Usage and Bill Impact Analysis Results

Part A: Results for District 1 (Monthly Customers)

Table MRH-Dir-RD2-A1: Summary statistics for customer usage (units of 100 gallons).

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	40.16	36.24	35.20	39.55	39.93	48.63	51.56	45.25	46.99	43.49	38.25	38.38
Median	37.40	29.92	29.92	29.92	29.92	37.40	37.40	29.92	37.40	29.92	29.92	29.92
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5th Percentile	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	5.00	0.00
95th Percentile	97.24	89.76	77.79	89.76	89.76	119.68	134.64	112.20	134.64	127.16	89.76	89.76
Maximum	276.76	276.76	321.64	583.44	568.48	628.32	680.68	912.56	1,151.92	538.56	807.84	493.68

Table MRH-Dir-RD2-A2: Summary statistics for current customer bill calculations.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$31.98	\$30.36	\$29.93	\$31.73	\$31.89	\$35.49	\$36.70	\$34.09	\$34.81	\$33.36	\$31.19	\$31.25
Median	\$30.81	\$27.72	\$27.72	\$27.72	\$27.72	\$30.81	\$30.81	\$27.72	\$30.81	\$27.72	\$27.72	\$27.72
Minimum	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33
5th Percentile	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$18.43	\$17.40	\$15.33
95th Percentile	\$55.59	\$52.49	\$49.39	\$52.49	\$52.49	\$64.88	\$72.31	\$61.78	\$71.07	\$67.97	\$52.49	\$52.49
Maximum	\$129.90	\$129.90	\$148.48	\$256.86	\$250.67	\$275.44	\$297.12	\$393.11	\$492.20	\$238.28	\$349.76	\$219.70

Table MRH-Dir-RD2-A3: Summary statistics for customer bill calculations under Company-proposed rates.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$35.30	\$32.83	\$32.18	\$34.91	\$35.15	\$40.63	\$42.47	\$38.50	\$39.60	\$37.39	\$34.10	\$34.18
Median	\$33.54	\$28.84	\$28.84	\$28.84	\$28.84	\$33.54	\$33.54	\$28.84	\$33.54	\$28.84	\$28.84	\$28.84
Minimum	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
5th Percentile	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$13.15	\$10.00
95th Percentile	\$71.22	\$66.51	\$60.32	\$66.51	\$66.51	\$85.34	\$95.66	\$80.63	\$94.76	\$90.05	\$66.51	\$66.51
Maximum	\$184.23	\$184.23	\$212.48	\$377.29	\$367.88	\$405.55	\$438.51	\$584.48	\$735.17	\$349.04	\$518.56	\$320.79

Table MRH-Dir-RD2-A4: Summary statistics for calculated dollar change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$3.32	\$2.47	\$2.25	\$3.18	\$3.27	\$5.14	\$5.77	\$4.41	\$4.79	\$4.03	\$2.90	\$2.93
Median	\$2.73	\$1.12	\$1.12	\$1.12	\$1.12	\$2.73	\$2.73	\$1.12	\$2.73	\$1.12	\$1.12	\$1.12
Minimum	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$6.53
5th Percentile	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$3.72	-\$4.25	-\$5.33
95th Percentile	\$15.63	\$14.02	\$11.44	\$13.30	\$14.02	\$20.47	\$23.69	\$18.85	\$22.97	\$21.36	\$14.02	\$14.02
Maximum	\$54.33	\$54.33	\$64.00	\$120.43	\$117.21	\$130.10	\$141.39	\$191.37	\$242.97	\$110.76	\$168.80	\$101.08

Table MRH-Dir-RD2-A5: Summary statistics for calculated percentage change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	5.29%	2.95%	2.32%	4.47%	4.55%	7.29%	7.72%	5.09%	6.16%	5.02%	2.71%	3.77%
Median	8.87%	4.04%	4.04%	4.04%	4.04%	8.87%	8.87%	4.04%	8.87%	4.04%	4.04%	4.04%
Minimum	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%
5th Percentile	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-20.18%	-24.71%	-34.77%
95th Percentile	28.12%	26.71%	24.03%	25.75%	26.71%	31.55%	33.34%	30.52%	32.82%	31.92%	26.71%	26.71%
Maximum	41.82%	41.82%	43.10%	46.89%	46.76%	47.23%	47.59%	48.68%	49.36%	46.48%	48.26%	46.01%

Part B: Results for District 1 (Quarterly Customers)

Table MRH-Dir-RD2-B1: Summary statistics for customer usage (units of 100 gallons).

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	172.82	180.28	161.37	144.18	170.87	182.46	200.32	230.68	243.38	190.56	223.55	187.09
Median	134.64	127.16	134.64	119.68	119.68	142.12	142.12	142.12	157.08	119.68	134.64	142.12
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5th Percentile	29.92	29.92	37.40	29.92	29.92	37.40	29.92	29.92	37.40	22.44	29.92	37.40
95th Percentile	396.44	433.84	321.64	299.20	418.88	418.88	523.60	740.52	718.08	590.94	710.60	456.13
Maximum	3,949.44	7,427.64	8,310.28	7,816.60	8,572.08	10,576.72	5,737.16	7,659.52	18,161.44	5,183.64	6,313.12	13,037.64

Table MRH-Dir-RD2-B2: Summary statistics for current customer bill calculations.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$94.34	\$97.10	\$89.25	\$82.46	\$93.35	\$97.84	\$105.74	\$117.96	\$122.73	\$101.68	\$114.95	\$99.58
Median	\$78.09	\$74.99	\$78.09	\$71.90	\$71.90	\$81.18	\$81.18	\$81.18	\$90.47	\$74.12	\$78.09	\$81.18
Minimum	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35	\$22.35
5th Percentile	\$37.83	\$34.74	\$37.83	\$34.74	\$34.74	\$37.83	\$34.74	\$34.74	\$37.83	\$33.93	\$34.74	\$37.83
95th Percentile	\$189.56	\$201.95	\$155.50	\$146.21	\$198.64	\$195.76	\$241.33	\$328.91	\$322.72	\$269.38	\$318.75	\$211.24
Maximum	\$1,662.66	\$3,102.56	\$2,114.76	\$3,263.59	\$3,576.34	\$1,049.54	\$2,402.74	\$3,198.56	\$2,062.12	\$2,173.59	\$2,641.18	\$1,665.01

Table MRH-Dir-RD2-B3: Summary statistics for customer bill calculations under Company-proposed rates.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$139.36	\$143.53	\$131.59	\$121.30	\$137.80	\$144.66	\$156.69	\$175.24	\$182.50	\$150.52	\$170.66	\$147.30
Median	\$114.76	\$110.05	\$114.76	\$105.34	\$105.34	\$119.47	\$119.47	\$119.47	\$133.60	\$107.38	\$114.76	\$119.47
Minimum	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00
5th Percentile	\$53.54	\$48.84	\$53.54	\$48.84	\$48.84	\$53.54	\$48.84	\$48.84	\$53.54	\$47.34	\$48.84	\$53.54
95th Percentile	\$284.28	\$303.12	\$232.48	\$218.36	\$297.74	\$293.70	\$361.66	\$496.18	\$486.76	\$404.58	\$479.39	\$317.24
Maximum	\$2,523.04	\$4,712.67	\$3,210.54	\$4,957.53	\$5,433.13	\$1,590.68	\$3,648.46	\$4,858.65	\$3,130.49	\$3,300.01	\$4,011.05	\$2,526.62

Table MRH-Dir-RD2-B4: Summary statistics for calculated dollar change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$45.02	\$46.42	\$42.34	\$38.84	\$44.46	\$46.82	\$50.95	\$57.28	\$59.77	\$48.84	\$55.71	\$47.73
Median	\$36.67	\$35.06	\$36.67	\$33.45	\$33.45	\$38.28	\$38.28	\$38.28	\$42.94	\$33.45	\$36.67	\$38.28
Minimum	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65	\$7.65
5th Percentile	\$15.53	\$14.10	\$15.71	\$14.10	\$14.10	\$15.71	\$14.10	\$14.10	\$15.71	\$13.56	\$14.10	\$15.71
95th Percentile	\$94.53	\$101.16	\$76.98	\$72.14	\$99.01	\$97.94	\$120.51	\$167.17	\$163.86	\$135.32	\$160.82	\$105.88
Maximum	\$860.38	\$1,610.11	\$1,095.78	\$1,693.95	\$1,856.79	\$541.14	\$1,245.72	\$1,660.09	\$1,068.37	\$1,126.41	\$1,369.87	\$861.61

Table MRH-Dir-RD2-B5: Summary statistics for calculated percentage change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	46.28%	46.08%	46.18%	45.72%	45.79%	46.60%	46.55%	46.52%	47.01%	46.02%	46.29%	46.50%
Median	46.75%	46.52%	46.75%	46.27%	46.27%	47.16%	47.16%	47.16%	47.50%	46.52%	46.75%	46.96%
Minimum	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%	32.82%
5th Percentile	40.59%	40.59%	41.53%	40.59%	39.72%	41.53%	40.59%	40.59%	41.53%	39.47%	40.11%	41.53%
95th Percentile	49.86%	49.94%	49.45%	49.28%	49.89%	49.89%	50.28%	50.72%	50.67%	50.48%	50.64%	50.04%
Maximum	51.76%	51.90%	51.82%	51.90%	51.92%	51.63%	51.85%	51.90%	51.81%	51.82%	51.87%	51.75%

Part C: Results for District 2

Table MRH-Dir-RD2-C1: Summary statistics for customer usage (units of 100 gallons).

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	45.01	38.33	40.30	42.72	42.36	49.78	57.40	52.61	48.30	41.78	39.11	42.09
Median	37.40	31.00	37.40	37.40	37.40	37.40	41.00	37.40	37.40	37.40	29.92	37.40
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5th Percentile	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48
95th Percentile	97.24	82.28	88.80	91.95	97.24	119.68	164.56	149.42	119.68	101.95	89.76	97.24
Maximum	516.12	441.32	366.52	403.92	336.60	441.32	756.00	677.00	429.00	381.48	569.00	463.76

Table MRH-Dir-RD2-C2: Summary statistics for current customer bill calculations.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$36.91	\$33.74	\$34.68	\$35.83	\$35.65	\$39.17	\$42.78	\$40.51	\$38.47	\$35.38	\$34.11	\$35.52
Median	\$33.19	\$31.91	\$33.05	\$33.05	\$33.05	\$33.05	\$36.50	\$33.05	\$33.05	\$33.05	\$29.51	\$33.05
Minimum	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33
5th Percentile	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87	\$18.87
95th Percentile	\$61.40	\$54.31	\$57.76	\$60.27	\$61.40	\$72.03	\$96.70	\$86.20	\$72.03	\$64.84	\$57.86	\$61.40
Maximum	\$259.86	\$224.42	\$188.98	\$206.70	\$174.80	\$227.87	\$373.51	\$336.08	\$218.58	\$196.07	\$284.91	\$235.05

Table MRH-Dir-RD2-C3: Summary statistics for customer bill calculations under Company-proposed rates.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$38.50	\$34.29	\$35.54	\$37.06	\$36.83	\$41.51	\$46.30	\$43.29	\$40.58	\$36.47	\$34.79	\$36.66
Median	\$33.73	\$31.09	\$33.54	\$33.54	\$33.54	\$33.54	\$35.81	\$33.54	\$33.54	\$33.54	\$28.84	\$33.54
Minimum	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
5th Percentile	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71
95th Percentile	\$71.22	\$61.80	\$65.93	\$68.71	\$71.22	\$85.34	\$115.85	\$104.06	\$85.34	\$74.18	\$66.51	\$71.22
Maximum	\$334.91	\$287.82	\$240.74	\$264.28	\$221.90	\$290.07	\$485.92	\$436.19	\$280.07	\$250.15	\$368.20	\$301.95

Table MRH-Dir-RD2-C4: Summary statistics for calculated dollar change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$1.59	\$0.55	\$0.86	\$1.24	\$1.18	\$2.33	\$3.52	\$2.78	\$2.10	\$1.09	\$0.67	\$1.14
Median	\$0.50	-\$0.67	\$0.46	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.12	-\$0.67	\$0.50
Minimum	-\$6.53	-\$6.53	-\$6.53	-\$6.53	-\$6.53	-\$5.36	-\$6.53	-\$5.36	-\$6.53	-\$6.53	-\$5.36	-\$6.53
5th Percentile	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.16	-\$4.20	-\$4.16
95th Percentile	\$9.82	\$7.49	\$7.75	\$8.65	\$9.82	\$13.31	\$20.30	\$17.94	\$12.57	\$10.39	\$8.62	\$9.82
Maximum	\$75.06	\$63.41	\$51.76	\$57.58	\$47.10	\$62.21	\$112.42	\$100.11	\$61.49	\$54.09	\$83.29	\$66.90

Table MRH-Dir-RD2-C5: Summary statistics for calculated percentage change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	0.29%	-2.27%	-1.26%	-0.45%	-0.80%	0.80%	1.57%	0.70%	0.44%	-1.56%	-2.56%	-1.16%
Median	1.50%	-1.93%	1.15%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	0.38%	-2.27%	1.50%
Minimum	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%
5th Percentile	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%	-22.07%
95th Percentile	15.99%	13.78%	13.89%	14.95%	15.98%	18.45%	21.61%	20.33%	18.01%	16.32%	14.82%	15.97%
Maximum	28.88%	28.25%	27.39%	27.86%	26.94%	28.02%	30.10%	29.79%	28.13%	27.59%	29.23%	28.46%

Part D: Results for District 3

Table MRH-Dir-RD2-D1: Summary statistics for customer usage (units of 100 gallons).

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	40.32	34.53	34.21	38.77	38.24	43.84	52.23	46.82	48.37	40.58	37.29	38.19
Median	37.40	29.92	29.92	30.00	29.92	37.40	37.40	33.00	37.40	29.92	29.92	29.92
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5th Percentile	6.95	6.95	5.95	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.46	4.00
95th Percentile	89.76	74.80	74.80	89.76	89.76	104.72	140.10	119.68	127.16	97.24	82.28	86.19
Maximum	374.00	276.76	306.68	366.52	534.00	1,264.12	553.52	688.16	1,346.40	531.08	575.96	422.00

Table MRH-Dir-RD2-D2: Summary statistics for current customer bill calculations.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$30.42	\$28.25	\$28.13	\$29.84	\$29.64	\$31.74	\$34.86	\$32.85	\$33.43	\$30.52	\$29.28	\$29.62
Median	\$29.33	\$26.53	\$26.53	\$26.56	\$26.53	\$29.33	\$29.33	\$27.68	\$29.33	\$26.53	\$26.53	\$26.53
Minimum	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33	\$15.33
5th Percentile	\$17.93	\$17.93	\$17.56	\$18.13	\$18.13	\$18.13	\$18.13	\$18.13	\$18.13	\$18.13	\$18.12	\$16.83
95th Percentile	\$48.92	\$43.32	\$43.32	\$48.92	\$48.92	\$54.52	\$67.74	\$60.12	\$62.92	\$51.72	\$46.12	\$47.58
Maximum	\$155.30	\$118.90	\$130.10	\$152.50	\$215.17	\$488.41	\$222.48	\$272.87	\$519.21	\$214.08	\$230.88	\$173.26

Table MRH-Dir-RD2-D3: Summary statistics for customer bill calculations under Company-proposed rates.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$35.38	\$31.74	\$31.53	\$34.41	\$34.07	\$37.60	\$42.86	\$39.47	\$40.45	\$35.54	\$33.47	\$34.04
Median	\$33.54	\$28.84	\$28.84	\$28.89	\$28.84	\$33.54	\$33.54	\$30.77	\$33.54	\$28.84	\$28.84	\$28.84
Minimum	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
5th Percentile	\$14.38	\$14.38	\$13.75	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.71	\$14.69	\$12.52
95th Percentile	\$66.51	\$57.09	\$57.09	\$66.51	\$66.51	\$75.92	\$98.17	\$85.34	\$90.05	\$71.22	\$61.80	\$64.26
Maximum	\$245.44	\$184.23	\$203.06	\$240.74	\$346.17	\$805.80	\$358.46	\$443.22	\$857.60	\$344.33	\$372.58	\$275.66

Table MRH-Dir-RD2-D4: Summary statistics for calculated dollar change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	\$4.96	\$3.49	\$3.40	\$4.57	\$4.43	\$5.86	\$7.99	\$6.62	\$7.02	\$5.03	\$4.19	\$4.42
Median	\$4.22	\$2.31	\$2.31	\$2.33	\$2.31	\$4.22	\$4.22	\$3.09	\$4.22	\$2.31	\$2.31	\$2.31
Minimum	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33	-\$5.33
5th Percentile	-\$3.56	-\$3.56	-\$3.81	-\$3.42	-\$3.42	-\$3.42	-\$3.42	-\$3.42	-\$3.42	-\$3.42	-\$3.43	-\$4.31
95th Percentile	\$17.58	\$13.77	\$13.77	\$17.58	\$17.58	\$21.40	\$30.42	\$25.22	\$27.13	\$19.49	\$15.68	\$16.67
Maximum	\$90.15	\$65.32	\$72.96	\$88.24	\$130.99	\$317.39	\$135.98	\$170.35	\$338.39	\$130.25	\$141.71	\$102.40

Table MRH-Dir-RD2-D5: Summary statistics for calculated percentage change in customer bills.

	January	February	March	April	May	June	July	August	September	October	November	December
Mean	10.62%	7.17%	6.92%	9.68%	8.50%	11.10%	14.08%	11.32%	12.33%	9.18%	7.89%	8.96%
Median	14.38%	8.70%	8.70%	8.77%	8.70%	14.38%	14.38%	11.18%	14.38%	8.70%	8.70%	8.70%
Minimum	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%	-34.77%
5th Percentile	-19.83%	-19.83%	-21.71%	-18.87%	-18.87%	-18.87%	-18.87%	-18.87%	-18.87%	-18.87%	-18.91%	-25.61%
95th Percentile	35.94%	31.77%	31.77%	35.94%	35.94%	39.26%	44.91%	41.96%	43.12%	37.69%	33.99%	35.04%
Maximum	58.05%	54.94%	56.08%	57.86%	60.88%	64.98%	61.12%	62.43%	65.17%	60.84%	61.38%	59.10%