Direct Testimony of
Barbara Meisenheimer
GR-2010-0192

Class Cost Of Service Study Results

Line	NEMO DISTRICT (Ave&Excess Mains Allocation with 27% Customer Component)	Formula		Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 3,245,054	$ 2,810,304	$ 145,627	$ 176,994	$ 19,363	$ 92,767
2	Depreciation and Amortization Expenses		$ 1,917,043	$ 1,346,420	$ 179,088	$ 239,313	$ 28,768	$ 123,454
3	Taxes		$ 838,898	$ 600,837	$ 72,710	$ 107,768	$ 14,617	$ 42,967
4	Total - Expenses and Taxes	(a)	$ 6,000,995	$ 4,757,560	$ 397,425	$ 524,075	$ 62,748	$ 259,188
5								
6	Current Revenue							
7	Rate Revenue		$ 6,701,552	$ 4,274,281	$ 454,331	$ 1,313,868	$ 145,820	$ 513,253
8	Other Revenue		$ 166,500	$ 106,194	$ 11,288	$ 32,643	$ 3,623	$ 12,752
9	Total - Current Revenues	(b)	$ 6,868,052	$ 4,380,476	$ 465,619	$ 1,346,511	$ 149,443	$ 526,004
10	Current Revenue Percentage		100.00%	63.78%	6.78%	19.61%	2.18%	7.66%
11								
12	Operating Income	(c) = (b) - (a)	$ 867,057	$ (377,085)	$ 68,194	$ 822,436	$ 86,695	$ 266,817
13								
14	Total Rate Base	(d)	$ 27,426,721	$ 19,021,531	$ 2,555,091	$ 3,219,285	$ 244,771	$ 2,386,044
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	3.16%	-1.98%	2.67%	25.55%	35.42%	11.18%
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 867,057	$ 601,339	$ 80,776	$ 101,773	$ 7,738	$ 75,431
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 6,868,052	$ 5,358,899	$ 478,200	$ 625,848	$ 70,486	$ 334,619
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 978,423	$ 12,582	$ (720,663)	$ (78,957)	$ (191,385)
24	Rev. Neutral Shift Percentage to Equalize Class ROR			22.89%	2.77%	-54.85%	-54.15%	-37.29%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			11.45%	1.38%	-27.43%	-27.07%	-18.64%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 489,212	$ 6,291	$ (360,331)	$ (39,478)	$ (95,693)
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 2,376,714	$ 1,854,466	$ 165,483	$ 216,577	$ 24,392	$ 115,796
30				$ 2,343,678	$ 171,774	$ (143,755)	$ (15,086)	$ 20,103
31	Combined Impact Adjustment			$ (146,821)	$ (10,761)	$ 143,755	$ 15,086	$ (1,259)
32	Total Revenue Adjustment		$ 2,376,714	$ 2,196,857	$ 161,013	$ -	$ -	$ 18,844
33								
34	Current Revenue + Total Revenue Adjustment		$ 9,244,766	$ 6,577,333	$ 626,631	$ 1,346,511	$ 149,443	$ 544,848
35	Class Resulting Share of Revenue			71.15%	6.78%	14.57%	1.62%	5.89%
36								
37	Small Customer Charge Calculation							
38	55% of Class Revenue			3617533	344647			
39	Number of Bills			196,248	20,860			
40	Customer Charge			$ 18.43	$ 16.52			

Attachment BAM Direct RD-2
NEMO

Class Cost Of Service Study Results

Line	SEMO DISTRICT (Ave&Excess Mains Allocation with 27% Customer Component)	Formula		Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 4,666,017	$ 3,951,052	$ 237,770	$ 221,236	$ 23,789	$ 232,171
2	Depreciation and Amortization Expenses		$ 1,620,288	$ 1,147,484	$ 166,449	$ 159,030	$ 21,369	$ 125,956
3	Taxes		$ 643,305	$ 507,450	$ 55,184	$ 38,143	$ 825	$ 41,703
4	Total - Expenses and Taxes	(a)	$ 6,929,610	$ 5,605,986	$ 459,403	$ 418,409	$ 45,982	$ 399,830
5								
6	Current Revenue							
7	Rate Revenue		$ 8,392,190	$ 4,894,476	$ 560,566	$ 1,630,196	$ 261,257	$ 1,045,695
8	Other Revenue		$ 192,564	$ 112,307	$ 12,863	$ 37,406	$ 5,995	$ 23,994
9	Total - Current Revenues	(b)	$ 8,584,754	$ 5,006,783	$ 573,428	$ 1,667,602	$ 267,252	$ 1,069,689
10	Current Revenue Percentage		100.00%	58.32%	6.68%	19.43%	3.11%	12.46%
11								
12	Operating Income	(c) = (b) - (a)	$ 1,655,144	$ (599,203)	$ 114,025	$ 1,249,193	$ 221,270	$ 669,860
13								
14	Total Rate Base	(d)	$ 29,676,439	$ 19,541,406	$ 3,092,239	$ 2,994,542	$ 135,730	$ 3,912,522
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	5.58%	-3.07%	3.69%	41.72%	163.02%	17.12%
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 1,655,144	$ 1,089,883	$ 172,463	$ 167,015	$ 7,570	$ 218,213
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 8,584,754	$ 6,695,869	$ 631,866	$ 585,423	$ 53,552	$ 618,043
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 1,689,086	$ 58,438	$ (1,082,178)	$ (213,700)	$ (451,647)
24	Rev. Neutral Shift Percentage to Equalize Class ROR			34.51%	10.42%	-66.38%	-81.80%	-43.19%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			17.26%	5.21%	-33.19%	-40.90%	-21.60%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 844,543	$ 29,219	$ (541,089)	$ (106,850)	$ (225,823)
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 1,763,429	$ 1,375,425	$ 129,794	$ 120,254	$ 11,000	$ 126,955
30				$ 2,219,969	$ 159,013	$ (420,835)	$ (95,849)	$ (98,869)
31	Combined Impact Adjustment			$ (574,409)	$ (41,144)	$ 420,835	$ 95,849	$ 98,869
32	Total Revenue Adjustment		$ 1,763,429	$ 1,645,559	$ 117,869	$ -	$ -	$ -
33								
34	Current Revenue + Total Revenue Adjustment		$ 10,348,183	$ 6,652,342	$ 691,297	$ 1,667,602	$ 267,252	$ 1,069,689
35	Class Resulting Share of Revenue			64.29%	6.68%	16.11%	2.58%	10.34%
36								
37	Small Customer Charge Calculation							
38	55% of Class Revenue			$ 3,658,788	$ 380,213			
39	Number of Bills			346,144	37,523			
40	Customer Charge			$ 10.57	$ 10.13			

Class Cost Of Service Study Results

Line	WEMO DISTRICT (Ave&Excess Mains Allocation with 27% Customer Component)	Formula		Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 631,852	$ 431,022	$ 93,599	$ 60,708	$ 37,356	$ 9,168
2	Depreciation and Amortization Expenses		$ 210,154	$ 153,133	$ 27,321	$ 17,663	$ 10,456	$ 1,580
3	Taxes		$ 123,479	$ 85,689	$ 16,331	$ 12,586	$ 8,004	$ 870
4	Total - Expenses and Taxes	(a)	$ 965,486	$ 669,844	$ 137,251	$ 90,957	$ 55,816	$ 11,617
5								
6	Current Revenue							
7	Rate Revenue		$ 1,261,561	$ 801,120	$ 103,116	$ 227,867	$ 129,458	$ -
8	Other Revenue		$ 25,741	$ 16,346	$ 2,104	$ 4,649	$ 2,641	$ -
9	Total - Current Revenues	(b)	$ 1,287,302	$ 817,466	$ 105,220	$ 232,517	$ 132,099	$ -
10	Current Revenue Percentage		100.00%	63.50%	8.17%	18.06%	10.26%	0.00%
11								
12	Operating Income	(c) = (b) - (a)	$ 321,817	$ 147,622	$ (32,031)	$ 141,559	$ 76,283	$ (11,617)
13								
14	Total Rate Base	(d)	$ 4,455,596	$ 3,019,363	$ 556,895	$ 496,424	$ 361,700	$ 21,214
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	7.52%	4.89%	-5.75%	28.52%	21.09%	
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 335,029	$ 227,035	$ 41,875	$ 37,328	$ 27,197	$ 1,595
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 1,287,302	$ 896,878	$ 179,126	$ 128,285	$ 83,013	$ -
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 79,412	$ 73,905	$ (104,232)	$ (49,086)	$ -
24	Rev. Neutral Shift Percentage to Equalize Class ROR			9.91%	71.67%	-45.74%	-37.92%	0.00%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			4.96%	35.84%	-22.87%	-18.96%	0.00%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 39,706	$ 36,953	$ (52,116)	$ (24,543)	$ -
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 309,125	$ 215,370.84	$ 43,014.13	$ 30,805.57	$ 19,934.33	
30				$ 255,077	$ 79,967	$ (21,310)	$ (4,609)	
31	Combined Impact Adjustment			$ (19,733)	$ (6,186)	$ 21,310	$ 4,609	
32	Total Revenue Adjustment		$ 309,125	$ 235,344	$ 73,781	$ -	$ -	$ -
33								
34	Current Revenue + Total Revenue Adjustment		$ 1,596,427	$ 1,052,810	$ 179,001	$ 232,517	$ 132,099	$ -
35	Class Resulting Share of Revenue			65.95%	11.21%	14.56%	8.27%	0.00%
36								
37	Small Customer Charge Calculation							
38	55% of Class Revenue			$ 579,046	$ 98,451			
39	Number of Bills			40,811	5,253			
40	Customer Charge			$ 14.19	$ 18.74			

Class Cost Of Service Study Results

Line	NEMO DISTRICT (Ave&Peak Mains Allocation with No Customer Component)	Formula		Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 3,245,054	$ 2,729,599	$ 141,332	$ 205,376	$ 25,464	$ 143,283
2	Depreciation and Amortization Expenses		$ 1,917,043	$ 1,246,551	$ 173,774	$ 274,435	$ 36,318	$ 185,965
3	Taxes		$ 838,898	$ 575,290	$ 71,350	$ 116,752	$ 16,549	$ 58,957
4	Total - Expenses and Taxes	(a)	$ 6,000,995	$ 4,551,440	$ 386,456	$ 596,564	$ 78,331	$ 388,205
5								
6	Current Revenue							
7	Rate Revenue		$ 6,701,552	$ 4,274,281	$ 454,331	$ 1,313,868	$ 145,820	$ 513,253
8	Other Revenue		$ 166,500	$ 106,194	$ 11,288	$ 32,643	$ 3,623	$ 12,752
9	Total - Current Revenues	(b)	$ 6,868,052	$ 4,380,476	$ 465,619	$ 1,346,511	$ 149,443	$ 526,004
10	Current Revenue Percentage		100.00%	63.78%	6.78%	19.61%	2.18%	7.66%
11								
12	Operating Income	(c) = (b) - (a)	$ 867,057	$ (170,964)	$ 79,162	$ 749,947	$ 71,112	$ 137,800
13								
14	Total Rate Base	(d)	$ 27,426,721	$ 17,231,168	$ 2,459,820	$ 3,848,926	$ 380,121	$ 3,506,686
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	3.16%	-0.99%	3.22%	19.48%	18.71%	3.93%
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 867,057	$ 544,739	$ 77,764	$ 121,678	$ 12,017	$ 110,859
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 6,868,052	$ 5,096,179	$ 464,220	$ 718,242	$ 90,348	$ 499,064
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 715,703	$ (1,399)	$ (628,268)	$ (59,095)	$ (26,941)
24	Rev. Neutral Shift Percentage to Equalize Class ROR			16.74%	-0.31%	-47.82%	-40.53%	-5.25%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			8.37%	-0.15%	-23.91%	-20.26%	-2.62%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 357,851	$ (699)	$ (314,134)	$ (29,548)	$ (13,470)
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 2,376,714	$ 1,763,551	$ 160,645	$ 248,550	$ 31,265	$ 172,703
30				$ 2,121,402	$ 159,946	$ (65,584)	$ 1,718	$ 159,232
31	Combined Impact Adjustment			$ (56,967)	$ (4,295)	$ 65,584	$ (46)	$ (4,276)
32	Total Revenue Adjustment		$ 2,376,714	$ 2,064,436	$ 155,651	$ -	$ 1,671	$ 154,956
33								
34	Current Revenue + Total Revenue Adjustment		$ 9,244,766	$ 6,444,912	$ 621,269	$ 1,346,511	$ 151,114	$ 680,961
35	Class Resulting Share of Revenue			69.71%	6.72%	14.57%	1.63%	7.37%
36								
37	<u>Small Customer Charge Calculation</u>							
38	55% of Class Revenue			3544701	341698			
39	Number of Bills			196,248	20,860			
40	Customer Charge			$ 18.06	$ 16.38			

Class Cost Of Service Study Results

Line	SEMO DISTRICT (Ave&Peak Mains Allocation with No Customer Component)	Formula	Total	Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 4,666,017	$ 3,822,785	$ 228,111	$ 247,939	$ 34,079	$ 333,103
2	Depreciation and Amortization Expenses		$ 1,620,288	$ 1,096,402	$ 162,603	$ 169,665	$ 25,467	$ 166,152
3	Taxes		$ 643,305	$ 484,932	$ 53,489	$ 42,831	$ 2,631	$ 59,423
4	Total - Expenses and Taxes	(a)	$ 6,929,610	$ 5,404,119	$ 444,202	$ 460,435	$ 62,177	$ 558,677
5								
6	Current Revenue							
7	Rate Revenue		$ 8,392,190	$ 4,894,476	$ 560,566	$ 1,630,196	$ 261,257	$ 1,045,695
8	Other Revenue		$ 192,564	$ 112,307	$ 12,863	$ 37,406	$ 5,995	$ 23,994
9	Total - Current Revenues	(b)	$ 8,584,754	$ 5,006,783	$ 573,428	$ 1,667,602	$ 267,252	$ 1,069,689
10	Current Revenue Percentage		100.00%	58.32%	6.68%	19.43%	3.11%	12.46%
11								
12	Operating Income	(c) = (b) - (a)	$ 1,655,144	$ (397,336)	$ 129,226	$ 1,207,167	$ 205,075	$ 511,012
13								
14	Total Rate Base	(d)	$ 29,676,439	$ 17,869,828	$ 2,966,368	$ 3,342,543	$ 269,830	$ 5,227,871
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	5.58%	-2.22%	4.36%	36.12%	76.00%	9.77%
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 1,655,144	$ 996,654	$ 165,443	$ 186,424	$ 15,049	$ 291,574
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 8,584,754	$ 6,400,773	$ 609,645	$ 646,859	$ 77,226	$ 850,252
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 1,393,990	$ 36,217	$ (1,020,743)	$ (190,026)	$ (219,438)
24	Rev. Neutral Shift Percentage to Equalize Class ROR			28.48%	6.46%	-62.61%	-72.74%	-20.98%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			14.24%	3.23%	-31.31%	-36.37%	-10.49%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 696,995	$ 18,109	$ (510,372)	$ (95,013)	$ (109,719)
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 1,763,429	$ 1,314,808	$ 125,230	$ 132,874	$ 15,863	$ 174,654
30				$ 2,011,803	$ 143,338	$ (377,498)	$ (79,150)	$ 64,935
31	Combined Impact Adjustment			$ (413,808)	$ (29,483)	$ 377,498	$ 79,150	$ (13,356)
32	Total Revenue Adjustment		$ 1,763,429	$ 1,597,995	$ 113,855	$ -	$ -	$ 51,578
33								
34	Current Revenue + Total Revenue Adjustment		$ 10,348,183	$ 6,604,778	$ 687,283	$ 1,667,602	$ 267,252	$ 1,121,268
35	Class Resulting Share of Revenue			63.83%	6.64%	16.11%	2.58%	10.84%
36								
37	Small Customer Charge Calculation							
38	55% of Class Revenue			$ 3,632,628	$ 378,006			
39	Number of Bills			346,144	37,523			
40	Customer Charge			$ 10.49	$ 10.07			

Class Cost Of Service Study Results

Line	WEMO DISTRICT (Ave&Peak Mains Allocation with No Customer Component)	Formula		Residential	Small General Service	Med General Service	Lg General Service	Large Volume and Transport
1	O & M Expenses		$ 631,852	$ 412,847	$ 91,839	$ 68,228	$ 49,770	$ 9,168
2	Depreciation and Amortization Expenses		$ 210,154	$ 149,324	$ 26,953	$ 19,240	$ 13,058	$ 1,580
3	Taxes		$ 123,479	$ 81,772	$ 15,952	$ 14,207	$ 10,679	$ 870
4	Total - Expenses and Taxes	(a)	$ 965,486	$ 643,943	$ 134,743	$ 101,675	$ 73,507	$ 11,617
5								
6	Current Revenue							
7	Rate Revenue		$ 1,261,561	$ 801,120	$ 103,116	$ 227,867	$ 129,458	$ -
8	Other Revenue		$ 25,741	$ 16,346	$ 2,104	$ 4,649	$ 2,641	$ -
9	Total - Current Revenues	(b)	$ 1,287,302	$ 817,466	$ 105,220	$ 232,517	$ 132,099	$ -
10	Current Revenue Percentage		100.00%	63.50%	8.17%	18.06%	10.26%	0.00%
11								
12	Operating Income	(c) = (b) - (a)	$ 321,817	$ 173,523	$ (29,523)	$ 130,842	$ 58,592	$ (11,617)
13								
14	Total Rate Base	(d)	$ 4,455,596	$ 2,878,333	$ 543,240	$ 554,783	$ 458,026	$ 21,214
15								
16	Current Rate Of Return	(e) = (c) ÷ (d)	7.52%	6.03%	-5.43%	23.58%	12.79%	
17								
18	Operating Income Needed To Equalize Class Returns	(f) = 7.40 × (d)	$ 335,029	$ 216,430	$ 40,848	$ 41,716	$ 34,440	$ 1,595
19								
20	Revenue Percentage Needed To Equalized Class Returns	(g) = (f) +(a)	$ 1,287,302	$ 860,373	$ 175,591	$ 143,391	$ 107,947	$ -
22								
23	Rev. Neutral Shift to Equalize Class ROR	(h) = (g) - (b)		$ 42,907	$ 70,371	$ (89,126)	$ (24,152)	$ -
24	Rev. Neutral Shift Percentage to Equalize Class ROR			5.36%	68.24%	-39.11%	-18.66%	0.00%
25								
26	OPC Maximum Recommended Revenue Neutral Shift Percentage			2.68%	34.12%	-19.56%	-9.33%	0.00%
27								
28	1/2 Revenue Neutral Shift Adjustment	(i) = (h) ÷ 2		$ 21,454	$ 35,185	$ (44,563)	$ (12,076)	$ -
29	Additional Revenue Requirement Adjustment (Staff Low Return, Equalized % Increase)		$ 309,125	$ 206,604.73	$ 42,165.38	$ 34,433.04	$ 25,921.72	
30				$ 228,058	$ 77,351	$ (10,130)	$ 13,846	
31	Combined Impact Adjustment			$ (6,654)	$ (2,257)	$ 10,130	$ (404)	
32	Total Revenue Adjustment		$ 309,125	$ 221,405	$ 75,094	$ -	$ 13,442	$ -
33								
34	Current Revenue + Total Revenue Adjustment		$ 1,596,427	$ 1,038,871	$ 180,314	$ 232,517	$ 145,541	$ -
35	Class Resulting Share of Revenue			65.07%	11.29%	14.56%	9.12%	0.00%
36								
37	Small Customer Charge Calculation							
38	55% of Class Revenue			$ 571,379	$ 99,173			
39	Number of Bills			40,811	5,253			
40	Customer Charge			$ 14.00	$ 18.88			