

## Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy

Corriedale Project Revenue Requirement (Assumptions)

Line No.	Assumptions	
1	<b>Total Project Cost</b>	\$ 56,974,771
2		
3	<b>Production Assumptions</b>	
4	BHP Turbines	8
5	CLFP Turbines	8
6	# of Turbines	16
7	Turbine Nameplate Capacity	2.5
8	Net Capacity Factor	46%
9	Output Degredation	0.10%
10	BHP Installed Capacity (MW)	20
11	CLFP Installed Capacity (MW)	20
12	Installed Capacity (MW)	40
13		
14	<b>O&amp;M Assumptions</b>	
15	\$ / Turbine	45,000
16	Turbine O&M	720,000
17	O&M Escalation Rate	2%
18	Lease Payment Yr 1-10	3.50%
19	Lease Payment Yr 11-20	5.00%
20	Lease Payment Yr 21-25	6.50%
21	CLFP Property Tax Rate	0.387%
22	BOP O&M \$ / Watt	0.00352
23	BOP O&M	140,800
24	Corporate Allocations	374,918
25	Wyoming Wind Tax \$ / MWh	1
26		
27	<b>Capital Cost Assumptions</b>	
28	Debt % of Capitalization	46.00%
29	Equity % of Capitalization	54.00%
30	Debt Cost	5.72%
31	Equity Cost	9.90%
32	Long-term Debt Weighted Cost	2.631%
33	Common Equity Weighted Cost	5.346%
34	Rate of Return	7.977%
35		
36	Combined State and Federal Tax Rate	21%
37	Income Tax Multiplier	1.26582

**Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy**  
 Corriedale Project Revenue Requirement (Summary)

<b>Line</b>						
<b>No.</b>	<b>Levelized Cost</b>	<b>5 Yr</b>	<b>10 Yr</b>	<b>15 Yr</b>	<b>20 Yr</b>	<b>25 Yr</b>
1	PV Revenue	6,300,975	8,681,472	14,696,178	18,366,764	20,538,849
2	Revenue Payment	1,577,172	1,292,465	1,714,558	1,867,523	1,920,308
3	PV Generation	337,794	553,264	699,332	798,351	865,477
4	Generation Payment	84,552	82,368	81,589	81,176	80,919
5	Levelized Cost	\$ 18.65	\$ 15.69	\$ 21.01	\$ 23.01	\$ 23.73

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Corriedale Project Revenue Requirement

Line No.	Revenue Requirement	2020	2021	2022	2023	2024	2025
	<b>Rate Base</b>						
1	Plant in Service	28,487,386	28,537,386	28,587,386	28,637,386	28,687,386	28,737,386
2	Less: Accumulated Depreciation	284,874	1,426,369	2,569,865	3,715,360	4,862,856	6,012,351
3	Tax Depreciation	5,612,015	8,997,770	5,434,900	3,295,582	3,296,955	1,690,671
4	Less: ADIT	1,118,700	2,768,517.32	3,669,712.25	4,121,230.53	4,572,617.12	4,686,264.04
5	Total Rate Base	27,083,812	24,342,499	22,347,809	20,800,795	19,251,913	18,038,771
6							
7	<b>Operating Expenses</b>						
8	Depreciation	284,874	1,141,495	1,143,495	1,145,495	1,147,495	1,149,495
9	Turbines	90,000	367,200	374,544	382,035	389,676	397,469
10	Lease Payment	16,755	66,953	66,886	66,819	66,753	66,686
11	BOP	17,600	71,808	73,244	74,709	76,203	77,727
12	Corporate Allocations	46,865	187,459	187,459	187,459	187,459	187,459
13	Property Taxes	27,562	110,440	110,633	110,827	111,020	111,214
14	Wyoming Wind Tax	19,947	79,706	79,627	79,547	79,467	79,388
15							
16	Interest Expense	181,235	640,500	588,016	547,311	506,556	474,636
17	Return on Equity	368,228	1,301,350	1,194,714	1,112,010	1,029,207	964,353
18							
19	Fed/State Income Tax	97,883	345,928	317,582	295,598	273,587	256,347
20							
21							
22	Total Revenue Requirement (lines 24 -33)	1,150,948	4,312,840	4,136,200	4,001,810	3,867,424	3,764,774
23	Less: Tax Credits	631,219	2,522,351	2,519,829	2,618,001	2,615,383	2,713,259
24	Net Operating Revenue Requirement	519,729	1,790,489	1,616,372	1,383,809	1,252,041	1,051,515

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Corriedale Project Revenue Requirement

Line No.	Revenue Requirement	2026	2027	2028	2029	2030	2031
	<b>Rate Base</b>						
1	Plant in Service	28,788,386	28,840,406	28,893,466	28,947,588	29,002,792	29,059,100
2	Less: Accumulated Depreciation	7,163,886	8,317,503	9,473,241	10,631,145	11,791,256	12,953,620
3	Tax Depreciation	83,815	84,339	85,123	85,922	86,967	87,976
4	Less: ADIT	4,462,042.78	4,237,494.59	4,012,665.21	3,787,549.06	3,562,188.74	3,336,567.32
5	Total Rate Base	17,162,456	16,285,408	15,407,559	14,528,894	13,649,346	12,768,912
6							
7	<b>Operating Expenses</b>						
8	Depreciation	1,151,535	1,153,616	1,155,739	1,157,904	1,160,112	1,162,364
9	Turbines	405,418	413,527	421,797	430,233	438,838	447,615
10	Lease Payment	66,619	66,553	66,486	66,420	95,648	95,552
11	BOP	79,282	80,867	82,485	84,135	85,817	87,534
12	Corporate Allocations	187,459	187,459	187,459	187,459	187,459	187,459
13	Property Taxes	111,411	111,612	111,818	112,027	112,241	112,459
14	Wyoming Wind Tax	79,309	79,229	79,150	79,071	78,992	78,913
15							
16	Interest Expense	451,579	428,502	405,404	382,284	359,142	335,976
17	Return on Equity	917,505	870,618	823,688	776,715	729,694	682,626
18							
19	Fed/State Income Tax	243,894	231,430	218,955	206,468	193,969	181,458
20							
21							
22	Total Revenue Requirement (lines 24 -33)	3,694,011	3,623,413	3,552,980	3,482,715	3,441,911	3,371,954
23	Less: Tax Credits	2,710,546	2,808,125	2,805,317	2,902,602	2,174,774	-
24	Net Operating Revenue Requirement	983,465	815,288	747,663	580,114	1,267,137	3,371,954

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Corriedale Project Revenue Requirement

Line No.	Revenue Requirement	2032	2033	2034	2035	2036	2037
	<b>Rate Base</b>						
1	Plant in Service	29,116,534	29,175,117	29,234,872	29,295,821	29,357,990	29,421,402
2	Less: Accumulated Depreciation	14,118,282	15,285,286	16,454,681	17,626,514	18,800,834	19,977,690
3	Tax Depreciation	89,120	90,172	91,361	75,650	60,019	61,219
4	Less: ADIT	3,110,703.72	2,884,568.95	2,658,181.75	2,427,983.30	2,193,980.19	1,959,696.50
5	Total Rate Base	11,887,548	11,005,262	10,122,009	9,241,324	8,363,176	7,484,016
6							
7	<b>Operating Expenses</b>						
8	Depreciation	1,164,661	1,167,005	1,169,395	1,171,833	1,174,320	1,176,856
9	Turbines	456,567	465,698	475,012	484,513	494,203	504,087
10	Lease Payment	95,456	95,361	95,266	95,170	95,075	94,980
11	BOP	89,284	91,070	92,891	94,749	96,644	98,577
12	Corporate Allocations	187,459	187,459	187,459	187,459	187,459	187,459
13	Property Taxes	112,681	112,908	113,139	113,375	113,615	113,861
14	Wyoming Wind Tax	78,834	78,755	78,676	78,598	78,519	78,441
15							
16	Interest Expense	312,785	289,570	266,330	243,158	220,052	196,919
17	Return on Equity	635,508	588,341	541,123	494,041	447,095	400,095
18							
19	Fed/State Income Tax	168,933	156,395	143,843	131,327	118,848	106,354
20							
21							
22	Total Revenue Requirement (lines 24 -33)	3,302,169	3,232,562	3,163,134	3,094,223	3,025,831	2,957,630
23	Less: Tax Credits	-	-	-	-	-	-
24	Net Operating Revenue Requirement	3,302,169	3,232,562	3,163,134	3,094,223	3,025,831	2,957,630

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Corriedale Project Revenue Requirement

Line No.	Revenue Requirement	2038	2039	2040	2041	2042	2043
	<b>Rate Base</b>						
1	Plant in Service	29,486,082	29,552,056	29,619,350	29,619,350	29,619,350	29,619,350
2	Less: Accumulated Depreciation	21,157,133	22,339,215	23,523,989	24,708,763	25,893,537	27,078,311
3	Tax Depreciation	62,444	63,693	64,967	52,538	31,624	19,078
4	Less: ADIT	1,725,126.62	1,490,264.82	1,255,105.26	1,017,335.72	775,174.27	530,378.11
5	Total Rate Base	6,603,823	5,722,576	4,840,255	3,893,251	2,950,638	2,010,660
6							
7	<b>Operating Expenses</b>						
8	Depreciation	1,179,443	1,182,082	1,184,774	1,184,774	1,184,774	1,184,774
9	Turbines	514,169	524,452	534,941	545,640	556,553	567,684
10	Lease Payment	94,885	94,790	124,342	124,217	124,093	123,969
11	BOP	100,549	102,560	104,611	106,703	108,837	111,014
12	Corporate Allocations	187,459	187,459	187,459	187,459	187,459	187,459
13	Property Taxes	114,111	114,366	114,627	114,627	114,627	114,627
14	Wyoming Wind Tax	78,362	78,284	78,205	78,127	78,049	77,971
15							
16	Interest Expense	173,760	150,572	127,357	102,439	77,637	52,904
17	Return on Equity	353,040	305,929	258,760	208,133	157,741	107,490
18							
19	Fed/State Income Tax	93,846	81,323	68,784	55,327	41,931	28,573
20							
21							
22	Total Revenue Requirement (lines 24 -33)	2,889,624	2,821,817	2,783,860	2,707,446	2,631,701	2,556,465
23	Less: Tax Credits	-	-	-	-	-	-
24	Net Operating Revenue Requirement	2,889,624	2,821,817	2,783,860	2,707,446	2,631,701	2,556,465

## Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy

Corriedale Project Revenue Requirement

Line No.	Revenue Requirement	2044	2045
	<b>Rate Base</b>		
1	Plant in Service	29,619,350	29,619,350
2	Less: Accumulated Depreciation	28,263,085	29,162,985
3	Tax Depreciation	11,552	3,876
4	Less: ADIT	284,001.55	95,836.51
5	Total Rate Base	<u>1,072,263</u>	<u>360,528</u>
6			
7	<b>Operating Expenses</b>		
8	Depreciation	1,184,774	899,900
9	Turbines	579,037	590,618
10	Lease Payment	123,845	123,721
11	BOP	113,234	115,499
12	Corporate Allocations	187,459	187,459
13	Property Taxes	114,627	114,627
14	Wyoming Wind Tax	77,893	77,815
15			
16	Interest Expense	28,213	9,486
17	Return on Equity	57,323	19,274
18			
19	Fed/State Income Tax	15,238	5,123
20			
21			
22	Total Revenue Requirement (lines 24 -33)	2,481,644	2,143,523
23	Less: Tax Credits	-	-
24	Net Operating Revenue Requirement	<u>2,481,644</u>	<u>2,143,523</u>