

Beartooth Forecast Model

6 Year Forecast

6 Year Forecast Assumptions

Power Costs

Power Costs based on various power sources as indicated on Page 7.

Growth in Plant

Growth in consumers, kwh sales and demand set at budget levels. Growth in plant (net) is approximately \$836,000/year. Included in this investment is a new meter system installed in the years 2018-2019 at a total cost of \$1,575,000.

Growth in Revenue

Growth in Revenue forecasted to grow 1/2% per year in kWh sales from new members. Usage per member remains flat.

Forecast driver

Forecast driver is **DSC** (Debt Service Coverage). DSC requirements are the average of the highest two of the last three years. This forecast achieves a minimum of 1.25 for lending requirements.

Cash level

Cash is set to a minimum criteria of \$500,000.

New debt for construction

New debt in the amount of \$1.575M will be borrowed for the new meter system. The loan will be \$1,575,000 on May 1, 2018 with interest at 4.85%. The loan is for 15 years.

Rates

Rates are forecasted at 2018 budgeted amounts and carried forward for the 5 year period. Facilities charge remains unchanged.

Capital Credits

Capital Credit payments will be set at 5% of outstanding Patronage. A total of \$2.5M will be retired in the forecast period.

Variable costs

Variable costs increase by 1% per year, and labor costs @ 2% per year.

NW/Energy/FERC Over Charge Settlement

Assumption is made court rules in BEC favor in 2018 and no repayment is necessary. The total "deferred credit" (\$1,112,068) is moved on the balance sheet and reclassified as Equity.

Compass model – Statement of Operations

Statement of Operations								
		2017 Audited	2018	2019	2020	2021	2022	2023
1	Revenue from energy sales	\$ 8,663,498	\$ 8,355,829	\$ 8,336,610	\$ 8,378,989	\$ 8,420,884	\$ 8,462,989	\$ 8,505,304
2	Other Revenue	\$ 38,679	\$ 37,871	\$ 39,700	\$ 40,177	\$ 41,383	\$ 42,624	\$ 43,903
3	Revenue Increase (Decrease)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Total Revenue	\$ 8,702,177	\$ 8,393,700	\$ 8,376,310	\$ 8,419,166	\$ 8,462,267	\$ 8,505,613	\$ 8,549,207
5	Cost of Purchased Power Energy	3,139,385	3,134,990	3,123,333	3,138,867	3,154,479	3,170,168	3,203,623
6	Cost of Purchased Power Transmission	6,579	0	0	0	0	0	0
7	Total Cost of Power	3,145,964	3,134,990	3,123,333	3,138,867	3,154,479	3,170,168	3,203,623
Operating Expenses:								
8	Operations & Maintenance	\$ 1,756,207	\$ 1,552,598	\$ 1,574,459	\$ 1,526,628	\$ 1,548,122	\$ 1,571,344	\$ 1,594,914
9	Customer Accounting	\$ 405,907	\$ 503,975	\$ 511,440	\$ 519,017	\$ 526,705	\$ 534,606	\$ 542,625
10	Administrative & General	\$ 1,158,896	\$ 943,903	\$ 994,825	\$ 1,011,495	\$ 1,028,410	\$ 1,045,645	\$ 1,124,643
11	<i>Amortization of Regulatory Asset</i>	<i>\$ 141,000</i>	<i>\$ 141,000</i>	<i>\$ 141,000</i>	<i>\$ 141,000</i>	<i>\$ 141,000</i>	<i>\$ 141,254</i>	<i>\$ -</i>
12	Total Operating Expense	\$ 6,607,974	\$ 6,276,466	\$ 6,345,057	\$ 6,337,007	\$ 6,398,716	\$ 6,463,017	\$ 6,465,805
Fixed Expenses:								
13	Depreciation Expense	\$ 987,356	\$ 1,014,390	\$ 1,023,863	\$ 1,033,424	\$ 1,043,075	\$ 1,053,558	\$ 1,064,041
14	Tax Expense	\$ 2,149	\$ 2,811	\$ 2,839	\$ 2,868	\$ 2,896	\$ 2,983	\$ 3,072
15	Interest Expense	\$ 556,006	\$ 594,728	\$ 577,487	\$ 532,678	\$ 495,534	\$ 464,597	\$ 442,185
	Interest Difference between RUS and Compass Models		\$ (2,257)	\$ 14,899	\$ 25,213	\$ 15,284	\$ (1,248)	\$ (2,217)
16	Total Cost of Electric Service	\$ 8,153,485	\$ 7,886,138	\$ 7,964,145	\$ 7,931,190	\$ 7,955,505	\$ 7,982,907	\$ 7,972,886
17	Operating Margins	\$ 548,692	\$ 507,562	\$ 412,165	\$ 487,976	\$ 506,762	\$ 522,706	\$ 576,322
18	Nonoperating Margins	\$ 93,343	\$ 166,354	\$ 145,726	\$ 124,244	\$ 101,775	\$ 77,799	\$ 64,334
19	Total Margins	\$ 642,035	\$ 673,916	\$ 557,891	\$ 612,220	\$ 608,537	\$ 600,505	\$ 640,655
			\$ -	\$ -				
Analysis of Revenue, Power Cost								
Analysis of Revenue								
20	Total kWh Revenue	\$ 6,257,126	\$ 5,922,121	\$ 5,932,894	\$ 5,920,184	\$ 5,949,785	\$ 5,979,535	\$ 6,009,432
21	Total Facilities Chg Revenue	\$ 2,406,372	\$ 2,433,708	\$ 2,446,572	\$ 2,458,805	\$ 2,471,099	\$ 2,483,454	\$ 2,495,872
22	kWh Sold	66,719,146	65,409,500	65,052,600	65,377,863	65,704,752	66,033,276	66,363,442
23	Energy Revenue/kWh sold	\$ 0.0938	\$ 0.0905	\$ 0.0912	\$ 0.0906	\$ 0.0906	\$ 0.0906	\$ 0.0906
24	Total Revenue/kWh sold	\$ 0.1299	\$ 0.1277	\$ 0.1288	\$ 0.1282	\$ 0.1282	\$ 0.1282	\$ 0.1282
Analysis of Power Cost								
25	kWh Purchased (inc. losses)	73,435,981	76,059,141	75,388,207	75,763,150	76,139,968	76,518,670	76,899,265
26	cost/kWh Energy	\$ 0.0427	\$ 0.04122	\$ 0.04143	\$ 0.04143	\$ 0.04143	\$ 0.04143	\$ 0.04166

Compass model – Balance Sheet

Balance Sheet								
	2017 Audited	2018	2019	2020	2021	2022	2023	
Assets								
1 Total Utility Plant Beginning Balance	\$ 31,197,874	\$ 31,694,605	\$ 32,954,905	\$ 33,943,170	\$ 34,632,835	\$ 35,323,867	\$ 36,006,209	
2 Plus Distribution Plant Additions	\$ 761,388	\$ 316,765	\$ 295,765	\$ 735,765	\$ 780,765	\$ 735,765	\$ 757,838	
3 Plus Metering System	\$ -	\$ 787,500	\$ 787,500	\$ -	\$ -	\$ -	\$ -	
4 Plus General Plant Additions	\$ -	\$ 230,824	\$ 5,000	\$ 75,000	\$ 35,000	\$ 75,000	\$ 77,250	
5 Less Plant Retirements	\$ 264,657	\$ 74,789	\$ 100,000	\$ 121,100	\$ 124,733	\$ 128,423	\$ 132,329	
6 Total Utility Plant Ending	\$ 31,694,605	\$ 32,954,905	\$ 33,943,170	\$ 34,632,835	\$ 35,323,867	\$ 36,006,209	\$ 36,708,968	
7 Less Accum. Prov. For Depr	\$ 15,265,607	\$ 16,205,208	\$ 17,270,071	\$ 18,323,395	\$ 19,382,737	\$ 20,448,872	\$ 21,521,838	
8 Net Utility Plant	\$ 16,428,998	\$ 16,749,697	\$ 16,673,099	\$ 16,309,440	\$ 15,941,130	\$ 15,557,337	\$ 15,187,130	
9 General Funds for Operations	\$ 724,686	\$ 1,278,453	\$ 646,449	\$ 407,223	\$ 594,001	\$ 1,142,213	\$ 1,100,819	
10 Other Assets	\$ 2,240,341	\$ 2,265,888	\$ 2,436,469	\$ 2,612,588	\$ 2,792,247	\$ 2,991,530	\$ 3,177,486	
11 Southern Regulatory Asset	\$ 705,306	\$ 564,306	\$ 423,306	\$ 282,306	\$ 141,306			
12 Total Assets	\$ 20,099,331	\$ 20,858,344	\$ 20,179,323	\$ 19,611,557	\$ 19,468,684	\$ 19,691,080	\$ 19,465,434	
Equity (Net Assets)								
13 Beginning Equity	\$ 7,342,114	\$ 7,516,577	\$ 8,947,907	\$ 9,093,885	\$ 9,290,718	\$ 9,476,422	\$ 9,646,295	
14 Prior Period Adjustment NW Energy	\$ -	\$ 1,112,068						
15 Plus Margins	\$ 642,035	\$ 673,916	\$ 558,251	\$ 612,532	\$ 608,537	\$ 600,505	\$ 640,655	
16 Less Payment of Capital Credits	\$ (467,573)	\$ (354,653)	\$ (412,273)	\$ (415,700)	\$ (422,833)	\$ (430,632)	\$ (438,337)	
Equity Difference between RUS and Compass models			\$ (359)	\$ (672)	\$ 328	\$ 328	\$ (672)	
17 Total Equity	\$ 7,516,577	\$ 8,947,907	\$ 9,093,526	\$ 9,290,046	\$ 9,476,750	\$ 9,646,623	\$ 9,847,941	
Liabilities								
18 Beginning Long Term Debt	\$ 11,627,218	\$ 12,911,071	\$ 13,310,786	\$ 12,068,364	\$ 10,855,696	\$ 10,050,676	\$ 9,584,352	
19 Plus New Debt for Dist. Mtr. & General Plant	\$ -	\$ 1,575,000	\$ -	\$ -	\$ -	\$ -	\$ (0)	
20 Plus Cushion of Credit CoBank Debt	\$ 2,087,964	\$ -						
21 Less CoBank Principal CoC Loans (2.94% & 3.47%)	\$ (167,437)	\$ (512,796)	\$ (521,101)	\$ (525,703)	\$ (360,927)	\$ 0	\$ -	
22 Less Payments of All Other Principal	\$ (636,674)	\$ (662,489)	\$ (721,321)	\$ (686,965)	\$ (444,093)	\$ (466,324)	\$ (489,732)	
23 Outstanding Long Term Debt	\$ 12,911,071	\$ 13,310,786	\$ 12,068,364	\$ 10,855,696	\$ 10,050,676	\$ 9,584,352	\$ 9,094,620	
24 Less Unamortized Cushion of Credit	\$ (2,363,768)	\$ (1,954,620)	\$ (1,519,936)	\$ (1,059,701)	\$ (574,316)	\$ (65,625)	\$ (0)	
25 Total Ending Long Term Debt	\$ 10,547,304	\$ 11,356,166	\$ 10,548,428	\$ 9,795,995	\$ 9,476,361	\$ 9,518,727	\$ 9,094,620	
26 Other Liabilities	\$ 897,141	\$ 554,271	\$ 537,369	\$ 525,516	\$ 515,574	\$ 525,730	\$ 522,873	
27 NW Energy/FERC overchg settlement	\$ 1,138,310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
28 Total Liabilities	\$ 12,582,754	\$ 11,910,437	\$ 11,085,797	\$ 10,321,511	\$ 9,991,935	\$ 10,044,457	\$ 9,617,493	
29 Total Liabilities and Equity	\$ 20,099,331	\$ 20,858,344	\$ 20,179,323	\$ 19,611,557	\$ 19,468,684	\$ 19,691,080	\$ 19,465,434	

Compass model – Cash Flow Statement

Cash Flow Statement								
		2017 Audited	2018	2019	2020	2021	2022	2023
Sources of Cash								
Cash from Operations								
1	Margins	\$ 642,035	\$ 673,916	\$ 558,251	\$ 612,532	\$ 608,537	\$ 600,505	\$ 640,655
2	Plus Depreciation	\$ 987,356	\$ 1,014,390	\$ 1,023,863	\$ 1,033,424	\$ 1,043,075	\$ 1,053,558	\$ 1,064,041
3	Net Changes to Working Capital	\$ 267,200	\$ (1,182,209)	\$ (46,842)	\$ (47,284)	\$ (47,601)	\$ (48,076)	\$ (49,098)
4	Plus Regulatory Asset Amortization	\$ 141,000	\$ 141,000	\$ 141,000	\$ 141,000	\$ 141,000	\$ 141,306	\$ -
5	Cash from Operations	\$ 2,037,591	\$ 647,097	\$ 1,676,272	\$ 1,739,672	\$ 1,745,011	\$ 1,747,293	\$ 1,655,598
Cash (for) from Financing								
6	Payment of Capital Credits	\$ (467,573)	\$ (354,653)	\$ (412,273)	\$ (415,700)	\$ (422,833)	\$ (430,632)	\$ (438,337)
7	Loans Cushion of Credit Financing	\$ 2,087,964						
8	COC Investment and Earnings into COC	\$ (2,363,768)	\$ (105,947)	\$ (80,170)	\$ (54,392)	\$ (28,958)	\$ (5,382)	\$ -
9	Loan Fund Advances		\$ 1,575,000	\$ -	\$ -	\$ -	\$ -	\$ -
10	CoC Applied to P & I		\$ 515,095	\$ 514,854	\$ 514,626	\$ 514,344	\$ 514,072	\$ 66,165
11	Cushion of Credit Loan payment CoBank	\$ (167,437)	\$ (512,796)	\$ (521,101)	\$ (525,703)	\$ (360,927)	\$ 0	\$ -
12	Loan Fund Payments	\$ (636,674)	\$ (662,489)	\$ (721,321)	\$ (686,965)	\$ (444,093)	\$ (466,324)	\$ (489,732)
13	Cash from Financing	\$ (1,547,487)	\$ 454,210	\$ (1,220,011)	\$ (1,168,134)	\$ (742,468)	\$ (388,265)	\$ (861,903)
Cash (for) from Investments								
14	Construction of Plant	\$ (761,388)	\$ (547,589)	\$ (1,088,265)	\$ (810,765)	\$ (815,765)	\$ (810,816)	\$ (835,088)
15	Cash from Investing	\$ (761,388)	\$ (547,589)	\$ (1,088,265)	\$ (810,765)	\$ (815,765)	\$ (810,816)	\$ (835,088)
16	Net Change to Cash	\$ (271,284)	\$ 553,717	\$ (632,004)	\$ (239,226)	\$ 186,779	\$ 548,211	\$ (41,394)
17	Beginning Cash Balance	\$ 995,970	\$ 724,736	\$ 1,278,453	\$ 646,449	\$ 407,223	\$ 594,001	\$ 1,142,213
18	Cash Ending Balance	\$ 724,736	\$ 1,278,453	\$ 646,449	\$ 407,223	\$ 594,001	\$ 1,142,213	\$ 1,100,819