Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate Docket No. DG 17-048

## Appendix A

## Qualifications

## Present Occupation

## Q. What is your present occupation?

A. I am a consulting economist and President of Ben Johnson Associates, Inc. ${ }^{\circledR}$, a firm of economic and analytic consultants specializing in the area of public utility regulation.

## Educational Background

## Q. What is your educational background?

A. I graduated with honors from the University of South Florida with a Bachelor of Arts degree in Economics in March 1974. I earned a Master of Science degree in Economics at Florida State University in September 1977. The title of my Master's Thesis is a "A Critique of Economic Theory as Applied to the Regulated Firm." Finally, I graduated from Florida State University in April 1982 with the Ph.D. degree in Economics. The title of my doctoral dissertation is "Executive Compensation, Size, Profit, and Cost in the Electric Utility Industry."

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## Clients

Q. What types of clients have employed your firm?

A Much of our work is performed on behalf of public agencies at every level of government involved in utility regulation. These agencies include state regulatory commissions, public counsels, attorneys general, and local governments, among others. We have also worked for a wide variety of different private organizations and firms, both regulated and unregulated. The diversity of our clientele is illustrated below.

## Regulatory Commissions

> Alaska Public Utilities Commission
> Arizona Corporation Commission
> Arkansas Public Service Commission
> Connecticut Department of Public Utility Control
> District of Columbia Public Service Commission
> Idaho Public Utilities Commission
> Idaho State Tax Commission
> Iowa Department of Revenue and Finance
> Kansas State Corporation Commission
> Maine Public Utilities Commission
> Minnesota Department of Public Service

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## Missouri Public Service Commission

National Association of State Utility Consumer Advocates
Nevada Public Service Commission
New Hampshire Public Utilities Commission
North Carolina Utilities Commission—Public Staff
Oklahoma Corporation Commission
Ontario Ministry of Culture and Communications
Staff of the Delaware Public Service Commission
Staff of the Georgia Public Service Commission
Texas Public Utilities Commission
Virginia State Corporation Commission
Washington Utilities and Transportation Commission
West Virginia Public Service Commission—Division of Consumer Advocate
Wisconsin Public Service Commission
Wyoming Public Service Commission

## Public Counsels

Arizona Residential Utility Consumers Office
Colorado Office of Consumer Counsel
Colorado Office of Consumer Services
Connecticut Consumer Counsel
District of Columbia Office of People's Counsel
Florida Public Counsel
Georgia Consumers' Utility Counsel

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    On Behalf of the New Hampshire Office of Consumer Advocate
    Docket No. DG 17-048
Hawaii Division of Consumer Advocacy
Illinois Small Business Utility Advocate Office
Indiana Office of the Utility Consumer Counselor
Iowa Consumer Advocate
Maryland Office of People's Counsel
Minnesota Office of Consumer Services
Missouri Public Counsel
New Hampshire Office of Consumer Advocate
New York State Department of State - Utility Intervention Unit
Ohio Consumer Counsel
Pennsylvania Office of Consumer Advocate
Utah Department of Business Regulation-Committee of Consumer Services
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## Attorneys General

Arkansas Attorney General
Florida Attorney General—Antitrust Division
Idaho Attorney General
Kentucky Attorney General
Michigan Attorney General
Minnesota Attorney General
Nevada Attorney General's Office of Advocate for Customers of Public Utilities
South Carolina Attorney General
Utah Attorney General
Virginia Attorney General
Washington Attorney General

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## Local Governments

## 1

2
,




3

City of Austin, TX
City of Corpus Christi, TX
City of Dallas, TX
City of El Paso, TX
City of Galveston, TX
City of Norfolk, VA
City of Phoenix, AZ
City of Richmond, VA
City of San Antonio, TX
City of Tucson, AZ
County of Augusta, VA
County of Henrico, VA
County of York, VA
Town of Ashland, VA
Town of Blacksburg, VA
Town of Pecos City, TX

## Other Government Agencies <br> Other

Canada-Department of Communications
Hillsborough County Property Appraiser
Provincial Governments of Canada
Sarasota County Property Appraiser

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    On Behalf of the New Hampshire Office of Consumer Advocate
    Docket No. DG 17-048
State of Florida-Department of General Services
United States Department of Justice-Antitrust Division
Utah State Tax Commission
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## Regulated Firms

Alabama Power Company
Americall LDC, Inc.

BC Rail
CommuniGroup
Florida Association of Concerned Telephone Companies, Inc.
LDDS Communications, Inc.
Louisiana/Mississippi Resellers Association
Madison County Telephone Company
Montana Power Company
Mountain View Telephone Company
Nevada Power Company
Network I, Inc.
North Carolina Long Distance Association
Northern Lights Public Utility
Otter Tail Power Company
Pan-Alberta Gas, Ltd.

Resort Village Utility, Inc.
South Carolina Long Distance Association

Stanton Telephone
Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate Docket No. DG 17-048
Teleconnect Company
Tennessee Resellers' Association
Westel Telecommunications
Yelcot Telephone Company, Inc.
6 Other Private Organizations

AARP

Arizona Center for Law in the Public Interest
Black United Fund of New Jersey
Clark Canyon, LLC
Clearwater Paper Company
Coalition of Boise Water Customers
Colorado Energy Advocacy Office
East Maine Medical Center
Georgia Legal Services Program
Harris Corporation
Helca Mining Company
Idaho Small Timber Companies
Independent Energy Producers of Idaho
Interstate Securities Corporation
J.R. Simplot Company

Merrill Trust Company
MICRON Semiconductor, Inc.
Native American Rights Fund
Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate Docket No. DG 17-048
North Carolina Sustainable Energy AssociationSkokomish Indian TribeSouth Carolina Solar Business AllianceTamarack Energy PartnershipTwin Falls Canal CompanyWorld Center for Birds of Prey7
Q. Before becoming a consultant, what was your employment experience?
A. From August 1975 to September 1977, I held the position of Senior Utility Analyst with Office of Public Counsel in Florida. From September 1974 until August 1975, I held the position of Economic Analyst with the same office. Prior to that time, I was employed by the law firm of Holland and Knight as a corporate legal assistant.
Q. In how many formal utility regulatory proceedings have you been involved?
A. I have been actively involved in more than 400 different formal regulatory proceedings concerning electric, telephone, natural gas, railroad, and water and sewer utilities.

Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate Docket No. DG 17-048
Q. Have you done any independent research and analysis in the field of regulatory economics?
A. Yes, I have undertaken extensive research and analysis of various aspects of utility regulation. Initially I prepare reports for the internal use of the Florida Public Counsel, but in the subsequent years I've prepared reports for use by the staff of the Florida Legislature and for submission to the Arizona Corporation Commission, the Florida Public Service Commission, the Canadian Department of Communications, and the Provincial Governments of Canada, among others. In addition, as I already mentioned, my Master's thesis concerned the theory of the regulated firm.
Q. Have you testified previously as an expert witness in the area of public utility regulation?
A. Yes. I have provided expert testimony on more than 300 occasions in proceedings before state courts, federal courts, and regulatory commissions throughout the United States and in Canada. I have presented or have pending expert testimony before 35 state commissions, the Interstate Commerce Commission, the Federal Communications Commission, the District of Columbia Public Service Commission, the Alberta, Canada Public Utilities Board, and the Ontario Ministry of Culture and Communication.

Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate
Docket No. DG 17-048

## Q. What types of companies have you analyzed?

A. My work has involved more than 425 different telephone companies, covering the entire spectrum from AT\&T Communications to Stanton Telephone, and approximately 60 electric utilities. I have also worked on consulting engagements involving more than 35 other regulated firms, including water, sewer, natural gas, and railroad companies.

## Teaching and Publications

## Q. Have you ever lectured on the subject of regulatory economics?

A. Yes, I have lectured to undergraduate classes in economics at Florida State University on various subjects related to public utility regulation and economic theory. I have also addressed conferences and seminars sponsored by such institutions as the National Association of Regulatory Utility Commissioners (NARUC), the Marquette University College of Business Administration, the Utah Division of Public Utilities and the University of Utah, the Competitive Telecommunications Association (COMPTEL), the International Association of Assessing Officers (IAAO), the Michigan State University Institute of Public Utilities, the National Association of State Utility Consumer Advocates (NASUCA), the Rural Electrification Administration (REA) and North Carolina State University.

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Q. Have you published any articles concerning public utility regulation?
A. Yes, I have authored or co-authored the following articles and comments:
"Attrition: A Problem for Public Utilities-Comment." Public Utilities Fortnightly, March 2, 1978, pp. 32-33.
"The Attrition Problem: Underlying Causes and Regulatory Solutions." Public Utilities Fortnightly, March 2, 1978, pp. 17-20.
"The Dilemma in Mixing Competition with Regulation." Public Utilities Fortnightly, February 15, 1979, pp. 15-19. "Cost Allocations: Limits, Problems, and Alternatives." Public Utilities Fortnightly, December 4, 1980, pp. 33-36.
"AT\&T is Wrong." The New York Times, February 13, 1982, p. 19.
"Deregulation and Divestiture in a Changing Telecommunications
Industry," with Sharon D. Thomas. Public Utilities Fortnightly, October 14, 1982, pp. 17-22.

Appendix A, Direct Testimony of Ben Johnson, Ph.D.
On Behalf of the New Hampshire Office of Consumer Advocate Docket No. DG 17-048
"Is the Debt-Equity Spread Always Positive?" Public Utilities Fortnightly, November 25, 1982, pp. 7-8.
"Working Capital: An Evaluation of Alternative Approaches." Electric Rate-Making, December 1982/January 1983, pp. 36-39.
"The Staggers Rail Act of 1980: Deregulation Gone Awry," with Sharon D. Thomas. West Virginia Law Review, Coal Issue 1983, pp. 725-738.
"Bypassing the FCC: An Alternative Approach to Access Charges." Public Utilities Fortnightly, March 7, 1985, pp. 18-23.
"On the Results of the Telephone Network's Demise-Comment," with Sharon D. Thomas. Public Utilities Fortnightly, May 1, 1986, pp. 6-7.
"Universal Local Access Service Tariffs: An Alternative Approach to Access Charges." In Public Utility Regulation in an Environment of Change, edited by Patrick C. Mann and Harry M. Trebing, pp. 63-75. Proceedings of the Institute of Public Utilities Seventeenth Annual Conference. East Lansing, Michigan: Michigan State University Public Utilities Institute, 1987.

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With E. Ray Canterbery. Review of The Economics of Telecommunications: Theory and Policy by John T. Wenders. Southern Economic Journal 54.2 (October 1987).
"The Marginal Costs of Subscriber Loops," A Paper Published in the Proceedings of the Symposia on Marginal Cost Techniques for Telephone Services. The National Regulatory Research Institute, July 15-19, 1990 and August 12-16, 1990.

With E. Ray Canterbery and Don Reading. "Cost Savings from Nuclear Regulatory Reform: An Econometric Model." Southern Economic Journal, January 1996.

## Professional Memberships

## Q. Do you belong to any professional societies?

A. Yes. I am a member of the American Economic Association.

## Illustrative Revision of Marginal Cost Study

| Annual Revenue Responsibility | Company Total | Residential |  |  |  | Commercial and Industrial: Low Load Factor <br> Low Annual Medium Annual High Annual |  |  |  |  |  | Commercial and Industrial: High Load Factor |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | R-1 |  | R-3, R-4 |  | G-41 |  | G-42 |  | G-43 |  | G-51 |  | G-52 |  | G-53 |  | G-54 |
| Total Customer Marginal Costs | \$ 12,679,781 | \$ | 414,200 | \$ | 10,146,365 | \$ | 1,271,010 | \$ | 482,000 | \$ | 24,068 | \$ | 187,960 | \$ | 80,208 | \$ | 27,563 | \$ | 46,406 |
| Total Capacity-Related Marginal Costs | \$ 44,284,977 | \$ | 162,422 |  | 19,100,858 | \$ | 7,508,326 | \$ | 10,418,024 | \$ | 2,739,844 | \$ | 759,955 | \$ | 1,166,727 | \$ | 1,385,386 | \$ | 1,043,435 |
| Total | \$ 56,964,759 | \$ | 576,623 |  | 29,247,224 |  | 8,779,336 | \$ | 10,900,023 | \$ | 2,763,913 | \$ | 947,915 | \$ | 1,246,936 | \$ | 1,412,950 | \$ | 1,089,841 |
| MC-based share of revenue responsibility | 100.0\% | 1.0\% 51.3\% |  |  |  | 15.4\% |  | 19.1\% |  | 4.9\% |  | 1.7\% |  | 2.2\% |  | 2.5\% |  | 1.9\% |  |
| Unit Marginal Costs |  |  | R-1 |  | R-3, R-4 |  | G-41 |  | G-42 |  | G-43 |  | G-51 |  | G-52 |  | G-53 |  | G-54 |
| Customer-Related Unit Marginal Costs Monthly Average per Bill |  |  | \$11.37 |  | \$11.11 |  | \$12.44 |  | \$23.44 |  | \$39.66 |  | \$12.52 |  | \$21.67 |  | \$68.43 |  | \$140.80 |
| Capacity-Related Unit Marginal Costs Annual Average per Therm |  | \$ | 0.2372 | \$ | 0.3353 | \$ | 0.3527 | \$ | 0.3100 | \$ | 0.2856 | \$ | 0.2021 | \$ | 0.1632 | \$ | 0.1402 | \$ | 0.0605 |

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

| Present Rates | Winter | Summer | Proposed Rates | Winter | Summer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost of Gas | \$0.7162 | \$0.4368 | Cost of Gas | \$0.7051 | \$0.4404 |
| LDAC | \$0.0640 |  | LDAC | \$0.0665 |  |
| Customer charge | \$15.27 |  | Customer charge | \$11.50 |  |
| Sales rate |  |  | Sales rate |  |  |
| First Block Size | 0 | 0 | First Block Size | 0 | 0 |
| Block 1 | \$0.2018 | \$0.2018 | Block 1 | \$0.6324 | \$0.6324 |
| Block 2 | \$0.2018 | \$0.2018 | Block 2 | \$0.6324 | \$0.6324 |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$15.27 | \$0.00 | \$15.27 | \$15.27 | \$0.00 | \$15.27 | \$11.50 | \$0.00 | \$11.50 | \$11.50 | \$0.00 | \$11.50 | -\$3.77 | -24.7\% | -\$3.77 | -24.7\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 2 | \$15.67 | \$1.56 | \$17.23 | \$15.67 | \$1.00 | \$16.68 | \$12.77 | \$1.54 | \$14.31 | \$12.77 | \$1.01 | \$13.78 | -\$2.93 | -17.0\% | -\$2.90 | -17.4\% | \$8.6170 | \$8.3376 | \$7.1544 | \$6.8897 |
| 4 | \$16.08 | \$3.12 | \$19.20 | \$16.08 | \$2.00 | \$18.08 | \$14.03 | \$3.09 | \$17.12 | \$14.03 | \$2.03 | \$16.06 | -\$2.08 | -10.8\% | -\$2.02 | -11.2\% | \$4.7995 | \$4.5201 | \$4.2792 | \$4.0145 |
| 6 | \$16.48 | \$4.68 | \$21.16 | \$16.48 | \$3.00 | \$19.49 | \$15.30 | \$4.63 | \$19.92 | \$15.30 | \$3.04 | \$18.34 | -\$1.24 | -5.8\% | -\$1.15 | -5.9\% | \$3.5270 | \$3.2476 | \$3.3208 | \$3.0561 |
| 8 | \$16.88 | \$6.24 | \$23.13 | \$16.88 | \$4.01 | \$20.89 | \$16.56 | \$6.17 | \$22.73 | \$16.56 | \$4.06 | \$20.62 | -\$0.39 | -1.7\% | -\$0.28 | -1.3\% | \$2.8908 | \$2.6114 | \$2.8416 | \$2.5769 |
| 10 | \$17.29 | \$7.80 | \$25.09 | \$17.29 | \$5.01 | \$22.30 | \$17.82 | \$7.72 | \$25.54 | \$17.82 | \$5.07 | \$22.89 | \$0.45 | 1.8\% | \$0.60 | 2.7\% | \$2.5090 | \$2.2296 | \$2.5541 | \$2.2894 |
| 15 | \$18.30 | \$11.70 | \$30.00 | \$18.30 | \$7.51 | \$25.81 | \$20.99 | \$11.57 | \$32.56 | \$20.99 | \$7.60 | \$28.59 | \$2.56 | 8.5\% | \$2.78 | 10.8\% | \$2.0000 | \$1.7206 | \$2.1707 | \$1.9060 |
| 20 | \$19.31 | \$15.60 | \$34.91 | \$19.31 | \$10.02 | \$29.32 | \$24.15 | \$15.43 | \$39.58 | \$24.15 | \$10.14 | \$34.29 | \$4.67 | 13.4\% | \$4.96 | 16.9\% | \$1.7455 | \$1.4661 | \$1.9790 | \$1.7143 |
| 25 | \$20.32 | \$19.51 | \$39.82 | \$20.32 | \$12.52 | \$32.84 | \$27.31 | \$19.29 | \$46.60 | \$27.31 | \$12.67 | \$39.98 | \$6.78 | 17.0\% | \$7.15 | 21.8\% | \$1.5928 | \$1.3134 | \$1.8640 | \$1.5993 |
| 30 | \$21.32 | \$23.41 | \$44.73 | \$21.32 | \$15.02 | \$36.35 | \$30.47 | \$23.15 | \$53.62 | \$30.47 | \$15.21 | \$45.68 | \$8.89 | 19.9\% | \$9.33 | 25.7\% | \$1.4910 | \$1.2116 | \$1.7873 | \$1.5226 |
| 35 | \$22.33 | \$27.31 | \$49.64 | \$22.33 | \$17.53 | \$39.86 | \$33.63 | \$27.01 | \$60.64 | \$33.63 | \$17.74 | \$51.38 | \$11.00 | 22.2\% | \$11.51 | 28.9\% | \$1.4183 | \$1.1389 | \$1.7326 | \$1.4679 |
| 40 | \$23.34 | \$31.21 | \$54.55 | \$23.34 | \$20.03 | \$43.37 | \$36.80 | \$30.86 | \$67.66 | \$36.80 | \$20.28 | \$57.07 | \$13.11 | 24.0\% | \$13.70 | 31.6\% | \$1.3638 | \$1.0844 | \$1.691 | \$1.4268 |
| 45 | \$24.35 | \$35.11 | \$59.46 | \$24.35 | \$22.54 | \$46.89 | \$39.96 | \$34.72 | \$74.68 | \$39.96 | \$22.81 | \$62.77 | \$15.22 | 25.6\% | \$15.88 | 33.9\% | \$1.3213 | \$1.0419 | \$1.659 | \$1.3949 |
| 50 | \$25.36 | \$39.01 | \$64.37 | \$25.36 | \$25.04 | \$50.40 | \$43.12 | \$38.58 | \$81.70 | \$43.12 | \$25.35 | \$68.47 | \$17.33 | 26.9\% | \$18.07 | 35.8\% | \$1.2874 | \$1.0080 | \$1.634 | \$1.3693 |
| 60 | \$27.38 | \$46.81 | \$74.19 | \$27.38 | \$30.05 | \$57.43 | \$49.44 | \$46.30 | \$95.74 | \$49.44 | \$30.41 | \$79.86 | \$21.55 | 29.0\% | \$22.43 | 39.1\% | \$1.2365 | \$0.9571 | \$1.5957 | \$1.3310 |
| 70 | \$29.40 | \$54.61 | \$84.01 | \$29.40 | \$35.06 | \$64.45 | \$55.77 | \$54.01 | \$109.78 | \$55.77 | \$35.48 | \$91.25 | \$25.77 | 30.7\% | \$26.80 | 41.6\% | \$1.2001 | \$0.9207 | \$1.5683 | \$1.3036 |
| 80 | \$31.41 | \$62.42 | \$93.83 | \$31.41 | \$40.06 | \$71.48 | \$62.09 | \$61.73 | \$123.82 | \$62.09 | \$40.55 | \$102.64 | \$29.99 | 32.0\% | \$31.17 | 43.6\% | \$1.1729 | \$0.8935 | \$1.5477 | \$1.2830 |
| 90 | \$33.43 | \$70.22 | \$103.65 | \$33.43 | \$45.07 | \$78.50 | \$68.41 | \$69.45 | \$137.86 | \$68.41 | \$45.62 | \$114.04 | \$34.21 | 33.0\% | \$35.53 | 45.3\% | \$1.1517 | \$0.8723 | \$1.5318 | \$1.2671 |
| 100 | \$35.45 | \$78.02 | \$113.47 | \$35.45 | \$50.08 | \$85.53 | \$74.74 | \$77.16 | \$151.90 | \$74.74 | \$50.69 | \$125.43 | \$38.43 | 33.9\% | \$39.90 | 46.6\% | \$1.1347 | \$0.8553 | \$1.5190 | \$1.2543 |
| 200 | \$55.63 | \$156.04 | \$211.67 | \$55.63 | \$100.16 | \$155.79 | \$137.98 | \$154.32 | \$292.30 | \$137.98 | \$101.38 | \$239.36 | \$80.63 | 38.1\% | \$83.57 | 53.6\% | \$1.0584 | \$0.7790 | \$1.4615 | \$1.1968 |

[^0]Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
RATE R-3 : RESIDENTIAL HEATING

| Present Rates | Winter | Summer |
| :--- | ---: | ---: |
| Cost of Gas | $\$ 0.7162$ | $\$ 0.4368$ |
| LDAC | $\$ 0.0640$ |  |
| Customer charge | $\$ 22.10$ |  |
| Sales rate |  |  |
| First Block Size | 100 | 20 |
| Block 1 | $\$ 0.3095$ | $\$ 0.3495$ |
| Block 2 | $\$ 0.2892$ | $\$ 0.2892$ |$\quad$| Proposed Rates | Winter | Summer |
| :--- | ---: | ---: | ---: |
| Cost of Gas | $\$ 0.7051$ | $\$ 0.4404$ |
| LDAC | $\$ 0.0665$ |  |
| Customer charge | $\$ 12.75$ |  |
| Sales rate |  |  |
| First Block Size | 100 | 20 |
| Block 1 | $\$ 0.6535$ | $\$ 0.6535$ |
| Block 2 | $\$ 0.6535$ | $\$ 0.6535$ |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | nter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG / LDAC | TOTAL | Base Rates | COG / LDAC | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$22.10 | \$0.00 | \$22.10 | \$22.10 | 0.00 | 2.10 | 2.75 | 0.00 | . 75 | \$12.75 | 0.00 | \$12.75 | \$9.35 | -42.3\% | -\$9.35 | -42.3 | 0.0000 | \$0.0000 | 0.0000 | 00 |
| 10 | \$25.60 | \$7.80 | \$33.40 | \$25.60 | \$5.01 | \$30.60 | \$19.28 | \$7.72 | \$27.00 | \$19.28 | \$5.07 | \$24.35 | -\$6.40 | -19.2\% | -\$6.25 | -20.4\% | \$3.3397 | \$3.0603 | \$2.699 | \$2.4349 |
| 25 | \$30.84 | \$19.51 | \$50.34 | \$30.54 | \$12.52 | \$43.06 | \$29.08 | \$19.29 | \$48.37 | \$29.08 | \$12.67 | \$41.76 | -\$1.97 | -3.9\% | -\$1.30 | -3.0\% | \$2.0137 | \$1.7222 | \$1.9349 | \$1.6702 |
| 50 | \$39.58 | \$39.01 | \$78.59 | \$37.77 | \$25.04 | \$62.81 | \$45.42 | \$38.58 | \$84.00 | \$45.42 | \$25.35 | \$70.77 | \$5.42 | 6.9\% | \$7.96 | 12.7\% | \$1.5717 | \$1.2561 | \$1.6800 | \$1.4153 |
| 75 | \$48.31 | \$58.52 | \$106.83 | \$45.00 | \$37.56 | \$82.56 | \$61.76 | \$57.87 | \$119.63 | \$61.76 | \$38.02 | \$99.78 | \$12.80 | 12.0\% | \$17.22 | 20.9\% | \$1.4244 | \$1.1007 | \$1.5951 | \$1.3304 |
| 100 | \$57.05 | \$78.02 | \$135.07 | \$52.23 | \$50.08 | \$102.31 | \$78.10 | \$77.16 | \$155.26 | \$78.10 | \$50.69 | \$128.79 | \$20.19 | 14.9\% | \$26.48 | 25.9\% | \$1.3507 | \$1.0231 | \$1.5526 | \$1.2879 |
| 125 | \$64.28 | \$97.53 | \$161.81 | \$59.46 | \$62.60 | \$122.06 | \$94.43 | \$96.45 | \$190.89 | \$94.43 | \$63.36 | \$157.80 | \$29.08 | 18.0\% | \$35.74 | 29.3\% | \$1.2944 | \$0.9764 | \$1.5271 | \$1.2624 |
| 150 | \$71.51 | \$117.03 | \$188.54 | \$66.69 | \$75.12 | \$141.81 | \$110.77 | \$115.74 | \$226.51 | \$110.77 | \$76.04 | \$186.81 | \$37.97 | 20.1\% | \$45.00 | 31.7\% | \$1.2569 | \$0.9454 | \$1.5101 | \$1.2454 |
| 175 | \$78.74 | \$136.54 | \$215.28 | \$73.92 | \$87.64 | \$161.56 | \$127.11 | \$135.03 | \$262.14 | \$127.11 | \$88.71 | \$215.82 | \$46.87 | 21.8\% | \$54.26 | 33.6\% | \$1.2301 | \$0.9232 | \$1.4980 | \$1.2333 |
| 200 | \$85.97 | \$156.04 | \$242.01 | \$81.15 | \$100.16 | \$181.31 | \$143.45 | 154.32 | 297.77 | \$143.45 | \$101.38 | \$244.83 | \$55.76 | 23.0\% | \$63.52 | 35.0\% | \$1.2101 | \$0.9065 | \$1.4888 | \$1.2241 |
| 225 | \$93.20 | \$175.55 | \$268.75 | 88.38 | \$112.68 | \$201.06 | \$159.78 | 73.61 | 333.40 | \$159.78 | \$114.06 | \$273.84 | \$64.65 | 24.1\% | \$72.78 | 36.2\% | \$1.1944 | \$0.8936 | \$1.4818 | \$1.2171 |
| 250 | \$100.43 | \$195.05 | \$295.48 | \$95.61 | \$125.20 | \$220.81 | \$176.12 | 192.90 | 69.03 | \$176.12 | \$126.73 | \$302.85 | \$73.55 | 24.9\% | \$82.04 | 37.2\% | \$1.1819 | \$0.8832 | \$1.4761 | \$1.2114 |
| 275 | \$107.6 | \$214.56 | 22.2 | \$102.84 | \$137.72 | \$240.56 | \$192.46 | \$212.19 | \$404.65 | \$192.46 | \$139.40 | \$331.86 | \$82.44 | 25.6\% | \$91.30 | 38.0\% | \$1.1717 | \$0.8747 | \$1.4715 | \$1.2068 |
| 300 | \$114.89 | \$234.06 | \$348.9 | \$110.07 | \$150.24 | \$260.31 | \$208.80 | \$231.48 | \$440.28 | \$208.80 | \$152.07 | \$360.87 | \$91.33 | 26.2\% | \$100.57 | 38.6\% | \$1.1632 | \$0.8677 | \$1.4676 | \$1.2029 |
| 350 | \$129.35 | \$273.07 | \$402.42 | \$124.53 | \$175.28 | \$299.81 | \$241.47 | \$270.07 | \$511.54 | \$241.47 | \$177.42 | \$418.89 | \$109.12 | 27.1\% | \$119.09 | 39.7\% | \$1.1498 | \$0.8566 | \$1.4615 | \$1.1968 |
| 400 | \$143.81 | \$312.08 | \$455.89 | \$138.99 | \$200.32 | \$339.31 | \$274.15 | \$308.65 | \$582.79 | \$274.15 | \$202.77 | \$476.91 | \$126.90 | 27.8\% | \$137.61 | 40.6\% | \$1.1397 | \$0.8483 | \$1.4570 | \$1.1923 |
| 450 | \$158.27 | \$351.09 | \$509.36 | \$153.45 | \$225.36 | \$378.81 | \$306.82 | \$347.23 | \$654.05 | \$306.82 | \$228.11 | \$534.93 | \$144.69 | 28.4\% | \$156.13 | 41.2\% | \$1.1319 | \$0.8418 | \$1.4534 | \$1.1887 |
| 500 | \$172.73 | \$390.10 | \$562.83 | \$167.91 | \$250.40 | \$418.31 | \$339.50 | \$385.81 | \$725.31 | \$339.50 | \$253.46 | \$592.96 | \$162.48 | 28.9\% | \$174.65 | 41.8\% | \$1.1257 | \$0.8366 | \$1.4506 | \$1.1859 |
| 750 | \$245.03 | \$585.15 | \$830.18 | \$240.21 | \$375.60 | \$615.81 | \$502.88 | \$578.71 | \$1,081.59 | \$502.88 | \$380.19 | \$883.06 | \$251.41 | 30.3\% | \$267.26 | 43.4\% | \$1.1069 | \$0.8211 | \$1.4421 | \$1.1774 |
| 1,000 | \$317.33 | \$780.20 | \$1,097.53 | \$312.51 | \$500.80 | \$813.31 | \$666.25 | \$771.61 | \$1,437.87 | \$666.25 | \$506.91 | \$1,173.17 | \$340.34 | 31.0\% | \$359.86 | 44.2\% | \$1.0975 | \$0.8133 | \$1.4379 | \$1.1732 |

Estimated Bill Percentiles
Winter

| $\begin{array}{\|l\|} \hline \$ 43.07 \\ \$ 57.05 \\ \$ 78.74 \\ \hline \end{array}$ | $\begin{array}{r} \hline \$ 46.81 \\ \$ 78.02 \\ \$ 136.54 \end{array}$ | $\begin{array}{r} \$ 89.88 \\ \$ 135.07 \\ \$ 215.28 \end{array}$ |  |  |  | \$51.96 | \$46.30 | \$98.25 |  |  |  | \$8.37 | 9.3\% |  |  | \$1.4980 |  | \$1.6375 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | \$78.10 | \$77.16 | \$155.26 |  |  |  | \$20.19 | 14.9\% |  |  | \$1.3507 |  | \$1.5526 |  |
|  |  |  |  |  |  | \$127.11 | \$135.03 | \$262.14 |  |  |  | \$46.87 | 21.8\% |  |  | \$1.2301 |  | \$1.4980 |  |
|  |  |  | \$26.29 | \$6.01 | \$32.30 |  |  |  | \$20.59 | \$6.08 | \$26.67 |  |  | -\$5.63 | -17.4\% |  | \$2.6920 |  | \$2.2225 |
|  |  |  | \$29.09 | \$10.02 | \$39.11 |  |  |  | \$25.82 | \$10.14 | \$35.95 |  |  | -\$3.15 | -8.1\% |  | \$1.9553 |  | \$1.7977 |
|  |  |  | \$31.98 | \$15.02 | \$47.01 |  |  |  | \$32.35 | \$15.21 | \$47.56 |  |  | \$0.55 | 1.2\% |  | \$1.5669 |  | \$1.5853 |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
RATE R-4 : LOW INCOME RESIDENTIAL HEATING

| Present Rates | Winter | Summer |
| :--- | ---: | ---: |
| Cost of Gas | $\$ 0.7162$ | $\$ 0.4368$ |
| LDAC | $\$ 0.0640$ |  |
| Customer charge | $\$ 8.84$ |  |
| Salos rate |  |  |
| First Block Size | 100 | 20 |
| Block 1 | $\$ 0.1398$ | $\$ 0.1398$ |
| Block 2 | $\$ 0.1156$ | $\$ 0.1156$ |$\quad$| Proposed Rates | Winter | Summer |
| :--- | ---: | ---: | ---: |
| Cost of Gas | $\$ 0.7051$ | $\$ 0.4404$ |
| LDAC | $\$ 0.0665$ |  |
| Customer charge | $\$ 5.10$ |  |
| Sales rate |  |  |
| First Block Size | 100 | 20 |
| Block 1 | $\$ 0.2614$ | $\$ 0.2614$ |
| Block 2 | $\$ 0.2614$ | $\$ 0.2614$ |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base <br> Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$8.84 | \$0.00 | \$8.84 | \$8.84 | \$0.00 | \$8.84 | \$5.10 | \$0.00 | \$5.10 | \$5.10 | \$0.00 | \$5.10 | -\$3.74 | -42.3\% | -\$3.74 | -42.3\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 10 | \$10.24 | \$7.80 | \$18.04 | \$10.24 | \$5.01 | \$15.25 | \$7.71 | \$7.72 | \$15.43 | \$7.71 | \$5.07 | \$12.78 | -\$2.61 | -14.5\% | -\$2.46 | -16.2\% | \$1.8040 | \$1.5246 | \$1.5428 | \$1.2781 |
| 25 | \$12.34 | \$19.51 | \$31.84 | \$12.21 | \$12.52 | \$24.73 | \$11.63 | \$19.29 | \$30.92 | \$11.63 | \$12.67 | \$24.31 | -\$0.92 | -2.9\% | -\$0.43 | -1.7\% | \$1.2736 | \$0.9894 | \$1.2369 | \$0.9722 |
| 50 | \$15.83 | \$39.01 | \$54.84 | \$15.10 | \$25.04 | \$40.14 | \$18.17 | \$38.58 | \$56.75 | \$18.17 | \$25.35 | \$43.51 | \$1.91 | 3.5\% | \$3.37 | 8.4\% | \$1.0968 | \$0.8029 | \$1.1350 | \$0.8703 |
| 75 | \$19.33 | \$58.52 | \$77.84 | \$17.99 | \$37.56 | \$55.55 | \$24.70 | \$57.87 | \$82.57 | \$24.70 | \$38.02 | \$62.72 | \$4.73 | 6.1\% | \$7.17 | 12.9\% | \$1.0379 | \$0.7407 | \$1.1010 | \$0.8363 |
| 100 | \$22.82 | \$78.02 | \$100.84 | \$20.88 | \$50.08 | \$70.96 | \$31.24 | \$77.16 | \$108.40 | \$31.24 | \$50.69 | \$81.93 | \$7.56 | 7.5\% | \$10.97 | 15.5\% | \$1.0084 | \$0.7096 | \$1.0840 | \$0.8193 |
| 125 | \$25.71 | \$97.53 | \$123.24 | \$23.77 | \$62.60 | \$86.37 | \$37.77 | \$96.45 | \$134.23 | \$37.77 | \$63.36 | \$101.14 | \$10.99 | 8.9\% | \$14.76 | 17.1\% | \$0.9859 | \$0.6910 | \$1.0738 | \$0.8091 |
| 150 | \$28.60 | \$117.03 | \$145.63 | \$26.66 | \$75.12 | \$101.78 | \$44.31 | \$115.74 | \$160.05 | \$44.31 | \$76.04 | \$120.35 | \$14.42 | 9.9\% | \$18.56 | 18.2\% | \$0.9709 | \$0.6786 | \$1.0670 | \$0.8023 |
| 175 | \$31.49 | \$136.54 | \$168.03 | \$29.55 | \$87.64 | \$117.19 | \$50.84 | \$135.03 | \$185.88 | \$50.84 | \$88.71 | \$139.55 | \$17.85 | 10.6\% | \$22.36 | 19.1\% | \$0.9601 | \$0.6697 | \$1.0621 | \$0.7974 |
| 200 | \$34.3 | \$156.04 | \$190.42 | \$32.44 | \$100.16 | \$132.60 | \$57.38 | \$154.32 | \$211.70 | \$57.38 | \$101.38 | \$158.76 | \$21.28 | 11.2\% | \$26.16 | 19.7\% | \$0.9521 | \$0.6630 | \$1.0585 | \$0.7938 |
| 225 | \$37.27 | \$175.55 | \$212.82 | \$35.33 | \$112.68 | \$148.01 | \$63.91 | \$173.61 | \$237.53 | \$63.91 | \$114.06 | \$177.97 | \$24.71 | 11.6\% | \$29.96 | 20.2\% | \$0.9458 | \$0.6578 | \$1.0557 | \$0.7910 |
| 250 | \$40.16 | \$195.05 | \$235.21 | \$38.22 | \$125.20 | \$163.42 | \$70.45 | \$192.90 | \$263.35 | \$70.45 | \$126.73 | \$197.18 | \$28.14 | 12.0\% | \$33.75 | 20.7\% | \$0.9408 | \$0.6537 | \$1.0534 | \$0.7887 |
| 275 | \$43.05 | \$214.56 | \$257.61 | \$41.11 | \$137.72 | \$178.83 | \$76.98 | \$212.19 | \$289.18 | \$76.98 | \$139.40 | \$216.39 | \$31.57 | 12.3\% | \$37.55 | 21.0\% | \$0.9367 | \$0.6503 | \$1.0516 | \$0.7869 |
| 300 | \$45.94 | \$234.06 | \$280.00 | \$44.00 | \$150.24 | \$194.24 | \$83.52 | \$231.48 | \$315.00 | \$83.52 | \$152.07 | \$235.59 | \$35.00 | 12.5\% | \$41.35 | 21.3\% | \$0.9333 | \$0.6475 | \$1.0500 | \$0.7853 |
| 350 | \$51.72 | \$273.07 | \$324.79 | \$49.78 | \$175.28 | \$225.06 | \$96.59 | \$270.07 | \$366.65 | \$96.59 | \$177.42 | \$274.01 | \$41.86 | 12.9\% | \$48.95 | 21.7\% | \$0.9280 | \$0.6430 | \$1.0476 | \$0.7829 |
| 400 | \$57.50 | \$312.08 | \$369.58 | \$55.56 | \$200.32 | \$255.88 | \$109.66 | \$308.65 | \$418.30 | \$109.66 | \$202.77 | \$312.42 | \$48.72 | 13.2\% | \$56.54 | 22.1\% | \$0.9240 | \$0.6397 | \$1.0458 | \$0.7811 |
| 450 | \$63.28 | \$351.09 | \$414.37 | \$61.34 | \$225.36 | \$286.70 | \$122.73 | \$347.23 | \$469.96 | \$122.73 | \$228.11 | \$350.84 | \$55.59 | 13.4\% | \$64.14 | 22.4\% | \$0.9208 | \$0.6371 | \$1.0443 | \$0.7796 |
| 500 | \$69.06 | \$390.10 | \$459.16 | \$67.12 | \$250.40 | \$317.52 | \$135.80 | \$385.81 | \$521.61 | \$135.80 | \$253.46 | \$389.26 | \$62.45 | 13.6\% | \$71.73 | 22.6\% | \$0.9183 | \$0.6350 | \$1.0432 | \$0.7785 |
| 750 | \$97.96 | \$585.15 | \$683.11 | \$96.02 | \$375.60 | \$471.62 | \$201.15 | \$578.71 | \$779.86 | \$201.15 | \$380.19 | \$581.34 | \$96.75 | 14.2\% | \$109.71 | 23.3\% | \$0.9108 | \$0.6288 | \$1.0398 | \$0.7751 |
| 1,000 | \$126.86 | \$780.20 | \$907.06 | \$124.92 | \$500.80 | \$625.72 | \$266.50 | \$771.61 | \$1,038.12 | \$266.50 | \$506.91 | \$773.42 | \$131.06 | 14.4\% | \$147.69 | 23.6\% | \$0.9071 | \$0.6257 | \$1.0381 | \$0.7734 |

Estimated Bill Percentiles Winter -
$25 \%$
Winter
W0\%
$75 \%$
Summer
25\%
50\%
Summ
43 75\%

| 70 | $\$ 18.63$ | $\$ 54.61$ | $\$ 73.2$ |
| :---: | ---: | ---: | ---: |
| 100 | $\$ 22.82$ | $\$ 78.02$ | $\$ 100.8$ |
| 150 | $\$ 28.60$ | $\$ 117.03$ | $\$ 145.6$ |
| 14 |  |  |  |
| 25 |  |  |  |
| 40 |  |  |  |
|  |  |  |  |


|  |  |  |
| :--- | ---: | ---: |
|  |  |  |
|  |  |  |
| $\$ 10.80$ | $\$ 7.01$ | $\$ 17.81$ |
| $\$ 12.21$ | $\$ 12.52$ | $\$ 24.73$ |
| $\$ 13.95$ | $\$ 20.03$ | $\$ 33.98$ |


| 41 |  |  |  | $\$ 4.17$ |
| ---: | ---: | ---: | ---: | ---: |


| $\$ 1.0463$ |  | $\$ 1.1058$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\$ 1.0084$ |  | $\$ 1.0840$ |  |  |
|  | $\$ 0.9709$ |  | $\$ 1.0670$ |  |
| $.0 \%$ |  | $\$ 1.2720$ |  | $\$ 1.1325$ |
| $.7 \%$ |  | $\$ 0.9894$ |  | $\$ 0.9722$ |
| $.4 \%$ |  | $\$ 0.8495$ |  | $\$ 0.8958$ |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

| Present Rates | Winter | Summer | Proposed Rates | Winter | Summer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost of Gas | \$0.7121 | \$0.4206 | Cost of Gas | \$0.7010 | \$0.4242 |
| LDAC | \$0.0450 |  | LDAC | \$0.0475 |  |
| Customer charge | \$48.36 |  | Customer charge | \$35.00 |  |
| Sales rate |  |  | Sales rate |  |  |
| First Block Size | 100 | 20 | First Block Size | 100 | 20 |
| Block 1 | \$0.3965 | \$0.3965 | Block 1 | \$0.5977 | \$0.5977 |
| Block 2 | \$0.2663 | \$0.2663 | Block 2 | \$0.4806 | \$0.4806 |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG / | TOTAL | Base Rates | COG/ | TOTAL | Base Rates | COG/ | TOTAL | Base Rates | COG / LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$48 | \$0 | \$48 | \$48 | \$0 | \$48 | \$35 | \$0 | \$35 | \$35 | \$0 | \$35 | -\$13.36 | -27.6\% | -\$13.36 | -27.6\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 10 | \$52 | \$8 | \$60 | \$52 | \$5 | \$57 | \$41 | \$7 | \$48 | \$41 | \$5 | \$46 | -\$11.43 | -19.1\% | -\$11.28 | -19.8\% | \$5.9896 | \$5.6981 | \$4.8465 | \$4.5697 |
| 25 | \$58 | \$19 | \$77 | \$58 | \$12 | \$69 | \$50 | \$19 | \$69 | \$49 | \$12 | \$61 | -\$8.54 | -11.1\% | -\$8.11 | -11.7\% | \$3.0880 | \$2.7705 | \$2.7464 | \$2.4461 |
| 50 | \$68 | \$38 | \$106 | \$64 | \$23 | \$88 | \$65 | \$37 | \$102 | \$61 | \$24 | \$85 | -\$3.73 | -3.5\% | -\$2.60 | -3.0\% | \$2.1208 | \$1.7512 | \$2.0463 | \$1.6992 |
| 75 | \$78 | \$57 | \$135 | \$71 | \$35 | \$106 | \$80 | \$56 | \$136 | \$73 | \$35 | \$109 | \$1.09 | 0.8\% | \$2.91 | 2.7\% | \$1.7984 | \$1.4114 | \$1.8129 | \$1.4502 |
| 100 | \$88 | \$76 | 64 | \$78 | \$47 | \$124 | \$95 | \$75 | \$170 | \$85 | \$47 | \$133 | \$5.91 | 3.6\% | \$8.42 | 6.8\% | \$1.6372 | \$1.2415 | \$1.6963 | \$1.3257 |
| 150 | \$101 | \$114 | \$215 | \$91 | \$70 | \$161 | \$119 | \$112 | \$231 | \$109 | \$71 | \$180 | \$16.19 | 7.5\% | \$19.44 | 12.1\% | \$1.4326 | \$1.0717 | \$1.5405 | \$1.2012 |
| 200 | \$115 | \$151 | \$266 | \$104 | \$93 | \$197 | \$143 | \$150 | \$293 | \$133 | \$94 | \$228 | \$26.47 | 10.0\% | \$30.46 | 15.4\% | \$1.3303 | \$0.9867 | \$1.4627 | \$1.1390 |
| 250 | \$128 | \$189 | \$317 | \$118 | \$116 | \$234 | \$167 | \$187 | \$354 | \$157 | \$118 | \$275 | \$36.76 | 11.6\% | \$41.48 | 17.7\% | \$1.2689 | \$0.9358 | \$1.4160 | \$1.1017 |
| 300 | \$141 | \$227 | \$368 | \$131 | \$140 | \$271 | \$191 | \$225 | \$415 | \$182 | \$142 | \$323 | \$47.04 | 12.8\% | \$52.49 | 19.4\% | \$1.2280 | \$0.9018 | \$1.3848 | \$1.0768 |
| 350 | \$155 | \$265 | \$420 | \$144 | \$163 | \$307 | \$215 | \$262 | \$477 | \$206 | \$165 | \$371 | \$57.32 | 13.7\% | \$63.51 | 20.7\% | \$1.1988 | \$0.8775 | \$1.3626 | \$1.0590 |
| 400 | \$168 | \$303 | \$471 | \$157 | \$186 | \$344 | \$239 | \$299 | \$538 | \$230 | \$189 | \$418 | \$67.61 | 14.4\% | \$74.53 | 21.7\% | \$1.1769 | \$0.8593 | \$1.3459 | \$1.0456 |
| 500 | \$195 | \$379 | \$573 | \$184 | \$233 | \$417 | \$287 | \$374 | \$661 | \$278 | \$236 | \$513 | \$88.18 | 15.4\% | \$96.57 | 23.2\% | \$1.1462 | \$0.8338 | \$1.3225 | \$1.0270 |
| 600 | \$221 | \$454 | \$675 | \$211 | \$279 | \$490 | \$335 | \$449 | \$784 | \$326 | \$283 | \$609 | \$108.74 | 16.1\% | \$118.61 | 24.2\% | \$1.1257 | \$0.8168 | \$1.3069 | \$1.0145 |
| 700 | \$248 | \$530 | \$778 | \$237 | \$326 | \$563 | \$383 | \$524 | \$907 | \$374 | \$330 | \$704 | \$129.31 | 16.6\% | \$140.64 | 25.0\% | \$1.1111 | \$0.8047 | \$1.2958 | \$1.0056 |
| 800 | \$274 | \$606 | \$880 | \$264 | \$372 | \$636 | \$431 | \$599 | \$1,030 | \$422 | \$377 | \$799 | \$149.88 | 17.0\% | \$162.68 | 25.6\% | \$1.1001 | \$0.7956 | \$1.2875 | \$0.9990 |
| 900 | \$301 | \$681 | \$982 | \$291 | \$419 | \$710 | \$479 | \$674 | \$1,153 | \$470 | \$425 | \$894 | \$170.45 | 17.3\% | \$184.72 | 26.0\% | \$1.0916 | \$0.7885 | \$1.2810 | \$0.9938 |
| 1,000 | \$328 | \$757 | \$1,085 | \$317 | \$466 | \$783 | \$527 | \$749 | \$1,276 | \$518 | \$472 | \$990 | \$191.01 | 17.6\% | \$206.76 | 26.4\% | \$1.0848 | \$0.7829 | \$1.2758 | \$0.9896 |
| 1,250 | \$394 | \$946 | \$1,341 | \$384 | \$582 | \$966 | \$647 | \$936 | \$1,583 | \$638 | \$590 | \$1,228 | \$242.43 | 18.1\% | \$261.85 | 27.1\% | \$1.0725 | \$0.7727 | \$1.2664 | \$0.9821 |
| 1,500 | \$461 | \$1,136 | \$1,596 | \$450 | \$698 | \$1,149 | \$768 | \$1,123 | \$1,890 | \$758 | \$708 | \$1,466 | \$293.85 | 18.4\% | \$316.94 | 27.6\% | \$1.0643 | \$0.7659 | \$1.2602 | \$0.9772 |

## Estimated BiII Percentiles

25\%
Winter -
$50 \%$ Winter 75\% 25\% Summer 50\% Summer $75 \%$

|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 70 | $\$ 76$ | $\$ 53$ | $\$ 129$ |  |  |  |  |
| 200 | $\$ 115$ | $\$ 151$ | $\$ 266$ |  |  |  | $\$ 77$ |
| 500 | $\$ 195$ | $\$ 379$ | $\$ 573$ |  |  |  | $\$ 143$ |
| 0 |  |  |  | $\$ 48$ | $\$ 0$ | $\$ 48$ |  |
| 8 |  |  |  | $\$ 287$ |  |  |  |
| 45 |  |  |  | $\$ 52$ | $\$ 4$ | $\$ 55$ |  |

$\$ 52$

| $\$ 129$ |  |  |  | $\$ 0.13$ |
| :--- | ---: | ---: | ---: | ---: |
| $\$ 293$ |  |  |  | $\$ 26.47$ |
| $\$ 661$ |  |  |  | $\$ 88.18$ |
|  | $\$ 35$ | $\$ 0$ | $\$ 35$ |  |
|  | $\$ 40$ | $\$ 4$ | $\$ 44$ |  |
|  | $\$ 59$ | $\$ 21$ | $\$ 80$ |  |


| $\$ 0.13$ | $0.1 \%$ |  |  | $\$ 1.8445$ |  | $\$ 1.8463$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- | :--- |
| 26.47 | $10.0 \%$ |  |  | $\$ 1.3303$ |  | $\$ 1.4627$ |  |
| 88.18 | $15.4 \%$ |  |  | $\$ 1.1462$ |  | $\$ 1.3225$ |  |
|  |  | $-\$ 13.36$ | $-27.6 \%$ |  | $\$ 0.0000$ |  | $\$ 0.0000$ |
|  |  | $-\$ 11.70$ | $-21.2 \%$ |  | $\$ 6.9071$ |  | $\$ 5.4448$ |
|  |  | $-\$ 3.70$ | $-4.4 \%$ |  | $\$ 1.8644$ |  | $\$ 1.7822$ |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
RATE G-42 : COMMERCIAL/INDUSTRIAL - MEDIUM ANNUAL USE, HIGH WINTER USE

| Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | Present Ra |  | Winter | Summer |  | Proposed | Rates | Winter | Summer |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  | Cost of Gas |  | \$0.7121 | \$0.4206 |  | Cost of Gas |  | \$0.7010 | \$0.4242 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  | LDAC |  | \$0.0450 |  |  | LDAC |  | \$0.0475 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  | Customer c | harge | \$145.08 |  |  | Customer c | charge | \$100.00 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  | Sales rate |  |  |  |  | Sales rate |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  | First Block | Size | 1000 | 400 |  | First Block | Size | 1000 | 400 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  | Block 1 |  | \$0.3606 | \$0.3606 |  | Block 1 |  | \$0.4672 | \$0.4672 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  | Block 2 |  | \$0.2402 | \$0.2402 |  | Block 2 |  | \$0.4055 | \$0.4055 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  | Mon | thly Bills at | Present R |  |  |  | Monthly | Bills at Prop | posed Ra | ates |  |  | hange in M | Monthly Bil |  |  | Unit | Costs |  |
| 13 |  | Use per |  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  | Wint |  | Summ | mer | Curr |  | Propo | osed |
|  |  | Month | Base | COG / |  | Base | COG / |  | Base | COG/ |  | Base | COG/ |  |  |  |  |  |  |  |  |  |
| 14 |  | (therms) | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  | 0 | \$145 | \$0 | \$145 | \$145 | \$0 | \$145 | \$100 | \$0 | \$100 | \$100 | \$0 | \$100 | -\$45.08 | -31.1\% | -\$45.08 | -31.1\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 17 |  | 10 | \$149 | \$8 | \$156 | \$149 | \$5 | \$153 | \$105 | \$7 | \$112 | \$105 | \$5 | \$109 | -\$44.10 | -28.2\% | -\$43.95 | -28.7\% | \$15.6257 | \$15.3342 | \$11.2161 | \$10.9393 |
| 18 |  | 25 | \$154 | \$19 | \$173 | \$154 | \$12 | \$166 | \$112 | \$19 | \$130 | \$112 | \$12 | \$123 | -\$42.63 | -24.6\% | -\$42.26 | -25.5\% | \$6.9209 | \$6.6294 | \$5.2159 | \$4.9391 |
| 19 |  | 50 | \$163 | \$38 | \$201 | \$163 | \$23 | \$186 | \$123 | \$37 | \$161 | \$123 | \$24 | \$147 | -\$40.17 | -20.0\% | -\$39.44 | -21.2\% | \$4.0193 | \$3.7278 | \$3.2158 | \$2.9390 |
| 20 |  | 75 | \$172 | \$57 | \$229 | \$172 | \$35 | \$207 | \$135 | \$56 | \$191 | \$135 | \$35 | \$170 | -\$37.72 | -16.5\% | -\$36.62 | -17.7\% | \$3.0521 | \$2.7606 | \$2.5491 | \$2.2723 |
| 21 |  | 100 | \$181 | \$76 | \$257 | \$181 | \$47 | \$228 | \$147 | \$75 | \$222 | \$147 | \$47 | \$194 | -\$35.27 | -13.7\% | -\$33.80 | -14.8\% | \$2.5685 | \$2.2770 | \$2.2158 | \$1.9390 |
| 22 |  | 150 | \$199 | \$114 | \$313 | \$199 | \$70 | \$269 | \$170 | \$112 | \$282 | \$170 | \$71 | \$241 | -\$30.37 | -9.7\% | -\$28.16 | -10.5\% | \$2.0849 | \$1.7934 | \$1.8824 | \$1.6056 |
| 23 |  | 200 | \$217 | \$151 | \$369 | \$217 | \$93 | \$310 | \$193 | \$150 | \$343 | \$193 | \$94 | \$288 | -\$25.47 | -6.9\% | -\$22.53 | -7.3\% | \$1.8431 | \$1.5516 | \$1.7158 | \$1.4390 |
| 24 |  | 250 | \$235 | \$189 | \$425 | \$235 | \$116 | \$352 | \$217 | \$187 | \$404 | \$217 | \$118 | \$335 | -\$20.57 | -4.8\% | -\$16.89 | -4.8\% | \$1.6980 | \$1.4065 | \$1.6158 | \$1.3390 |
| 25 |  | 300 | \$253 | \$227 | \$480 | \$253 | \$140 | \$393 | \$240 | \$225 | \$465 | \$240 | \$142 | \$382 | -\$15.66 | -3.3\% | -\$11.25 | -2.9\% | \$1.6013 | \$1.3098 | \$1.5491 | \$1.2723 |
| 26 |  | 350 | \$271 | \$265 | \$536 | \$271 | \$163 | \$434 | \$264 | \$262 | \$526 | \$264 | \$165 | \$429 | -\$10.76 | -2.0\% | -\$5.62 | -1.3\% | \$1.5322 | \$1.2407 | \$1.5015 | \$1.2247 |
| 27 |  | 400 | \$289 | \$303 | \$592 | \$289 | \$186 | \$476 | \$287 | \$299 | \$586 | \$287 | \$189 | \$476 | -\$5.86 | -1.0\% | \$0.02 | 0.0\% | \$1.4804 | \$1.1889 | \$1.4658 | \$1.1890 |
| 28 |  | 500 | \$325 | \$379 | \$704 | \$313 | \$233 | \$546 | \$334 | \$374 | \$708 | \$327 | \$236 | \$563 | \$3.95 | 0.6\% | \$17.16 | 3.1\% | \$1.4079 | \$1.0923 | \$1.4158 | \$1.1266 |
| 29 |  | 750 | \$416 | \$568 | \$983 | \$373 | \$349 | \$723 | \$450 | \$561 | \$1,012 | \$429 | \$354 | \$783 | \$28.46 | 2.9\% | \$60.02 | 8.3\% | \$1.3111 | \$0.9635 | \$1.3491 | \$1.0435 |
| 30 |  | 1,000 | \$506 | \$757 | \$1,263 | \$433 | \$466 | \$899 | \$567 | \$749 | \$1,316 | \$530 | \$472 | \$1,002 | \$52.97 | 4.2\% | \$102.87 | 11.4\% | \$1.2628 | \$0.8990 | \$1.3157 | \$1.0019 |
| 31 |  | 1,500 | \$626 | \$1,136 | \$1,761 | \$554 | \$698 | \$1,252 | \$770 | \$1,123 | \$1,893 | \$733 | \$708 | \$1,441 | \$131.33 | 7.5\% | \$188.58 | 15.1\% | \$1.1743 | \$0.8346 | \$1.2618 | \$0.9603 |
| 32 |  | 2,000 | \$746 | \$1,514 | \$2,260 | \$674 | \$931 | \$1,605 | \$973 | \$1,497 | \$2,470 | \$936 | \$943 | \$1,879 | \$209.69 | 9.3\% | \$274.29 | 17.1\% | \$1.1300 | \$0.8024 | \$1.2349 | \$0.9396 |
| 33 |  | 3,000 | \$986 | \$2,271 | \$3,257 | \$914 | \$1,397 | \$2,311 | \$1,378 | \$2,246 | \$3,624 | \$1,341 | \$1,415 | \$2,756 | \$366.41 | 11.2\% | \$445.71 | 19.3\% | \$1.0858 | \$0.7702 | \$1.2079 | \$0.9188 |
| 34 |  | 4,000 | \$1,226 | \$3,028 | \$4,255 | \$1,154 | \$1,862 | \$3,016 | \$1,784 | \$2,994 | \$4,778 | \$1,747 | \$1,887 | \$3,634 | \$523.12 | 12.3\% | \$617.13 | 20.5\% | \$1.0637 | \$0.7541 | \$1.1945 | \$0.9084 |
| 35 |  | 5,000 | \$1,466 | \$3,786 | \$5,252 | \$1,394 | \$2,328 | \$3,722 | \$2,189 | \$3,743 | \$5,932 | \$2,152 | \$2,359 | \$4,511 | \$679.84 | 12.9\% | \$788.55 | 21.2\% | \$1.0504 | \$0.7444 | \$1.1864 | \$0.9022 |
| 36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 37 | Estimated Bill | ercentiles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38 | Winter-25\% | 1,300 | \$578 | \$984 | \$1,562 |  |  |  | \$689 | \$973 | \$1,662 |  |  |  | \$99.98 | 6.4\% |  |  | \$1.2015 |  | \$1.2784 |  |
| 39 | Winter - $50 \%$ | 2,000 | \$746 | \$1,514 | \$2,260 |  |  |  | \$973 | \$1,497 | \$2,470 |  |  |  | \$209.69 | 9.3\% |  |  | \$1.1300 |  | \$1.2349 |  |
| 40 | Winter - 75\% | 3,500 | \$1,106 | \$2,650 | \$3,756 |  |  |  | \$1,581 | \$2,620 | \$4,201 |  |  |  | \$444.76 | 11.8\% |  |  | \$1.0732 |  | \$1.2002 |  |
| 41 | Summer-25\% | 45 |  |  |  | \$161 | \$21 | \$182 |  |  |  | \$121 | \$21 | \$142 |  |  | -\$40.00 | -21.9\% |  | \$4.0502 |  | \$3.1612 |
| 42 | Summer-50\% | 350 |  |  |  | \$271 | \$163 | \$434 |  |  |  | \$264 | \$165 | \$429 |  |  | -\$5.62 | -1.3\% |  | \$1.2407 |  | \$1.2247 |
| 43 | Summer - 75\% | 750 |  |  |  | \$373 | \$349 | \$723 |  |  |  | \$429 | \$354 | \$783 |  |  | \$60.02 | 8.3\% |  | \$0.9635 |  | \$1.0435 |

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

| Present Rates | Winter | $\begin{gathered} \text { Summer } \\ \$ 0.4206 \end{gathered}$ | Proposed Rates | Winter | $\begin{array}{c\|} \hline \text { Summer } \\ \$ 0.4242 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost of Gas | \$0.7121 |  | Cost of Gas | \$0.7010 |  |
| LDAC | \$0.0450 |  | LDAC | \$0.0475 |  |
| Customer charge Sales rate | \$622.61 |  | Customer charge Sales rate | \$400.00 |  |
| First Block Size | 0 | 0 | First Block Size | 0 | 0 |
| Block 1 | \$0.2216 | \$0.1013 | Block 1 | \$0.3196 | \$0.1461 |
| Block 2 | \$0.2216 | \$0.1013 | Block 2 | \$0.3196 | \$0.1461 |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | inter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG / LDAC | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | COG / LDAC | TOTAL | Base Rates | COG / LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 200 | \$667 | \$151 | \$818 | \$643 | \$93 | \$736 | \$464 | \$150 | \$614 | \$429 | \$94 | \$524 | -\$204.72 | -25.0\% | -\$212.43 | -28.9\% | \$4.0918 | \$3.6800 | \$3.0681 | \$2.6178 |
| 500 | \$733 | \$379 | \$1,112 | \$673 | \$233 | \$906 | \$560 | \$374 | \$934 | \$473 | \$236 | \$709 | -\$177.88 | -16.0\% | -\$197.15 | -21.8\% | \$2.2239 | \$1.8121 | \$1.8682 | \$1.4178 |
| 1,000 | 844 | \$757 | \$1,601 | \$724 | \$466 | \$1,190 | \$720 | \$749 | \$1,468 | 46 | \$472 | \$1,018 | -\$133.15 | -8.3\% | -\$171.68 | -14.4\% | \$1.6013 | \$1.1895 | \$1.4682 | \$1.0178 |
| 1,250 | 900 | \$946 | \$1,846 | \$749 | 582 | \$1,331 | \$800 | \$936 | \$1,735 | \$583 | \$590 | \$1,172 | -\$110.79 | -6.0\% | -\$158.95 | -11.9\% | \$1.4768 | \$1.0650 | \$1.3882 | \$0.9378 |
| 1,500 | \$955 | \$1,136 | \$2,091 | \$775 | \$698 | \$1,473 | \$879 | \$1,123 | \$2,002 | \$619 | \$708 | \$1,327 | -\$88.42 | -4.2\% | -\$146.21 | -9.9\% | \$1.3938 | \$0.9820 | \$1.3348 | \$0.8845 |
| 1,750 | \$1,010 | \$1,325 | \$2,335 | \$800 | \$815 | \$1,615 | \$959 | \$1,310 | \$2,269 | \$656 | \$826 | \$1,481 | -\$66.06 | -2.8\% | -\$133.48 | -8.3\% | \$1.3345 | \$0.9227 | \$1.2967 | \$0.8464 |
| 2,000 | \$1,066 | \$1,514 | \$2,580 | \$825 | \$931 | \$1,756 | \$1,039 | \$1,497 | \$2,536 | \$692 | \$943 | \$1,636 | -\$43.69 | -1.7\% | -\$120.75 | -6.9\% | \$1.2900 | \$0.8782 | \$1.2682 | \$0.8178 |
| 2,500 | \$1,177 | \$1,893 | \$3,069 | \$876 | \$1,164 | \$2,040 | \$1,199 | \$1,871 | \$3,070 | \$765 | \$1,179 | \$1,945 | \$1.04 | 0.0\% | -\$95.28 | -4.7\% | \$1.2277 | \$0.8159 | \$1.2282 | \$0.7778 |
| 3,000 | \$1,287 | \$2,271 | \$3,559 | \$927 | \$1,397 | \$2,323 | \$1,359 | \$2,246 | \$3,604 | \$838 | \$1,415 | \$2,253 | \$45.77 | 1.3\% | -\$69.81 | -3.0\% | \$1.1862 | \$0.7744 | \$1.2015 | \$0.7512 |
| 3,500 | \$1,398 | \$2,650 | \$4,048 | \$977 | \$1,630 | \$2,607 | \$1,519 | \$2,620 | \$4,139 | \$911 | \$1,651 | \$2,562 | \$90.50 | 2.2\% | -\$44.34 | -1.7\% | \$1.1566 | \$0.7448 | \$1.1824 | \$0.7321 |
| 4,000 | \$1,509 | \$3,028 | \$4,537 | \$1,028 | \$1,862 | \$2,890 | \$1,679 | \$2,994 | \$4,673 | \$984 | \$1,887 | \$2,871 | \$135.23 | 3.0\% | -\$18.88 | -0.7\% | \$1.1344 | \$0.7226 | \$1.1682 | \$0.7178 |
| 4,500 | \$1,620 | \$3,407 | \$5,027 | \$1,078 | \$2,095 | \$3,174 | \$1,838 | \$3,368 | \$5,207 | \$1,058 | \$2,123 | \$3,180 | \$179.96 | 3.6\% | \$6.59 | 0.2\% | \$1.1171 | \$0.7053 | \$1.1570 | \$0.7067 |
| 5,000 | \$1,731 | \$3,786 | \$5,516 | \$1,129 | \$2,328 | \$3,457 | \$1,998 | \$3,743 | \$5,741 | \$1,131 | \$2,359 | \$3,489 | \$224.69 | 4.1\% | \$32.06 | 0.9\% | \$1.1032 | \$0.6914 | \$1.1482 | \$0.6978 |
| 6,000 | \$1,952 | \$4,543 | \$6,495 | \$1,230 | \$2,794 | \$4,024 | \$2,318 | \$4,491 | \$6,809 | \$1,277 | \$2,830 | \$4,107 | \$314.15 | 4.8\% | \$82.99 | 2.1\% | \$1.0825 | \$0.6707 | \$1.1348 | \$0.6845 |
| 7,000 | \$2,174 | \$5,300 | \$7,474 | \$1,332 | \$3,259 | \$4,591 | \$2,638 | \$5,240 | \$7,877 | \$1,423 | \$3,302 | \$4,725 | \$403.61 | 5.4\% | \$133.93 | 2.9\% | \$1.0676 | \$0.6558 | \$1.1253 | \$0.6750 |
| 8,000 | \$2,395 | \$6,057 | \$8,452 | \$1,433 | \$3,725 | \$5,158 | \$2,957 | \$5,988 | \$8,945 | \$1,569 | \$3,774 | \$5,343 | \$493.08 | 5.8\% | \$184.86 | 3.6\% | \$1.0565 | \$0.6447 | \$1.1182 | \$0.6678 |
| 9,000 | \$2,617 | \$6,814 | \$9,431 | \$1,534 | \$4,190 | \$5,725 | \$3,277 | \$6,737 | \$10,013 | \$1,715 | \$4,245 | \$5,961 | \$582.54 | 6.2\% | \$235.80 | 4.1\% | \$1.0479 | \$0.6361 | \$1.1126 | \$0.6623 |
| 10,000 | \$2,839 | \$7,571 | \$10,410 | \$1,636 | \$4,656 | \$6,292 | \$3,596 | \$7,485 | \$11,082 | \$1,861 | \$4,717 | \$6,578 | \$672.00 | 6.5\% | \$286.73 | 4.6\% | \$1.0410 | \$0.6292 | \$1.1082 | \$0.6578 |
| 15,000 | \$3,947 | \$11,357 | \$15,303 | \$2,142 | \$6,984 | \$9,126 | \$5,195 | \$11,228 | \$16,422 | \$2,592 | \$7,076 | \$9,668 | \$1,119.30 | 7.3\% | \$541.40 | 5.9\% | \$1.0202 | \$0.6084 | \$1.0948 | \$0.6445 |
| 20,000 | \$5,055 | \$15,142 | \$20,197 | \$2,649 | \$9,312 | \$11,961 | \$6,793 | \$14,970 | \$21,763 | \$3,322 | \$9,434 | \$12,757 | \$1,566.61 | 7.8\% | \$796.08 | 6.7\% | \$1.0098 | \$0.5980 | \$1.0882 | \$0.6378 |

[^1]Estimated Bill Percentiles per 2010 MCS


COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
RATE G-51 : COMMERCIALINDUSTRIAL - LOW ANNUAL USE, LOW WINTER USE

Estimated Bill Percentiles per 2010 MCS
RATE G-52 : COMMERCIALINDUSTRIAL - MEDIUM ANNUAL USE, LOW WINTER USE

| Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | Present R |  | Winter | Summer |  | Proposed | Rates | Winter | Summer |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  | Cost of Gas |  | \$0.7305 | \$0.4574 |  | Cost of Ga |  | \$0.7194 | \$0.4610 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  | LDAC |  | \$0.0450 |  |  | LDAC |  | \$0.0475 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  | Customer | harge | \$145.08 |  |  | Customer | harge | \$100.00 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  | Sales rate |  |  |  |  | Sales rate |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  | First Block | Size | 1000 | 1000 |  | First Block | Size | 1000 | 1000 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  | Block 1 |  | \$0.2052 | \$0.1487 |  | Block 1 |  | \$0.2746 | \$0.2293 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  | Block 2 |  | \$0.1367 | \$0.0845 |  | Block 2 |  | \$0.2425 | \$0.1558 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  | Mon | thly Bills at | Present R | ates |  |  | Month | thly Bills at P | roposed R | ates |  |  | ange in M | Monthly Bil |  |  | Unit | Costs |  |
| 13 |  | Use per |  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  | Win |  | Sumn |  | Cur | rent | Propo | osed |
|  |  | Month | Base | COG / |  | Base | COG / |  | Base | COG / |  | Base | COG / |  |  |  |  |  |  |  |  |  |
| 14 |  | (therms) | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  | 200 | \$186 | \$155 | \$341 | \$175 | \$100 | \$275 | \$155 | \$153 | \$308 | \$146 | \$102 | \$248 | -\$32.92 | -9.6\% | -\$27.74 | -10.1\% | \$1.7061 | \$1.3765 | \$1.5415 | \$1.2378 |
| 17 |  | 300 | \$207 | \$233 | \$439 | \$190 | \$151 | \$340 | \$182 | \$230 | \$412 | \$169 | \$153 | \$321 | -\$26.84 | -6.1\% | -\$19.07 | -5.6\% | \$1.4643 | \$1.1347 | \$1.3748 | \$1.0711 |
| 18 |  | 400 | \$227 | \$310 | \$537 | \$205 | \$201 | \$406 | \$210 | \$307 | \$517 | \$192 | \$203 | \$395 | -\$20.76 | -3.9\% | -\$10.40 | -2.6\% | \$1.3434 | \$1.0138 | \$1.2915 | \$0.9878 |
| 19 |  | 500 | \$248 | \$388 | \$635 | \$219 | \$251 | \$471 | \$237 | \$383 | \$621 | \$215 | \$254 | \$469 | -\$14.68 | -2.3\% | -\$1.73 | -0.4\% | \$1.2709 | \$0.9413 | \$1.2415 | \$0.9378 |
| 20 |  | 600 | \$268 | \$465 | \$734 | \$234 | \$301 | \$536 | \$265 | \$460 | \$725 | \$238 | \$305 | \$543 | -\$8.60 | -1.2\% | \$6.94 | 1.3\% | \$1.2225 | \$0.8929 | \$1.2082 | \$0.9045 |
| 21 |  | 700 | \$289 | \$543 | \$832 | \$249 | \$352 | \$601 | \$292 | \$537 | \$829 | \$261 | \$356 | \$616 | -\$2.52 | -0.3\% | \$15.61 | 2.6\% | \$1.1880 | \$0.8584 | \$1.1844 | \$0.8807 |
| 22 |  | 800 | \$309 | \$620 | \$930 | \$264 | \$402 | \$666 | \$320 | \$614 | \$933 | \$283 | \$407 | \$690 | \$3.56 | 0.4\% | \$24.28 | 3.6\% | \$1.1621 | \$0.8325 | \$1.1665 | \$0.8628 |
| 23 |  | 900 | \$330 | \$698 | \$1,028 | \$279 | \$452 | \$731 | \$347 | \$690 | \$1,037 | \$306 | \$458 | \$764 | \$9.64 | 0.9\% | \$32.95 | 4.5\% | \$1.1419 | \$0.8123 | \$1.1526 | \$0.8489 |
| 24 |  | 1,000 | \$350 | \$776 | \$1,126 | \$294 | \$502 | \$796 | \$375 | \$767 | \$1,141 | \$329 | \$509 | \$838 | \$15.72 | 1.4\% | \$41.62 | 5.2\% | \$1.1258 | \$0.7962 | \$1.1415 | \$0.8378 |
| 25 |  | 1,100 | \$364 | \$853 | \$1,217 | \$302 | \$553 | \$855 | \$399 | \$844 | \$1,242 | \$345 | \$559 | \$904 | \$25.44 | 2.1\% | \$49.37 | 5.8\% | \$1.1064 | \$0.7772 | \$1.1295 | \$0.8220 |
| 26 |  | 1,200 | \$378 | \$931 | \$1,308 | \$311 | \$603 | \$914 | \$423 | \$920 | \$1,343 | \$360 | \$610 | \$971 | \$35.16 | 2.7\% | \$57.11 | 6.3\% | \$1.0902 | \$0.7613 | \$1.1195 | \$0.8089 |
| 27 |  | 1,300 | \$391 | \$1,008 | \$1,399 | \$319 | \$653 | \$972 | \$447 | \$997 | \$1,444 | \$376 | \$661 | \$1,037 | \$44.88 | 3.2\% | \$64.86 | 6.7\% | \$1.0765 | \$0.7479 | \$1.1110 | \$0.7978 |
| 28 |  | 1,400 | \$405 | \$1,086 | \$1,491 | \$328 | \$703 | \$1,031 | \$472 | \$1,074 | \$1,545 | \$392 | \$712 | \$1,104 | \$54.60 | 3.7\% | \$72.61 | 7.0\% | \$1.0648 | \$0.7364 | \$1.1038 | \$0.7882 |
| 29 |  | 1,500 | \$419 | \$1,163 | \$1,582 | \$336 | \$754 | \$1,090 | \$496 | \$1,150 | \$1,646 | \$407 | \$763 | \$1,170 | \$64.32 | 4.1\% | \$80.35 | 7.4\% | \$1.0546 | \$0.7264 | \$1.0975 | \$0.7800 |
| 30 |  | 1,750 | \$453 | \$1,357 | \$1,810 | \$357 | \$879 | \$1,236 | \$556 | \$1,342 | \$1,899 | \$446 | \$890 | \$1,336 | \$88.61 | 4.9\% | \$99.72 | 8.1\% | \$1.0342 | \$0.7065 | \$1.0849 | \$0.7635 |
| 31 |  | 2,000 | \$487 | \$1,551 | \$2,038 | \$378 | \$1,005 | \$1,383 | \$617 | \$1,534 | \$2,151 | \$485 | \$1,017 | \$1,502 | \$112.91 | 5.5\% | \$119.08 | 8.6\% | \$1.0190 | \$0.6915 | \$1.0754 | \$0.7511 |
| 32 |  | 2,500 | \$555 | \$1,939 | \$2,494 | \$421 | \$1,256 | \$1,677 | \$738 | \$1,917 | \$2,656 | \$563 | \$1,271 | \$1,834 | \$161.51 | 6.5\% | \$157.81 | 9.4\% | \$0.9976 | \$0.6706 | \$1.0622 | \$0.7337 |
| 33 |  | 3,000 | \$624 | \$2,327 | \$2,950 | \$463 | \$1,507 | \$1,970 | \$860 | \$2,301 | \$3,160 | \$641 | \$1,526 | \$2,167 | \$210.10 | 7.1\% | \$196.54 | 10.0\% | \$0.9834 | \$0.6567 | \$1.0534 | \$0.7222 |
| 34 |  | 4,000 | \$760 | \$3,102 | \$3,862 | \$547 | \$2,010 | \$2,557 | \$1,102 | \$3,068 | \$4,170 | \$797 | \$2,034 | \$2,831 | \$307.30 | 8.0\% | \$274.00 | 10.7\% | \$0.9656 | \$0.6392 | \$1.0424 | \$0.7077 |
| 35 |  | 5,000 | \$897 | \$3,878 | \$4,775 | \$632 | \$2,512 | \$3,144 | \$1,344 | \$3,835 | \$5,179 | \$953 | \$2,543 | \$3,495 | \$404.49 | 8.5\% | \$351.46 | 11.2\% | \$0.9549 | \$0.6288 | \$1.0358 | \$0.6990 |
| 36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 37 | Estimated Bill | rcentiles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38 | Winter-25\% | 1,040 | \$356 | \$807 | \$1,162 |  |  |  | \$384 | \$798 | \$1,182 |  |  |  | \$19.61 | 1.7\% |  |  | \$1.1176 |  | \$1.1364 |  |
| 39 | Winter - 50\% | 2,000 | \$487 | \$1,551 | \$2,038 |  |  |  | \$617 | \$1,534 | \$2,151 |  |  |  | \$112.91 | 5.5\% |  |  | \$1.0190 |  | \$1.0754 |  |
| 40 | Winter - 75\% | 3,500 | \$692 | \$2,714 | \$3,406 |  |  |  | \$981 | \$2,684 | \$3,665 |  |  |  | \$258.70 | 7.6\% |  |  | \$0.9732 |  | \$1.0471 |  |
| 41 | Summer-25\% | 700 |  |  |  | \$249 | \$352 | \$601 |  |  |  | \$261 | \$356 | \$616 |  |  | \$15.61 | 2.6\% |  | \$0.8584 |  | \$0.8807 |
| 42 | Summer-50\% | 1,040 |  |  |  | \$297 | \$522 | \$820 |  |  |  | \$336 | \$529 | \$864 |  |  | \$44.72 | 5.5\% |  | \$0.7881 |  | \$0.8311 |
| 43 | Summer-75\% | 2,000 |  |  |  | \$378 | \$1,005 | \$1,383 |  |  |  | \$485 | \$1,017 | \$1,502 |  |  | \$119.08 | 8.6\% |  | \$0.6915 |  | \$0.7511 |

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

[^2]COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

Estimated Bill Percentile
Winter - 5 B
Winter $-25 \%$
Winter $-50 \%$
Winter-75\%
Summer $-25 \%$
Summer-50\%
15,000
30,000
5,000
15,000


Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
RATE G-54 : COMMERCIAL/INDUSTRIAL - HIGH ANNUAL USE, LOAD FACTOR GREATER THAN $90 \%$

| 14 | (therms) | Ra |
| :---: | :---: | :---: |
| 15 |  |  |
| 16 | 1,000 |  |
| 17 | 2,500 |  |
| 18 | 5,000 |  |
| 19 | 7,500 | \$ |
| 20 | 10,000 |  |
| 21 | 12,500 |  |
| 22 | 15,000 |  |
| 23 | 20,000 |  |
| 24 | 25,000 |  |
| 25 | 30,000 |  |
| 26 | 35,000 |  |
| 27 | 40,000 |  |
| 28 | 45,000 |  |
| 29 | 50,000 |  |
| 30 | 55,000 |  |
| 31 | 60,000 |  |
| 32 | 75,000 |  |
| 33 | 100,000 | \$ |
| 34 | 150,000 | \$ |
| 35 | 200,000 | \$1 |

Estimated BiII Percentiles
Winter-
$25 \%$
Winter -
$50 \%$
$50 \%$
Winter -
$75 \%$
Summer
$25 \%$
Summer
50\% Summe
Estimated Bill Percentiles per 2010 MCS

| Present Rates | Winter | Summer |
| :--- | :--- | ---: |
| Cost of Gas | $\$ 0.7305$ | $\$ 0.4574$ |
| LDAC | $\$ 0.0450$ |  |
| Customer charge | $\$ 640.74$ |  |
| Sales rate |  |  |
| First Block Size | 0 | 0 |
| Block 1 | $\$ 0.0547$ | $\$ 0.0297$ |
| Block 2 | $\$ 0.0547$ | $\$ 0.0297$ |$\quad$| Proposed Rates | Winter | Summer |
| :--- | :--- | :--- | ---: |
| Cost of Gas | $\$ 0.7194$ | $\$ 0.4610$ |
| LDAC | $\$ 0.0475$ |  |
| Customer charge | $\$ 400.00$ |  |
| Sales rate |  |  |
| First Block Size | 0 | 0 |
| Block 1 | $\$ 0.0825$ | $\$ 0.0448$ |
| Block 2 | $\$ 0.0825$ | $\$ 0.0448$ |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summe |  | Current |  | Proposed |  |
|  | Base | COG / |  |  | COG / |  |  | COG / |  | Base | COG / |  |  |  |  |  |  |  |  |  |
|  | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | Rates | LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summe | Winter | Summer |
| 1,000 | \$695 | \$776 | \$1,471 | \$670 | \$502 | \$1,173 | \$483 | \$767 | \$1,249 | \$445 | \$509 | \$953 | -\$221.52 | -15.1\% | -\$219.53 | -18.7 | \$1.4709 | \$1.1728 | \$1.2494 | \$0.9533 |
| 2,500 | \$777 | \$1,939 | \$2,716 | \$715 | \$1,256 | \$1,971 | \$606 | \$1,917 | \$2,524 | \$512 | \$1,271 | \$1,783 | -\$192.70 | -7.1\% | -\$187.72 | -9.5\% | \$1.0865 | \$0.788 | \$1.0094 | \$0.7133 |
| 5,000 | \$914 | \$3,878 | \$4,792 | \$789 | \$2,512 | \$3,301 | \$813 | \$3,835 | \$4,647 | \$624 | \$2,543 | \$3,167 | -\$144.67 | -3.0\% | -\$134.70 | -4.1\% | \$0.9583 | \$0.660 | \$0.9294 | \$0.6333 |
| 7,500 | \$1,051 | \$5,816 | \$6,867 | 63 | \$3,768 | \$4,631 | \$1,019 | \$5,752 | \$6,771 | 36 | \$3,814 | \$4,550 | -\$96.63 | -1.4\% | -\$81.67 | -1.8\% | \$0.9156 | \$0.6175 | \$0.9027 | \$0.606 |
| 10,000 | \$1,188 | \$7,755 | \$8,943 | \$933 | \$5,024 | 5,962 | \$1,225 | \$7,669 | \$8,894 | \$848 | \$5,085 | \$5,933 | -\$48.60 | -0.5\% | -\$28.65 | -0.5\% | \$0.8943 | \$0.5962 | \$0.8894 | \$0.5933 |
| 12,500 | \$1,324 | \$9,694 | \$11,018 | \$1,012 | \$6,280 | \$7,292 | \$1,431 | \$9,586 | \$11,018 | \$960 | \$6,356 | \$7,316 | -\$0.56 | 0.0\% | \$24.37 | 0.3\% | \$0.8815 | \$0.583 | \$0.8814 | \$0.5853 |
| 15,000 | \$1,461 | \$11,633 | \$13,094 | \$1,086 | \$7,536 | \$8,622 | \$1,637 | \$11,504 | \$13,141 | \$1,072 | \$7,628 | \$8,700 | \$47.47 | 0.4 | \$77.39 | 0.9\% | \$0.872 | \$0.574 | \$0.876 | \$0.5 |
| 20,000 | \$1,735 | \$15,510 | \$17,245 | \$1,235 | \$10,048 | \$11,283 | \$2,050 | \$15,338 | \$17,388 | \$1,296 | \$10,170 | \$11,466 | \$143.54 | 0.8\% | \$183.43 | 1.6 | \$0.862 | \$0.5641 | \$0.86 | \$0. |
| 25,000 | \$2,008 | \$19,388 | \$21,39 | \$1,383 | \$12,560 | \$13,943 | 2,462 | \$19,173 | \$21,635 | \$1,520 | \$12,713 | \$14,233 | \$239.61 | 1.1\% | \$289.48 | 2.1 | 0.855 | \$0.557 | 0.86 | \$0.5693 |
| 0,000 | \$2,282 | \$23,265 | \$25,547 | \$1,532 | \$15,072 | \$16,604 | \$2,875 | \$23,007 | \$25,882 | \$1,744 | \$15,255 | \$16,999 | \$335.69 | $1.3 \%$ | \$395.5 | $2.4 \%$ | 0.85 | \$0.553 | 0.862 | \$0.5666 |
| 35,000 | \$2,555 | \$27,143 | \$29,698 | \$1,680 | \$17,584 | \$19,264 | \$3,287 | \$26,842 | \$30,129 | \$1,968 | \$17,798 | \$19,766 | \$431.76 | 1.5\% | \$501.56 | 2.6\% | \$0.848 | \$0.550 | \$0.8608 | \$0.5647 |
| 40,000 | \$2,829 | \$31,020 | \$33,849 | \$1,829 | \$20,096 | \$21,925 | \$3,700 | \$30,677 | \$34,377 | \$2,192 | \$20,341 | \$22,532 | \$527.83 | 1.6\% | \$607.60 | 2.8\% | \$0.846 | \$0.548 | \$0.859 | \$0.5633 |
| 45,000 | \$3,102 | \$34,898 | \$38,000 | \$1,977 | \$22,608 | \$24,585 | \$4,112 | \$34,511 | \$38,624 | \$2,416 | \$22,883 | \$25,299 | \$623.90 | 1.6\% | \$713.65 | 2.9\% | \$0.844 | \$0.546 | \$0.858 | \$0.5622 |
| 50,000 | \$3,376 | \$38,775 | \$42,151 | \$2,126 | \$25,120 | \$27,246 | \$4,525 | \$38,346 | \$42,871 | \$2,640 | \$25,426 | \$28,065 | \$719.97 | 1.7\% | \$819.69 | 3.0\% | \$0.8430 | \$0.5449 | \$0.8574 | \$0.5613 |
| 55,000 | \$3,649 | \$42,653 | \$46,302 | \$2,274 | \$27,632 | \$29,906 | \$4,937 | \$42,180 | \$47,118 | \$2,864 | \$27,968 | \$30,832 | \$816.04 | 1.8\% | \$925.73 | 3.1\% | \$0.8418 | \$0.5437 | \$0.8567 | \$0.5606 |
| 60,000 | \$3,923 | \$46,530 | \$50,453 | \$2,423 | \$30,144 | \$32,567 | \$5,350 | \$46,015 | \$51,365 | \$3,088 | \$30,511 | \$33,599 | \$912.11 | 1.8\% | \$1,031.77 | 3.2\% | \$0.8409 | \$0.5428 | \$0.8561 | \$0.5600 |
| 75,000 | \$4,743 | \$58,163 | \$62,906 | \$2,868 | \$37,680 | \$40,548 | \$6,587 | \$57,519 | \$64,106 | \$3,760 | \$38,139 | \$41,898 | \$1,200.32 | 1.9\% | \$1,349.90 | 3.3\% | \$0.8387 | \$0.540 | \$0.8547 | \$0.5586 |
| 100,000 | \$6,111 | \$77,550 | \$83,661 | \$3,611 | \$50,240 | \$53,851 | \$8,650 | \$76,691 | \$85,341 | \$4,879 | \$50,851 | \$55,731 | \$1,680.68 | 2.0\% | \$1,880.12 | 3.5\% | \$0.8366 | \$0.5385 | \$0.8534 | \$0.5573 |
| 150,000 | \$8,846 | \$116,325 | \$125,171 | \$5,096 | \$75,360 | \$80,456 | \$12,775 | \$115,037 | \$127,812 | \$7,119 | \$76,277 | \$83,396 | \$2,641.38 | 2.1\% | \$2,940.55 | 3.7\% | \$0.8345 | \$0.5364 | \$0.8521 | \$0.5560 |
| 200,000 | \$11,581 | \$155,100 | \$166,681 | \$6,581 | \$100,480 | \$107,061 | \$16,900 | \$153,383 | \$170,283 | \$9,359 | \$101,703 | \$111,062 | \$3,602.09 | 2.2\% | \$4,000.97 | 3.7\% | \$0.8334 | \$0.5353 | \$0.8514 | \$0.5553 |

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES

Winter
25\%
Winter -
$50 \%$
Winter -
$75 \%$
Summe
Summer
$25 \%$
Summer -
$50 \%$
Summer
$75 \%$
Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES KEENE DIVISION RATE RESIDENTIAL TO ENERGYNORTH RATE R-3 : RESIDENTIAL HEATING

| Present Rates | Winter | Summer |
| :--- | ---: | ---: |
| Cost of Gas | $\$ 1.5352$ | $\$ 0.6281$ |
|  |  |  |
|  | $\$ 9.00$ |  |
| Customer charge |  |  |
| Sales rate | 80 | 80 |
| First Block Size | 120 | 120 |
| Second Block Size |  |  |
| Block 1 | $\$ 1.1522$ | $\$ 1.1522$ |
| Block 2 | $\$ 0.942$ | $\$ 0.9442$ |
| Block 3 | $\$ 0.7946$ | $\$ 0.7946$ |


| Proposed Rates | Winter | Summer |
| :---: | :---: | :---: |
| Cost of Gas | \$0.7051 | \$0.4404 |
| LDAC | \$0.0665 |  |
| Customer charge Sales rate | \$12.75 |  |
| First Block Size | 100 | 20 |
| Block 1 | \$0.6535 | \$0.6535 |
| Block 2 | \$0.6535 | \$0.6535 |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG | TOTAL | Base Rates | COG | TOTAL | Base Rates | $\begin{aligned} & \hline \text { COG/ } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \hline \text { COG } / 1 \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$9.00 | \$0.00 | \$9.00 | \$9.00 | \$0.00 | \$9.00 | \$12.75 | \$0.00 | \$12.75 | \$12.75 | \$0.00 | \$12.7 | \$3.75 | 41.6\% | \$3.75 | 41.6\% | \$0.0000 | \$0.0000 | \$0.0000 | 0.0000 |
| 10 | \$20.52 | \$15.35 | \$35.87 | \$20.52 | \$6.28 | \$26.80 | \$19.28 | \$7.72 | \$27.00 | \$19.28 | \$5.07 | \$24.35 | -\$8.88 | -24.7\% | -\$2.45 | -9.2\% | \$3.5874 | \$2.6803 | \$2.6996 | \$2.4349 |
| 25 | \$37.81 | \$38.38 | \$76.19 | \$37.81 | \$15.70 | \$53.51 | \$29.08 | \$19.29 | \$48.37 | \$29.08 | \$12.67 | \$41.76 | -\$27.81 | -36.5\% | -\$11.75 | -22.0\% | \$3.0474 | \$2.1403 | \$1.9349 | \$1.6702 |
| 50 | \$66.61 | \$76.76 | \$143.37 | \$66.61 | \$31.41 | \$98.02 | \$45.42 | \$38.58 | \$84.00 | \$45.42 | \$25.35 | \$70.77 | -\$59.37 | -41.4\% | -\$27.25 | -27.8\% | \$2.8674 | \$1.9603 | \$1.6800 | \$1.4153 |
| 75 | \$95.42 | \$115.14 | \$210.56 | \$95.42 | \$47.11 | \$142.52 | \$61.76 | \$57.87 | \$119.63 | \$61.76 | \$38.02 | \$99.78 | -\$90.93 | -43.2\% | -\$42.75 | -30.0\% | \$2.8074 | \$1.9003 | \$1.5951 | \$1.3304 |
| 100 | \$120.06 | \$153.52 | \$273.58 | \$120.06 | \$62.81 | \$182.87 | \$78.10 | \$77.16 | \$155.26 | \$78.10 | \$50.69 | \$128.79 | -\$118.32 | -43.2\% | -\$54.08 | -29.6\% | \$2.7358 | \$1.8287 | \$1.5526 | \$1.2879 |
| 125 | \$143.67 | \$191.90 | \$335.57 | \$143.67 | \$78.51 | \$222.18 | \$94.43 | \$96.45 | \$190.89 | \$94.43 | \$63.36 | \$157.80 | -\$144.68 | -43.1\% | -\$64.38 | -29.0\% | \$2.6845 | \$1.7774 | \$1.5271 | \$1.2624 |
| 150 | \$167.27 | \$230.28 | \$397.55 | \$167.27 | \$94.22 | \$261.49 | \$110.77 | \$115.74 | \$226.51 | \$110.77 | \$76.04 | \$186.81 | -\$171.04 | -43.0\% | -\$74.68 | -28.6\% | \$2.6503 | \$1.7432 | \$1.5101 | \$1.2454 |
| 175 | \$190.88 | \$268.66 | \$459.54 | \$190.88 | \$109.92 | \$300.79 | \$127.11 | \$135.03 | \$262.14 | \$127.11 | \$88.71 | \$215.82 | -\$197.39 | -43.0\% | -\$84.97 | -28.2\% | \$2.6259 | \$1.7188 | \$1.4980 | \$1.2333 |
| 200 | \$214.48 | \$307.04 | \$521.52 | \$214.48 | \$125.62 | \$340.10 | \$143.45 | \$154.32 | \$297.77 | \$143.45 | \$101.38 | \$244.83 | -\$223.75 | -42.9\% | -\$95.27 | -28.0\% | \$2.6076 | \$1.7005 | \$1.488 | \$1.2241 |
| 225 | \$234.35 | \$345.42 | \$579.77 | \$234.35 | \$141.32 | \$375.67 | \$159.78 | \$173.61 | \$333.40 | \$159.78 | \$114.06 | \$273.84 | -\$246.37 | -42.5\% | -\$101.83 | -27.1\% | \$2.5767 | \$1.6696 | \$1.481 | \$1.2171 |
| 250 | \$254.21 | \$383.80 | \$638.01 | \$254.21 | \$157.03 | \$411.24 | \$176.12 | \$192.90 | \$369.03 | \$176.12 | \$126.73 | \$302.85 | -\$268.98 | -42.2\% | -\$108.38 | -26.4\% | \$2.5520 | \$1.6449 | \$1.476 | \$1.2114 |
| 275 | \$274.08 | \$422.18 | \$696.26 | \$274.08 | \$172.73 | \$446.80 | \$192.46 | \$212.19 | \$404.65 | \$192.46 | \$139.40 | \$331.86 | -\$291.60 | -41.9\% | -\$114.94 | -25.7\% | \$2.5318 | \$1.6247 | \$1.4715 | \$1.2068 |
| 300 | \$293.94 | \$460.56 | \$754.50 | \$293.94 | \$188.43 | \$482.37 | \$208.80 | \$231.48 | \$440.28 | \$208.80 | \$152.07 | \$360.87 | -\$314.22 | -41.6\% | -\$121.50 | -25.2\% | \$2.5150 | \$1.6079 | \$1.4676 | \$1.2029 |
| 350 | \$333.67 | \$537.32 | \$870.99 | \$333.67 | \$219.84 | \$553.51 | \$241.47 | \$270.07 | \$511.54 | \$241.47 | \$177.42 | \$418.89 | -\$359.45 | -41.3\% | -\$134.61 | -24.3\% | \$2.4885 | \$1.5814 | \$1.4615 | \$1.1968 |
| 400 | \$373.40 | \$614.08 | \$987.48 | \$373.40 | \$251.24 | \$624.64 | \$274.15 | \$308.65 | \$582.79 | \$274.15 | \$202.77 | \$476.91 | -\$404.69 | -41.0\% | -\$147.73 | -23.6\% | \$2.4687 | \$1.5616 | \$1.4570 | \$1.1923 |
| 450 | \$413.13 | \$690.84 | \$1,103.97 | \$413.13 | \$282.65 | \$695.78 | \$306.82 | \$347.23 | \$654.05 | \$306.82 | \$228.11 | \$534.93 | -\$449.92 | -40.8\% | -\$160.84 | -23.1\% | \$2.4533 | \$1.5462 | \$1.4534 | \$1.1887 |
| 500 | \$452.86 | \$767.60 | \$1,220.46 | \$452.86 | \$314.05 | \$766.91 | \$339.50 | \$385.81 | \$725.31 | \$339.50 | \$253.46 | \$592.96 | -\$495.15 | -40.6\% | -\$173.95 | -22.7\% | \$2.4409 | \$1.5338 | \$1.4506 | \$1.1859 |
| 750 | \$651.51 | \$1,151.40 | \$1,802.91 | \$651.51 | \$471.08 | \$1,122.59 | \$502.88 | \$578.71 | \$1,081.59 | \$502.88 | \$380.19 | \$883.06 | -\$721.32 | -40.0\% | -\$239.52 | -21.3\% | \$2.4039 | \$1.4968 | \$1.4421 | \$1.1774 |
| 1,000 | \$850.16 | \$1,535.20 | \$2,385.36 | \$850.16 | \$628.10 | \$1,478.26 | \$666.25 | \$771.61 | \$1,437.87 | \$666.25 | \$506.91 | \$1,173.17 | -\$947.49 | -39.7\% | -\$305.09 | -20.6\% | \$2.3854 | \$1.4783 | \$1.4379 | \$1.1732 |


| Estimated Bill Percentiles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25\% | 60 | \$78.13 | \$92.11 | \$170.24 |  |  |  | \$51.96 | \$46.30 | \$98.25 |  |  |  | -\$71.99 | -42.3\% |  |  | \$2.8374 |  | \$1.6375 |  |
| 50\% | 100 | \$120.06 | \$153.52 | \$273.58 |  |  |  | \$78.10 | \$77.16 | \$155.26 |  |  |  | -\$118.32 | -43.2\% |  |  | \$2.7358 |  | \$1.5526 |  |
| Winter - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $75 \%$ | 175 | \$190.88 | \$268.66 | \$459.54 |  |  |  | \$127.11 | \$135.03 | \$262.14 |  |  |  | -\$197.39 | -43.0\% |  |  | \$2.6259 |  | \$1.4980 |  |
| 25\% | 12 |  |  |  | \$22.83 | \$7.54 | \$30.36 |  |  |  | \$20.59 | \$6.08 | \$26.67 |  |  | -\$3.69 | -12.2\% |  | \$2.5303 |  | \$2.2225 |
| Summer - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50\% | 20 |  |  |  | \$32.04 | \$12.56 | \$44.61 |  |  |  | \$25.82 | \$10.14 | \$35.95 |  |  | -\$8.65 | -19.4\% |  | \$2.2303 |  | \$1.7977 |
| Summer - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75\% | 30 |  |  |  | \$43.57 | \$18.84 | \$62.41 |  |  |  | \$32.35 | \$15.21 | \$47.56 |  |  | -\$14.85 | -23.8\% |  | \$2.0803 |  | \$1.5853 |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
KEENE DIVISION RATE COMMERCIALIINDUSTRIAL TO ENERGYNORTH RATE G-41 : COMMERCIALIINDUSTRIAL - LOW ANNUAL USE, HIGH WINTER USE

| Present Rates | Winter | Summer |
| :---: | :---: | :---: |
| Cost of Gas | \$1.5352 | \$0.6281 |
| Customer charge Sales rate | \$18.00 |  |
| First Block Size | 80 | 80 |
| Second Block Size | 120 | 120 |
| Block 1 | \$1.1522 | \$1.1522 |
| Block 2 | \$0.9442 | \$0.9442 |
| Block 3 | \$0.7946 | \$0.7946 |


| Proposed Rates | Winter | Summer |
| :--- | ---: | ---: |
| Cost of Gas | $\$ 0.7010$ | $\$ 0.4242$ |
| LDAC | $\$ 0.0475$ |  |
|  | $\$ 35.00$ |  |
| Customer charge |  |  |
| Sales rate | 100 | 20 |
| First Block Size |  |  |
|  | $\$ 0.5977$ | $\$ 0.5977$ |
| Block 1 | $\$ 0.4806$ | $\$ 0.4806$ |
| Block 2 |  |  |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG | TOTAL | Base Rates | COG | TOTAL | Base <br> Rates | COG / LDAC | TOTAL | Base Rates | $\begin{aligned} & \text { COG/ } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$18 | \$0 | \$18 | \$18 | \$0 | \$18 | \$35 | \$0 | \$35 | \$35 | \$0 | \$35 | \$17.00 | 94.5\% | \$17.00 | 94.5\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 10 | \$30 | \$15 | \$45 | \$30 | \$6 | \$36 | \$41 | \$7 | \$48 | \$41 | \$5 | \$46 | \$3.59 | 8.0\% | \$9.89 | 27.6\% | \$4.4874 | \$3.5803 | \$4.8465 | \$4.5697 |
| 25 | \$47 | \$38 | 85 | \$47 | \$16 | \$63 | \$50 | \$19 | \$69 | \$49 | \$12 | \$61 | -\$16.53 | -19.4\% | -\$1.35 | -2.2\% | \$3.4074 | \$2.5003 | \$2.7464 | \$2.4461 |
| 50 | \$76 | \$77 | \$152 | \$76 | \$31 | \$107 | \$65 | \$37 | \$102 | \$61 | \$24 | \$85 | -\$50.06 | -32.9\% | -\$22.06 | -20.6\% | \$3.0474 | \$2.1403 | \$2.0463 | \$1.6992 |
| 75 | \$104 | \$115 | \$220 | \$104 | \$47 | \$152 | \$80 | \$56 | \$136 | \$73 | \$35 | \$109 | -\$83.58 | -38.1\% | -\$42.76 | -28.2\% | \$2.9274 | \$2.0203 | \$1.8129 | \$1.4502 |
| 100 | \$129 | \$154 | \$283 | \$129 | \$63 | \$192 | \$95 | \$75 | \$170 | \$85 | \$47 | \$133 | -\$112.95 | -40.0\% | -\$59.30 | -30.9\% | \$2.8258 | \$1.9187 | \$1.6963 | \$1.3257 |
| 150 | \$176 | \$230 | \$407 | \$176 | \$94 | \$270 | \$119 | \$112 | \$231 | \$109 | \$71 | \$180 | -\$175.47 | -43.2\% | -\$90.30 | -33.4\% | \$2.7103 | \$1.8032 | \$1.5405 | \$1.2012 |
| 200 | \$223 | \$307 | \$531 | \$223 | \$126 | \$349 | \$143 | \$150 | \$293 | \$133 | \$94 | \$228 | -\$237.99 | -44.9\% | -\$121.30 | -34.7\% | \$2.6526 | \$1.7455 | \$1.4627 | \$1.1390 |
| 250 | \$263 | \$384 | \$647 | \$263 | \$157 | \$420 | \$167 | \$187 | \$354 | \$157 | \$118 | \$275 | -\$293.02 | -45.3\% | -\$144.82 | -34.5\% | \$2.5880 | \$1.6809 | \$1.4160 | \$1.1017 |
| 300 | \$303 | \$461 | \$764 | \$303 | \$188 | \$491 | \$191 | \$225 | \$415 | \$182 | \$142 | \$323 | -\$348.06 | -45.6\% | -\$168.34 | -34.3\% | \$2.5450 | \$1.6379 | \$1.3848 | \$1.0768 |
| 350 | \$343 | \$537 | \$880 | \$343 | \$220 | \$563 | \$215 | \$262 | \$477 | \$206 | \$165 | \$371 | -\$403.10 | -45.8\% | -\$191.86 | -34.1\% | \$2.5143 | \$1.6072 | \$1.3626 | \$1.0590 |
| 400 | \$382 | \$614 | \$996 | \$382 | \$251 | \$634 | \$239 | \$299 | \$538 | \$230 | \$189 | \$418 | -\$458.13 | -46.0\% | -\$215.38 | -34.0\% | \$2.4912 | \$1.5841 | \$1.3459 | \$1.0456 |
| 500 | \$462 | \$768 | \$1,229 | \$462 | \$314 | \$776 | \$287 | \$374 | \$661 | \$278 | \$236 | \$513 | -\$568.20 | -46.2\% | -\$262.43 | -33.8\% | \$2.4589 | \$1.5518 | \$1.3225 | \$1.0270 |
| 600 | \$541 | \$921 | \$1,462 | \$541 | \$377 | \$918 | \$335 | \$449 | \$784 | \$326 | \$283 | \$609 | -\$678.28 | -46.4\% | -\$309.47 | -33.7\% | \$2.4374 | \$1.5303 | \$1.3069 | \$1.0145 |
| 700 | \$621 | \$1,075 | \$1,695 | \$621 | \$440 | \$1,060 | \$383 | \$524 | \$907 | \$374 | \$330 | \$704 | -\$788.35 | -46.5\% | -\$356.51 | -33.6\% | \$2.4220 | \$1.5149 | \$1.2958 | \$1.0056 |
| 800 | \$700 | \$1,228 | \$1,928 | \$700 | \$502 | \$1,203 | \$431 | \$599 | \$1,030 | \$422 | \$377 | \$799 | -\$898.42 | -46.6\% | -\$403.56 | -33.6\% | \$2.4105 | \$1.5034 | \$1.2875 | \$0.9990 |
| 900 | \$780 | \$1,382 | \$2,161 | \$780 | \$565 | \$1,345 | \$479 | \$674 | \$1,153 | \$470 | \$425 | \$894 | -\$1,008.49 | -46.7\% | -\$450.60 | -33.5\% | \$2.4015 | \$1.4944 | \$1.2810 | \$0.9938 |
| 1,000 | \$859 | \$1,535 | \$2,394 | \$859 | \$628 | \$1,487 | \$527 | \$749 | \$1,276 | \$518 | \$472 | \$990 | -\$1,118.57 | -46.7\% | -\$497.64 | -33.5\% | \$2.3944 | \$1.4873 | \$1.2758 | \$0.9896 |
| 1,250 | \$1,058 | \$1,919 | \$2,977 | \$1,058 | \$785 | \$1,843 | \$647 | \$936 | \$1,583 | \$638 | \$590 | \$1,228 | -\$1,393.75 | -46.8\% | -\$615.25 | -33.4\% | \$2.3814 | \$1.4743 | \$1.2664 | \$0.9821 |
| 1,500 | \$1,256 | \$2,303 | \$3,559 | \$1,256 | \$942 | \$2,199 | \$768 | \$1,123 | \$1,890 | \$758 | \$708 | \$1,466 | -\$1,668.93 | -46.9\% | -\$732.85 | -33.3\% | \$2.3728 | \$1.4657 | \$1.2602 | \$0.9772 | Winter Winter 50\% Winter Summer -

Sum $25 \%$ Summer Summ
$75 \% \quad 45$

| \$99 | \$107 | \$206 |  |  |  | \$77 | \$52 | \$129 |  |  |  | -\$76.88 | -37.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$223 | \$307 | \$531 |  |  |  | \$143 | \$150 | \$293 |  |  |  | -\$237.99 | -44.9\% |
| \$462 | \$768 | \$1,229 |  |  |  | \$287 | \$374 | \$661 |  |  |  | -\$568.20 | -46.2\% |
|  |  |  | \$18 | \$0 | \$18 |  |  |  | \$35 | \$0 | \$35 |  |  |
|  |  |  | \$27 | \$5 | \$32 |  |  |  | \$40 | \$4 | \$44 |  |  |
|  |  |  | \$70 | \$28 | \$98 |  |  |  | \$59 | \$21 | \$80 |  |  |


|  |  | $\$ 2.9445$ |  | $\$ 1.8463$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | $\$ 2.6526$ |  | $\$ 1.4627$ |  |
|  |  | $\$ 2.4589$ |  | $\$ 1.3225$ |  |
| $\$ 17.00$ | $94.5 \%$ |  | $\$ 0.0000$ |  | $\$ 0.0000$ |
| $\$ 11.32$ | $35.1 \%$ |  | $\$ 4.0303$ |  | $\$ 5.4448$ |
| $\$ 17.91$ | $-18.3 \%$ |  | $\$ 2.1803$ |  | $\$ 1.7822$ |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
KEENE DIVISION RATE COMMERCIALIINDUSTRIAL TO ENERGYNORTH RATE G-42 : COMMERCIAL/INDUSTRIAL - MEDIUM ANNUAL USE, HIGH WINTER USE

| Present Rates | Winter <br> Cost of Gas | Summer |
| :--- | ---: | ---: |
|  | $\$ 1.5352$ | $\$ 0.6281$ |
| Customer charge | $\$ 18.00$ |  |
| Sales rate |  |  |
| First Block Size | 80 | 80 |
| Second Block Size | 120 | 120 |
| Block 1 |  | $\$ 1.1522$ |
| Block 2 | $\$ 1.1522$ |  |
| Block 3 | $\$ 0.9442$ | $\$ 0.9442$ |$\quad$|  |
| :--- | :--- | :--- | :--- |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Ra |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG | TOTAL | Base Rates | COG | TOTAL | Base Rates | $\begin{aligned} & \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \hline \text { COG / } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 0 | \$18 | \$0 | \$18 | \$18 | \$0 | \$18 | \$100 | \$0 | \$100 | \$100 | \$0 | \$100 | \$82.00 | 455.6\% | \$82.00 | 455.6\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| 10 | \$30 | \$15 | \$45 | \$30 | \$6 | \$36 | \$105 | \$7 | \$112 | \$105 | \$5 | \$109 | \$67.29 | 149.9\% | \$73.59 | 205.5\% | \$4.4874 | \$3.5803 | \$11.2161 | \$10.9393 |
| 25 | \$47 | \$38 | \$85 | \$47 | \$16 | \$63 | \$112 | \$19 | \$130 | \$112 | \$12 | \$123 | \$45.21 | 53.1\% | \$60.97 | 97.5\% | \$3.4074 | \$2.5003 | \$5.2159 | \$4.9391 |
| 50 | \$76 | \$77 | \$152 | \$76 | \$31 | \$107 | \$123 | \$37 | \$161 | \$123 | \$24 | \$147 | \$8.42 | 5.5\% | \$39.94 | 37.3\% | \$3.0474 | \$2.1403 | \$3.2158 | \$2.9390 |
| 75 | \$104 | \$115 | \$220 | \$104 | \$47 | \$152 | \$135 | \$56 | \$191 | \$135 | \$35 | \$170 | -\$28.37 | -12.9\% | \$18.90 | 12.5\% | \$2.9274 | \$2.0203 | \$2.5491 | \$2.2723 |
| 100 | \$129 | \$154 | \$283 | \$129 | \$63 | \$192 | \$147 | \$75 | \$222 | \$147 | \$47 | \$194 | -\$61.00 | -21.6\% | \$2.03 | 1.1\% | \$2.8258 | \$1.9187 | \$2.2158 | \$1.9390 |
| 150 | \$176 | \$230 | \$407 | \$176 | \$94 | \$270 | \$170 | \$112 | \$282 | \$170 | \$71 | \$241 | -\$124.18 | -30.5\% | -\$29.64 | -11.0\% | \$2.7103 | \$1.8032 | \$1.8824 | \$1.6056 |
| 200 | \$223 | \$307 | \$531 | \$223 | \$126 | \$349 | \$193 | \$150 | \$343 | \$193 | \$94 | \$288 | -\$187.37 | -35.3\% | -\$61.31 | -17.6\% | \$2.6526 | \$1.7455 | \$1.7158 | \$1.4390 |
| 250 | \$263 | \$384 | \$647 | \$263 | \$157 | \$420 | \$217 | \$187 | \$404 | \$217 | \$118 | \$335 | -\$243.07 | -37.6\% | -\$85.50 | -20.3\% | \$2.5880 | \$1.6809 | \$1.6158 | \$1.3390 |
| 300 | \$303 | \$461 | \$764 | \$303 | \$188 | 491 | \$240 | \$225 | \$465 | \$240 | \$142 | \$382 | -\$298.77 | -39.1\% | -\$109.68 | -22.3\% | \$2.5450 | \$1.6379 | \$1.5491 | \$1.2723 |
| 350 | \$343 | \$537 | \$880 | \$343 | \$220 | \$563 | \$264 | \$262 | \$526 | \$264 | \$165 | \$429 | -\$354.48 | -40.3\% | -\$133.87 | -23.8\% | \$2.5143 | \$1.6072 | \$1.5015 | \$1.2247 |
| 400 | \$382 | \$614 | \$996 | \$382 | \$251 | \$634 | \$287 | \$299 | \$586 | \$287 | \$189 | \$476 | -\$410.18 | -41.2\% | -\$158.06 | -24.9\% | \$2.4912 | \$1.5841 | \$1.4658 | \$1.189 |
| 500 | \$462 | \$768 | \$1,229 | \$462 | \$314 | \$776 | \$334 | \$374 | \$708 | \$327 | \$236 | \$563 | -\$521.58 | -42.4\% | -\$212.61 | -27.4\% | \$2.4589 | \$1.5518 | \$1.4158 | \$1.126 |
| 750 | \$661 | \$1,151 | \$1,812 | \$661 | \$471 | \$1,132 | \$450 | \$561 | \$1,012 | \$429 | \$354 | \$783 | -\$800.10 | -44.2\% | -\$348.98 | -30.8\% | \$2.4159 | \$1.5088 | \$1.3491 | \$1.0435 |
| 1,000 | \$859 | \$1,535 | \$2,394 | \$859 | \$628 | \$1,487 | \$567 | \$749 | \$1,316 | \$530 | \$472 | \$1,002 | -\$1,078.61 | -45.0\% | -\$485.35 | -32.6\% | \$2.3944 | \$1.4873 | \$1.3157 | \$1.0019 |
| 1,500 | \$1,256 | \$2,303 | \$3,559 | \$1,256 | \$942 | \$2,199 | \$770 | \$1,123 | \$1,893 | \$733 | \$708 | \$1,441 | -\$1,666.50 | -46.8\% | -\$758.09 | -34.5\% | \$2.3728 | \$1.4657 | \$1.2618 | \$0.9603 |
| 2,000 | \$1,654 | \$3,070 | \$4,724 | \$1,654 | \$1,256 | \$2,910 | \$973 | \$1,497 | \$2,470 | \$936 | \$943 | \$1,879 | -\$2,254.39 | -47.7\% | -\$1,030.83 | -35.4\% | \$2.3621 | \$1.4550 | \$1.2349 | \$0.9396 |
| 3,000 | \$2,448 | \$4,606 | \$7,054 | \$2,448 | \$1,884 | \$4,333 | \$1,378 | \$2,246 | \$3,624 | \$1,341 | \$1,415 | \$2,756 | -\$3,430.17 | -48.6\% | -\$1,576.31 | -36.4\% | \$2.3513 | \$1.4442 | \$1.2079 | \$0.9188 |
| 4,000 | \$3,243 | \$6,141 | \$9,384 | \$3,243 | \$2,512 | \$5,755 | \$1,784 | \$2,994 | \$4,778 | \$1,747 | \$1,887 | \$3,634 | -\$4,605.96 | -49.1\% | -\$2,121.79 | -36.9\% | \$2.3459 | \$1.4388 | \$1.1945 | \$0.9084 |
| 5,000 | \$4,038 | \$7,676 | \$11,714 | \$4,038 | \$3,141 | \$7,178 | \$2,189 | \$3,743 | \$5,932 | \$2,152 | \$2,359 | \$4,511 | -\$5,781.74 | -49.4\% | -\$2,667.27 | -37.2\% | \$2.3427 | \$1.4356 | \$1.1864 | \$0.9022 |


| Estimated | ill Perc | es |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Winter - | 1300 | \$1098 | \$1,996 | \$3,093 |  |  |  | \$689 | $\$ 973$ | \$1,662 |  |  |  | -\$1,431.35 | -46.3\% |  |  | \$2 3795 |  | \$12784 |  |
| Winter - | 1,300 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50\% | 2,000 | \$1,654 | \$3,070 | \$4,724 |  |  |  | \$973 | \$1,497 | \$2,470 |  |  |  | -\$2,254.39 | -47.7\% |  |  | \$2.3621 |  | \$1.2349 |  |
| Winter - $75 \%$ | 3,500 |  |  | \$8,219 |  |  |  |  | \$2,620 | \$4,201 |  |  |  | -\$4,018.07 | -48.9\% |  |  | \$2.3482 |  | \$1.2002 |  |
| Summer - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25\% | 45 |  |  |  | \$70 | \$28 | \$98 |  |  |  | \$121 | \$21 | \$142 |  |  | \$44.14 | 45.0\% |  | \$2.1803 |  | \$3.1612 |
| Summer - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50\% | 350 |  |  |  | \$343 | \$220 | \$563 |  |  |  | \$264 | \$165 | \$429 |  |  | -\$133.87 | -23.8\% |  | \$1.6072 |  | \$1.2247 |
| Summer 75\% | 750 |  |  |  | \$661 | \$471 | \$1,132 |  |  |  | $\$ 429$ | $\$ 354$ | \$783 |  |  | -\$348.98 | $-30.8 \%$ |  | \$1.5088 |  | \$1.0435 |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
KEENE DIVISION RATE COMMERCIALIINDUSTRIAL TO ENERGYNORTH RATE G-51 : COMMERCIALINDUSTRIAL - LOW ANNUAL USE, LOW WINTER USE

| Present Rates Cost of Gas | Winter \$1.5352 | $\begin{gathered} \hline \text { Summer } \\ \$ 0.6281 \end{gathered}$ | Proposed Rates Cost of Gas LDAC | $\begin{aligned} & \hline \text { Winter } \\ & \$ 0.7194 \\ & \$ 0.0475 \end{aligned}$ | $\begin{gathered} \hline \text { Summer } \\ \$ 0.4610 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Customer charge Sales rate | \$18.00 |  | Customer charge <br> Sales rate | \$35.00 |  |
| First Block Size | 80 | 80 | First Block Size | 100 | 100 |
| Second Block Size | 120 | 120 |  |  |  |
| Block 1 | \$1.1522 | \$1.1522 | Block 1 | \$0.3146 | \$0.3146 |
| Block 2 | \$0.9442 | \$0.9442 | Block 2 | \$0.2616 | \$0.2616 |
| Block 3 | \$0.7946 | \$0.7946 |  |  |  |


| Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
| Base Rates | COG | TOTAL | Base Rates | COG | TOTAL | Base Rates | $\begin{aligned} & \text { COG } / 1 \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | COG / LDAC | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| \$18 | \$0 | \$18 | \$18 | \$0 | \$18 | \$35 | \$0 | \$35 | \$35 | \$0 | \$35 | \$17.00 | 94.5\% | \$17.00 | 94.5\% | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| \$30 | \$15 | \$45 | \$30 | \$6 | \$36 | \$38 | \$8 | \$46 | \$38 | \$5 | \$43 | \$0.94 | 2.1\% | \$7.43 | 20.8\% | \$4.4874 | \$3.5803 | \$4.5818 | \$4.3234 |
| \$47 | \$38 | 5 | \$47 | \$16 | 63 | \$43 | \$19 | \$62 | \$43 | \$13 | \$56 | -\$23.15 | -27.2\% | -\$6.93 | -11.1\% | \$3.4074 | \$2.5003 | \$2.4816 | \$2.2232 |
| \$76 | \$77 | \$152 | \$76 | \$31 | \$107 | \$51 | \$38 | \$89 | \$51 | \$25 | \$76 | -\$63.29 | -41.5\% | -\$30.86 | -28.8\% | \$3.0474 | \$2.1403 | \$1.7815 | \$1.5231 |
| \$104 | \$115 | \$220 | \$104 | \$47 | \$152 | \$59 | \$58 | \$116 | \$59 | \$38 | \$97 | -\$103.44 | -47.1\% | -\$54.79 | -36.2\% | \$2.9274 | \$2.0203 | \$1.5482 | \$1.2898 |
| \$129 | \$154 | \$283 | \$129 | \$63 | \$192 | \$66 | \$77 | \$143 | \$66 | \$51 | \$117 | -\$139.43 | -49.3\% | -\$74.56 | -38.9\% | \$2.8258 | \$1.9187 | \$1.4315 | \$1.1731 |
| \$176 | \$230 | \$407 | \$176 | \$94 | \$270 | \$80 | \$115 | \$195 | \$80 | \$76 | \$156 | -\$211.97 | -52.1\% | -\$114.67 | -42.4\% | \$2.7103 | \$1.8032 | \$1.2972 | \$1.0388 |
| \$223 | \$307 | \$531 | \$223 | \$126 | \$349 | \$93 | \$153 | \$246 | \$93 | \$102 | \$194 | -\$284.52 | -53.6\% | -\$154.78 | -44.3\% | \$2.6526 | \$1.7455 | \$1.2300 | \$0.9716 |
| \$263 | \$384 | \$647 | \$263 | \$157 | \$420 | \$106 | \$192 | \$297 | \$106 | \$127 | \$233 | -\$349.59 | -54.0\% | -\$187.41 | -44.6\% | \$2.5880 | \$1.6809 | \$1.1897 | \$0.9313 |
| \$303 | \$461 | \$764 | \$303 | \$188 | \$491 | \$119 | \$230 | \$349 | \$119 | \$153 | \$271 | -\$414.65 | -54.3\% | -\$220.04 | -44.8\% | \$2.5450 | \$1.6379 | \$1.1628 | \$0.9044 |
| \$343 | \$537 | \$880 | \$343 | \$220 | \$563 | \$132 | \$268 | \$400 | \$132 | \$178 | \$310 | -\$479.72 | -54.5\% | -\$252.67 | -44.9\% | \$2.5143 | \$1.6072 | \$1.1436 | \$0.8852 |
| \$382 | \$614 | \$996 | \$382 | \$251 | \$634 | \$145 | \$307 | \$452 | \$145 | \$203 | \$348 | -\$544.78 | -54.7\% | -\$285.30 | -45.0\% | \$2.4912 | \$1.5841 | \$1.1292 | \$0.8708 |
| \$462 | \$768 | \$1,229 | \$462 | \$314 | \$776 | \$171 | \$383 | \$555 | \$171 | \$254 | \$425 | -\$674.91 | -54.9\% | -\$350.56 | -45.2\% | \$2.4589 | \$1.5518 | \$1.1091 | \$0.8507 |
| \$541 | \$921 | \$1,462 | \$541 | \$377 | \$918 | \$197 | \$460 | \$657 | \$197 | \$305 | \$502 | -\$805.04 | -55.0\% | -\$415.82 | -45.3\% | \$2.4374 | \$1.5303 | \$1.0957 | \$0.8373 |
| \$621 | \$1,075 | \$1,695 | \$621 | \$440 | \$1,060 | \$223 | \$537 | \$760 | \$223 | \$356 | \$579 | -\$935.18 | -55.2\% | -\$481.09 | -45.4\% | \$2.4220 | \$1.5149 | \$1.0861 | \$0.8277 |
| \$700 | \$1,228 | \$1,928 | \$700 | \$502 | \$1,203 | \$250 | \$614 | \$863 | \$250 | \$407 | \$656 | -\$1,065.31 | -55.2\% | -\$546.35 | -45.4\% | \$2.4105 | \$1.5034 | \$1.0789 | \$0.8205 |
| \$780 | \$1,382 | \$2,161 | \$780 | \$565 | \$1,345 | \$276 | \$690 | \$966 | \$276 | \$458 | \$733 | -\$1,195.44 | -55.3\% | -\$611.61 | -45.5\% | \$2.4015 | \$1.4944 | \$1.0733 | \$0.8149 |
| \$859 | \$1,535 | \$2,394 | \$859 | \$628 | \$1,487 | \$302 | \$767 | \$1,069 | \$302 | \$509 | \$810 | -\$1,325.57 | -55.4\% | -\$676.87 | -45.5\% | \$2.3944 | \$1.4873 | \$1.0688 | \$0.8104 |
| \$1,058 | \$1,919 | \$2,977 | \$1,058 | \$785 | \$1,843 | \$367 | \$959 | \$1,326 | \$367 | \$636 | \$1,003 | -\$1,650.90 | -55.5\% | -\$840.02 | -45.6\% | \$2.3814 | \$1.4743 | \$1.0607 | \$0.8023 |
| \$1,256 | \$2,303 | \$3,559 | \$1,256 | \$942 | \$2,199 | \$433 | \$1,150 | \$1,583 | \$433 | \$763 | \$1,195 | -\$1,976.22 | -55.5\% | -\$1,003.17 | -45.6\% | \$2.3728 | \$1.4657 | \$1.055 | \$0.7970 |

## 號

Winter - 25\%
42 Winter-50\%
4 Summer- $25 \%$
45 Summer-50\%
45
175
450
6
60
250

| $\$ 70$ | $\$ 69$ | $\$ 139$ |  |  |  | $\$ 49$ | $\$ 35$ | $\$ 84$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 200$ | $\$ 269$ | $\$ 469$ |  |  |  | $\$ 86$ | $\$ 134$ | $\$ 220$ |
| $\$ 422$ | $\$ 691$ | $\$ 1,113$ |  |  |  | $\$ 25$ | $\$ 4$ | $\$ 29$ |
|  |  |  | $\$ 158$ | $\$ 345$ | $\$ 503$ |  |  |  |
|  |  |  | $\$ 87$ | $\$ 38$ | $\$ 125$ |  |  |  |
|  |  | $\$ 263$ | $\$ 157$ | $\$ 420$ |  |  |  |  |


| $\$ 84$ |  |  |  |
| :--- | ---: | ---: | ---: |
| 220 |  |  |  |
| 503 |  |  |  |
|  | $\$ 37$ | $\$ 3$ | $\$ 40$ |
|  | $\$ 54$ | $\$ 31$ | $\$ 84$ |
|  | $\$ 106$ | $\$ 127$ | $\$ 233$ |



| $\$ 1.8593$ |  |
| :--- | :--- |
| $\$ 1.2588$ |  |
| $\$ 1.1180$ |  |
|  | $\$ 6.6569$ |
|  | $\$ 1.4065$ |
|  |  |

Estimated Bill Percentiles per 2010 MCS

COMPARATIVE MONTHLY BILLING UNDER PRESENT AND PROPOSED RATES
KEENE DIVISION RATE COMMERCIAL/INDUSTRIAL TO ENERGYNORTH RATE G-52 : COMMERCIALINDUSTRIAL - MEDIUM ANNUAL USE, LOW WINTER USE

| Present Rates Cost of Gas | $\begin{aligned} & \hline \text { Winter } \\ & \$ 1.5352 \end{aligned}$ | Summer $\$ 0.6281$ | Proposed Rates Cost of Gas LDAC | Winter \$0.7194 \$0.0475 | Summer $\$ 0.4610$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Customer charge Sales rate | \$18.00 |  | Customer charge Sales rate | \$100.00 |  |
| First Block Size <br> Second Block Size | 80 120 | 80 120 | First Block Size | 1000 | 1000 |
| Block 1 | \$1.1522 | \$1.1522 | Block 1 | \$0.2746 | \$0.2293 |
| Block 2 | \$0.9442 | \$0.9442 | Block 2 | \$0.2425 | \$0.1558 |
| Block 3 | \$0.7946 | \$0.7946 |  |  |  |


| Use per Month (therms) | Monthly Bills at Present Rates |  |  |  |  |  | Monthly Bills at Proposed Rates |  |  |  |  |  | Change in Monthly Bill |  |  |  | Unit Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Winter |  |  | Summer |  |  | Winter |  |  | Summer |  |  | Winter |  | Summer |  | Current |  | Proposed |  |
|  | Base Rates | COG | TOTAL | Base Rates | COG | TOTAL | Base Rates | $\begin{aligned} & \hline \text { COG/ } \\ & \text { LDAC } \end{aligned}$ | TOTAL | Base Rates | $\begin{aligned} & \text { COG/ } \\ & \text { LDAC } \end{aligned}$ | TOTAL | \$ | \% | \$ | \% | Winter | Summer | Winter | Summer |
| 200 | \$223 | \$307 | \$531 | \$223 | \$126 | \$349 | \$155 | \$153 | \$308 | \$146 | \$102 | \$248 | -\$222.22 | -41.9\% | -\$101.54 | -29.1\% | \$2.6526 | \$1.7455 | \$1.5415 | \$1.2378 |
| 300 | \$303 | \$461 | \$764 | \$303 | \$188 | \$491 | \$182 | \$230 | \$412 | \$169 | \$153 | \$321 | -\$351.05 | -46.0\% | -\$170.03 | -34.6\% | \$2.5450 | \$1.6379 | \$1.3748 | \$1.0711 |
| 0 | \$38 | \$614 | 996 | \$382 | \$251 | 34 | \$210 | 307 | 17 | \$192 | \$203 | \$395 | -\$479.88 | -48.2\% | -\$238.52 | -37.6\% | \$2.4912 | \$1.5841 | \$1.2915 | \$0.9878 |
| 0 | 462 | \$768 | \$1,229 | 62 | \$314 | 776 | \$237 | \$383 | \$621 | \$215 | \$254 | \$469 | -\$608.71 | -49.5\% | -\$307.01 | -39.6\% | \$2.4589 | \$1.5518 | \$1.2415 | \$0.9378 |
| 600 | \$541 | \$921 | \$1,462 | \$541 | 377 | \$918 | \$265 | \$460 | \$725 | \$238 | \$305 | \$543 | -\$737.54 | -50.4\% | -\$375.50 | -40.9\% | \$2.4374 | \$1.5303 | \$1.2082 | \$0.9045 |
| 700 | \$621 | \$1,075 | \$1,695 | \$621 | \$440 | \$1,060 | \$292 | \$537 | \$829 | \$261 | \$356 | \$616 | -\$866.37 | -51.1\% | -\$443.99 | -41.9\% | \$2.4220 | \$1.5149 | \$1.1844 | \$0.8807 |
| 800 | \$700 | \$1,228 | \$1,928 | \$700 | \$502 | \$1,203 | \$320 | \$614 | \$933 | \$283 | \$407 | \$690 | -\$995.20 | -51.6\% | -\$512.48 | -42.6\% | \$2.4105 | \$1.5034 | \$1.1665 | \$0.8628 |
| 900 | \$780 | \$1,382 | \$2,161 | \$780 | \$565 | \$1,345 | \$347 | \$690 | \$1,037 | \$306 | \$458 | \$764 | -\$1,124.03 | -52.0\% | -\$580.97 | -43.2\% | \$2.4015 | \$1.4944 | \$1.1526 | \$0.8489 |
| 1,000 | \$859 | \$1,535 | \$2,394 | \$859 | \$628 | \$1,487 | \$375 | \$767 | \$1,141 | \$329 | \$509 | \$838 | -\$1,252.86 | -52.3\% | -\$649.46 | -43.7\% | \$2.3944 | \$1.4873 | \$1.1415 | \$0.8378 |
| 1,100 | \$939 | \$1,689 | \$2,627 | \$939 | \$691 | \$1,630 | \$399 | \$844 | \$1,242 | \$345 | \$559 | \$904 | -\$1,384.90 | -52.7\% | -\$725.29 | -44.5\% | \$2.3885 | \$1.4814 | \$1.1295 | \$0.8220 |
| 1,200 | \$1,018 | \$1,842 | \$2,860 | \$1,018 | \$754 | \$1,772 | \$423 | \$920 | \$1,343 | \$360 | \$610 | \$971 | -\$1,516.94 | -53.0\% | -\$801.13 | -45.2\% | \$2.3836 | \$1.4765 | \$1.1195 | \$0.8089 |
| 1,300 | \$1,098 | \$1,996 | \$3,093 | \$1,098 | \$817 | \$1,914 | \$447 | \$997 | \$1,444 | \$376 | \$661 | \$1,037 | -\$1,648.98 | -53.3\% | -\$876.96 | -45.8\% | \$2.3795 | \$1.4724 | \$1.1110 | \$0.7978 |
| 1,400 | \$1,177 | \$2,149 | \$3,326 | \$1,177 | \$879 | \$2,056 | \$472 | \$1,074 | \$1,545 | \$392 | \$712 | \$1,104 | -\$1,781.02 | -53.5\% | -\$952.79 | -46.3\% | \$2.3759 | \$1.4688 | \$1.1038 | \$0.7882 |
| 1,500 | \$1,256 | \$2,303 | \$3,559 | \$1,256 | \$942 | \$2,199 | \$496 | \$1,150 | \$1,646 | \$407 | \$763 | \$1,170 | -\$1,913.06 | -53.7\% | -\$1,028.63 | -46.8\% | \$2.3728 | \$1.4657 | \$1.0975 | \$0.7800 |
| 1,750 | \$1,455 | \$2,687 | \$4,142 | \$1,455 | \$1,099 | \$2,554 | \$556 | \$1,342 | \$1,899 | \$446 | \$890 | \$1,336 | -\$2,243.17 | -54.2\% | -\$1,218.21 | -47.7\% | \$2.3667 | \$1.4596 | \$1.0849 | \$0.7635 |
| 2,000 | \$1,654 | \$3,070 | \$4,724 | \$1,654 | \$1,256 | \$2,910 | \$617 | \$1,534 | \$2,151 | \$485 | \$1,017 | \$1,502 | -\$2,573.27 | -54.5\% | -\$1,407.80 | -48.4\% | \$2.3621 | \$1.4550 | \$1.0754 | \$0.7511 |
| 2,500 | \$2,051 | \$3,838 | \$5,889 | \$2,051 | \$1,570 | \$3,621 | \$738 | \$1,917 | \$2,656 | \$563 | \$1,271 | \$1,834 | -\$3,233.47 | -54.9\% | -\$1,786.97 | -49.3\% | \$2.3556 | \$1.4485 | \$1.0622 | \$0.7337 |
| 3,000 | \$2,448 | \$4,606 | \$7,054 | \$2,448 | \$1,884 | \$4,333 | \$860 | \$2,301 | \$3,160 | \$641 | \$1,526 | \$2,167 | -\$3,893.68 | -55.2\% | -\$2,166.14 | -50.0\% | \$2.3513 | \$1.4442 | \$1.0534 | \$0.7222 |
| 4,000 | \$3,243 | \$6,141 | \$9,384 | \$3,243 | \$2,512 | \$5,755 | \$1,102 | \$3,068 | \$4,170 | \$797 | \$2,034 | \$2,831 | -\$5,214.08 | -55.6\% | -\$2,924.48 | -50.8\% | \$2.3459 | \$1.4388 | \$1.0424 | \$0.7077 |
| 5,000 | \$4,038 | \$7,676 | \$11,714 | \$4,038 | \$3,141 | \$7,178 | \$1,344 | \$3,835 | \$5,179 | \$953 | \$2,543 | \$3,495 | -\$6,534.49 | -55.8\% | -\$3,682.82 | -51.3\% | \$2.342 | \$1.4356 | \$1.0358 | \$0.6990 |

## Winter

 $25 \%$ Winter -$50 \%$ Winter $75 \%$ Summer Summer 50\% Summer $75 \%$

| 1,040 | $\$ 891$ | $\$ 1,597$ | $\$ 2,488$ |
| :--- | ---: | ---: | ---: |
| 2,000 | $\$ 1,654$ | $\$ 3,070$ | $\$ 4,724$ |
| 3,500 | $\$ 2,846$ | $\$ 5,373$ | $\$ 8,219$ |
| 700 |  |  |  |
| 1,040 |  |  |  |
| 2,000 |  |  |  |
|  |  |  |  |


| 19 |  |  |  | $\$ 384$ | $\$ 798$ |
| ---: | ---: | ---: | ---: | ---: | ---: |


|  |  |  | $-\$ 1$, |
| ---: | ---: | ---: | ---: |
|  |  |  | $-\$ 2$, |
|  |  |  | $-\$ 4$, |
| $\$ 261$ | $\$ 356$ | $\$ 616$ |  |
| $\$ 336$ | $\$ 529$ | $\$ 864$ |  |
| $\$ 485$ | $\$ 1,017$ | $\$ 1,502$ |  |


| $-\$ 1,305.68$ | $-52.5 \%$ |  |  | $\$ 2.3919$ |  | $\$ 1.1364$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $-\$ 2,573.27$ | $-54.5 \%$ |  |  | $\$ 2.3621$ |  | $\$ 1.0754$ |  |
| $-\$ 4,553.88$ | $-55.4 \%$ |  |  | $\$ 2.3482$ |  | $\$ 1.0471$ |  |
|  |  | $-\$ 443.99$ | $-41.9 \%$ |  | $\$ 1.5149$ |  | $\$ 0.8807$ |
|  |  | $-\$ 679.79$ | $-44.0 \%$ |  | $\$ 1.4848$ |  | $\$ 0.8311$ |
|  |  | $-\$ 1,407.80$ | $-48.4 \%$ |  | $\$ 1.4550$ |  | $\$ 0.7511$ |

Estimated Bill Percentiles per 2010 MCS


[^0]:    Estimated Bill Percentiles
    Winter -
    Winter
    50\%
    Winter -
    $75 \%$
    Summer -
    25\%
    Summer -
    50\%
    Summer -
    $75 \% \quad 20$

[^1]:    Estimated Bill Perce
    50\%
    50\%
    Winter -
    $75 \%$
    Summe
    $25 \%$
    Summer
    50\%
    Summer -
    $75 \%$

[^2]:    Estimated Bill Percentiles per 2010 MCS

