include the cost of fuel.