THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

D.T.E. 05-27

DIRECT TESTIMONY OF JOSEPH A. FERRO

– RATE DESIGN,
STEEL INFRASTRUCTURE ANNUAL BASE RATE ADJUSTMENT
AND OTHER ADJUSTMENT FACTORS –

IN SUPPORT OF
BAY STATE GAS COMPANY'S
REQUEST FOR INCREASE IN BASE REVENUE

EXH. BSG/JAF-2

APRIL 27, 2005

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I. INTRODUCTION

Q. Mr. Ferro, does this Exhibit BSG/JAF-2 represent the second of three series of Exhibits you are sponsoring as part of Bay State Gas Company's ("Bay State" or "Company") proposed rate filing?

A. Yes. As explained further below, this Exhibit BSG/JAF-2 includes my testimony and supporting schedules related to rate design and the Company's proposed annual rate adjustment process and mechanisms. Exhibit BSG/JAF-1 includes a description of my background, and provides the Company's test year billing determinants and revenues to support the proposed rate design. Exhibit BSG/JAF-3 includes a description of the Company's proposed revised tariff sheets associated with the proposed rate and service provision changes set out in this case, including changes to the recovery of pension and post retirement benefits other than pensions ("PBOP") expenses, which is also discussed in Mr. Barkauskas' testimony (Exh. BSG/SAB-1).

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. Please explain the purpose of this Exhibit.

A. Exhibit BSG/JAF-2 sets forth the updated, and in some cases new, rates, services and adjustment mechanisms proposed in this proceeding. In particular, as part of Exhibit BSG/JAF-2, I present and support: Rate design and the resulting base rates and bill impacts and the annual rate adjustment process and mechanisms associated with the Steel Infrastructure Replacement ("SIR") Base Rate Adjustment, which is also discussed in Mr. Bryant, Mr. Cote, and Mr. Skirtich's testimony (Exhs. BSG/SHB-1, BSG/DGC-1 and BSG/JES-1, respectively) and the Performance Base Rate ("PBR") structure, which is discussed in Mr. Bryant's and Mr. Kaufmann's testimony (Exhs. BSG/SHB-1 and BSG/LRK-1, respectively).

III. OVERVIEW OF RATE DESIGN

Q. Please present the base rates that Bay State has designed to recover its proposed revenue increase?

A. Refer to pages 15 and 16 of Schedule JAF-2-1 for the base rates that the Company is proposing for each customer class.

Q. Please provide a list of your schedules supporting the Company's rate design.

A. My schedules in support of the Company's rate design are as follows:

Schedule Designation	Description
Schedule JAF-2-1	Rate Design Worksheet (16 pages)
Schedule JAF-2-2	Development of Customer Charges (1 page)
Schedule JAF-2-3	Development of Block Sizes (1 page)
Schedule JAF-2-4	Preliminary Rate Design Summary (2 pages)
Schedule JAF-2-5	Calc. of Res. Low-Income Discount Rate, (6 pages)
Schedule JAF-2-6	Bill Impacts by Strata, (12 pages)
Schedule JAF-2-7	Typical Bill Impacts by Rate Class (8 pages)

Q. Has the Company designed rates consistent with the Department's precedent?

A. Yes. Bay State's rates were designed consistent with the Department's precedents.

Q. Please list the primary goals used to guide Bay State's rate design.

A. The goals used to guide Bay State's rate design include: efficiency, simplicity, continuity, fairness, and earnings stability.

Q. Please briefly describe how each of the above goals is related to the rate design.

A. An efficient rate design provides an accurate basis for consumers' decisions and allows a company to recover its cost of providing service. Simplicity implies that consumers will easily understand the rate structure. The goal of rate continuity implies that changes to the rate design will be gradual and will allow customers to adjust their consumption patterns to the rate changes. A fair rate design means that no customer class pays more than the cost of providing it service. Earnings stability means that a company's earnings from its rates should not vary significantly over the period of a few years.

IV. REVENUE ALLOCATION AND BILL IMPACT CONSTRAINTS

Q. What amount of incremental revenue does the Company propose to collect through its rate design?

A. The Company proposes to collect an additional $22,238,326 through its proposed rates.

Q. How much of this incremental revenue increase is the Company proposing to recover through the base rates of tariff customers?

A. The Company is proposing to increase its tariff base rates by $17,580,855. The reasons for the difference between the Company's proposed revenue increase and the increase to base rates are presented in the following table:

	AMOUNT	EXPLANATION
Total Proposed Increase	**$ 22,238,326**	Schedule JES-2, line 8
Pension & PBOP Costs	- $ 5,630,282	Base Rates to LDAC - Sch.

		JES-4 and Sch. JAF-2-1, line 173
Special Contracts	- $ 418,748	Allocated Increase – JAF-2-1 (Line 140 – 113)
Other Fees Increase	- $ 46,525	Sch. JAF-1-8, 1-10, and JAF-2-1, line 208
Lower "Indirect" gas costs in CGAC	+$ 1,438,084	LP/LNG, A&G, WC, BD TY-$19.1m vs. New-$17.7m (JAF-2-1, l.83 & 84 vs. l.150)
Base Rate Increase	**$ 17,580,855**	Sch. JAF-2-1, line 214

The table above indicates that, because of the shifting of cost recovery from base rates to the LDAC (pension/PBOP) and CGAC (indirect gas costs) and a portion of the proposed increase being allocated to special contract service, the Company is proposing to increase its base rates by $17,580,855 rather than by the total proposed revenue increase. The pension/PBOP-related costs are explained by Mr. Skirtich, while the new indirect gas costs is explained on pages 21 through 24 of Mr. Harrison's testimony, and the data is summarized on Schedule JLH-3-14.

Q. What is the basis of the Company's proposed revenue allocation for base rates?

A. Costs were assigned to customer classes based upon the results of Mr. Harrison's Accounting Cost of Service study ("ACOS").

Q. What information from Mr. Harrison's ACOS was used for revenue allocation?

A. Refer to pages 5 and 6 of Schedule JAF-2-1. Lines 140 through 142 show the target base revenue requirements by customer class for the test year. The class revenue requirements are also shown on Schedule JLH-3-14.

Q. Please explain how revenue allocation to the customer classes was performed.

A. The revenue requirements resulting from the ACOS were set as initial targets for allocating test year base revenue among customer classes. The initial revenue targets were evaluated to determine if any customer class would receive an increase greater than 6% of its total test year revenue, excluding the shortfall due to the low-income discount. Any customer class above this amount was capped at 6%, and the remaining revenue increase was reallocated to other customer classes.

Q. Please provide a reference for the base revenue requirements resulting from the ACOS.

A. Refer to line 204 of Schedule JAF-2-1. The percentages shown on this line represent each customer class' share of the base revenue requirement after a portion is directly allocated to special contract customers. Each customer class' target base revenue requirement is shown on line 213.

Q. Why did you employ a cap of 6% of each class's total test year revenue?

A. The employment of the 6% cap is consistent with the Company's past practice of limiting class increases in rate filings and the Department's decisions regarding those practices, as evidenced in Bay State's last two rate proceedings; general rate case, D.P.U. 92-111 and rate redesign case, D.P.U. 95-104. Instituting a cap of 6% of each class's total test year revenues to allow for rate continuity as the 6% cap limits bill impacts in general.

Q. Did the initial revenue allocation result in any customer class exceeding the 6% impact constraints?

A. Yes. By assigning the revenue requirement based on the ACOS, the initial allocated revenue increase to three customer classes exceeded the 6% cap. The resulting increases, shown on line 219 of Schedule JAF-2-1, were: Residential Non-heating – 48.92%; G/T 50 – 7.53%; and G/T 43 – 7.36%.

Q. How did the Company mitigate the bill impact to these customer classes?

A. The amount of the customer class' revenue requirement in excess of the bill impact cap was reassigned to all other customer classes using the total test year revenue allocation method. All steps of assigning the revenue requirement among customer classes are presented in the following section of my testimony.

Q. How was the remaining revenue increase assigned to other customer classes?

A. Since no customer classes were assigned a decrease at equalized rates of return, any remaining revenue shortfall was assigned to customer classes who were assigned an increase that was less than the 6% cap. The basis for this allocation was the ratio of each class' test year revenues to the group's total test year revenues. This allocation of the revenue increase is consistent with Department policy and the Company's practice in its previous rate proceedings.

Q. How does the Company's proposed allocation differ from the target allocation of base revenue requirement?

A. Line 240 of Schedule JAF-2-1 shows the change in revenue requirement for each customer class. The Company's proposed base revenue requirements are shown on line 242, and line 243 shows the proposed total revenue requirement.

Q. Did you calculate bill impacts for each customer class?

A. Yes. The class bill impacts resulting from final rate design are shown on the final lines, 407 to 410, of Schedule JAF-2-1. These bill impacts include the recovery of the revenue requirement resulting from the residential low-income discount. Class bill impacts prior to calculating the low-income discount are shown on line 244.

Q. Explain how the class bill impacts were calculated.

A. The bill impacts were computed by comparing the total revenue requirements by customer class for the test year with the Company's rate design proposal. These bill impacts provide the average burner-tip change for each customer class and include changes to base rates, direct gas costs, indirect gas costs, and the LDAC rates. The bill impacts shown are limited to the changes resulting from the instant rate proceeding. For example, the only revision to the LDAC is due to the shift of pension-related costs into the LDAC. Likewise, the direct gas cost shifts shown are a result of the SMBA model proposed in this proceeding through Mr. Harrison's testimony.

Q. Please provide a reference for the development of the test year direct gas costs and surcharges.

A. The development of the test year revenue amounts is shown on Schedule JAF-1-2 and described in my testimony, Exhibit BSG/JAF-1. For rate design purposes, these revenues are shown on lines 184 through 199 of Schedule JAF-2-1.

Q. Please provide a reference for the test year and revised indirect gas cost rates and revenues on Schedule JAF-2-1.

A. The test year indirect gas cost rates are shown on lines 94 and 95, pages 3 and 4, while the revenues are shown on lines 121 through 123, pages 5 and 6. The new or proposed indirect gas cost rates are shown on lines 158 and 159, and revenues on lines 189 through 191, of pages 7 and 8.

Q. Are the revised indirect gas costs included in the determination of bill impacts?

A. Yes. The initial indirect gas costs have been set at test year levels. The revised indirect gas costs have been included in the bill impacts.

Q. Please describe how total bill impacts were calculated for transportation customers.

A. For transportation customers, total bill impacts were computed by including estimated direct and indirect gas costs. The actual seasonal/monthly gas cost rates by rate class, which were charged to sales customers throughout the test year and also used for the bill impacts of sales customers, were used to impute a level of gas commodity costs for firm transportation customers. These gas cost rates were multiplied by the billing determinants of the respective firm transportation service rate classes, in order to estimate gas costs. The gas costs for transportation customers were held constant at these levels and do not include the modifications proposed in this proceeding. This is a reasonable approach considering that the Company's proposed changes to charging for gas supply service do not apply to the competitive supplier service charged to transportation customers.

V. BASIC APPROACH TO RATE DESIGN

Q. In general, please describe the rate design calculations shown on Schedule JAF-2-1.

A. Each customer class' base revenue requirement is shown on line 242 of Schedule JAF-2-1. Proposed customer charges are presented on line 274. The revenue generated from the customer charges is subtracted from each customer class' revenue requirement, and with the exception of the demand-based customer classes, the remaining revenue is set as a volumetric revenue target. The specific design of the demand-based rates is presented later in this testimony.

Q. How were Mr. Harrison's ACOS and Marginal Cost of Service studies used to guide the rate design process?

A. Both the seasonal rate structure and customer charge levels were guided by the results of the ACOS Study. The unit marginal costs resulting from the Marginal

Cost of Service Study assisted in the development of the proposed second block rates, or in some cases, whether a second block was appropriate, by customer class.

Q. Did the Company evaluate the levels of the first block sizes for each customer class?

A. Yes. The Company evaluated the existing block sizes to determine if approximately 50% of the customers' bills terminate in the first block, and to compute the percent of therms falling in the first block. The Company also evaluated block sizes by setting the block sizes at a level that generated approximately 50% of the customers' bills terminating in that first block, and observing the resulting percent of therms falling in the first block. Schedule JAF-2-3 presents the results of both the current and proposed block sizes.

Q. How did the Company use this analysis presented in Schedule JAF-2-3?

A. The Company attempted to ensure that the block sizes reasonably strike a balance for the residential classes between attaining the 50% target of bills ending in the first block and avoiding a disproportionate volume of therms in either the first or second blocks. As a result, the Company increased the Residential Heating Peak period first block size from 90 to 125 therms, while it elected to maintain the same block sizes for the Off-peak period, as well as for the non-heating class' block size for both periods.

For the C&I classes, the Company has reason to simplify those rate structures and move to flat, or single-step, rates. As shown in this schedule, block rates for many of the C&I classes are showing rather large variations of percentages of bills ending in the first block coupled with the volume of therms in each block. Also, the Company is proposing to move closer to cost based customer charges,

especially compared to the residential customer charges. (See Schedule JAF-2-2.) This movement does not impose as much of a need to recover significant customer cost revenue requirement in a head block. For these reasons, the Company believes it has an opportunity to simplify C&I rates, which will be easier for customers to understand and for the Company to administer. Flat rates also achieve an optimal level of fairness for customers and the Company, with respect to the cost or revenue impact associated with usage variations, particularly due to weather. That is, the impact of monthly customer usage swings, up or down, is at the same unit cost for all C&I customers and for the Company.

VI. RESIDENTIAL RATE DESIGN

Q. What customer charges does Bay State propose for its residential customer classes?

A. Schedule JAF-2-2 presents the Company's assessment of its current monthly customer charges as compared to its cost-based customer charges and of proposed customer charges as a percent of, and movement towards, the cost based charges. The following customer charges and associated percent of the cost-based charges are being proposed:

	Mo. Charge	Approx. % of ACOS
Residential Heating:	$12.10	50%
Residential Heating Low-Income:	$$6.25	25%
Residential Non-Heating:	$11.60	50%
Resid. Non-Heating Low-Income:	$$6.25	25%

Q. Why has Bay State proposed these customer charges?

A. Currently, customer charges for the residential customer classes are significantly below the Company's allocated cost of service to these customers. Bay State's proposal to increase their customer charges balances the desire to minimize bill

impacts and the need to move towards cost-based rates. Considering that all residential customer charges are well below the cost-based customer charges, and that bill impacts have been minimized, Bay State believes its proposed customer charges are reasonable.

Q. Please explain how the remaining revenue requirement is determined and recovered.

A. Refer to pages 11 & 12 of Schedule JAF-2-1. On line 275, the number of test year customer charges is multiplied by the proposed customer charge. This amount is subtracted from the revenue requirement assigned to each customer class. The remaining revenue is collected through volumetric charges.

Q. Describe the development of the volumetric charges for the residential customer classes.

A. First, the second block rates were set as a multiple of the unit marginal cost for each customer class. Refer to lines 279 through 330 of Schedule JAF-2-1 for the computation of the volumetric charges. A multiplier of one implies that the second block rate is equal to the winter unit marginal cost for the customer class. The multiplier for the residential heating customer class was set at 1.80. The first block rate is equal to the second block rate plus an additional amount to collect the remaining volumetric revenue requirement.

Q. Why has the Company selected 1.80 as the marginal cost multiplier?

A. The Company set the multiplier at 1.80 to balance competing rate design goals. The second block rate should be set close to marginal cost to provide proper price signals for customers' consumption decisions. However, setting the second block rate at or very close to marginal cost will cause disproportionately high bill

impacts for low use residential customers. The Company believes that its proposed rate structure appropriately balances the rate design goals.

Q. Does the Company propose to maintain the residential low-income customer classes?

A. Yes. Low-income residential customers will continue to receive a 20% burner-tip discount. Please refer to Schedule JAF-2-5 for the calculation of the low-income residential rate structures.

Q. Please explain the calculations shown on Schedule JAF-2-5.

A. For each of the four residential customer classes, page 1 of Schedule JAF-2-5 shows the billing determinants for the test year, the proposed rate design before the inclusion of the low-income discount, and the calculation of the resulting base revenues. Page 2 presents the total revenue for each of the residential classes and the first iteration of the 20% burner-tip discount for low-income customers. The resulting base revenues are recalculated with the revised rates, and the process is repeated until a 20% discount is achieved for both the heating and non-heating customer classes. The proposed low-income base rates are shown on lines 163 through 168 of Schedule JAF-2-5 and are restated on lines 380 through 386 of Schedule JAF-2-1 for the purpose of demonstrating the Company's revenue proof.

Q. How did the Company allocate the subsidy provided to the low-income residential customers?

A. The low-income discount will be recovered from all other tariff customer classes and was allocated to classes based upon distribution rate base. The use of the distribution rate base allocator for the assignment of this revenue shortfall represents Department policy, evidenced in Bay State's previous rate cases, D.P.U

95-52/104 and D.P.U. 92-111, as well as in KeySpan's most recent rate case, D.T.E. 03-40. Refer to lines 355 through 369 of Schedule JAF-2-1 for the amount of the residential subsidy assigned to each customer class.

Q. How was the low-income subsidy amount added to the rate structures?

A. The subsidies were added to the volumetric components of the rate structures. Refer to line 355 through 371 of Schedule JAF-2-1 for the calculation of the surcharges that were added to the volumetric rates for each customer class. Lines 380 through 389 show the Company's proposed rate design, after the addition of the low-income surcharges.

Q. How has the residential low-income discount affected class bill impacts?

A. The allocation of the residential low-income discount has pushed some classes above the cap of a 6% increase to each class' total revenues, but all by less than 2%. Line 410 of Schedule JAF-2-1 shows the final class percentage impacts to total revenues.

Q. Please explain the Outdoor Gas Lighting Service – Rate L.

A. The Outdoor Lighting rate is for unmetered gas service for a standard outdoor gaslight. The current rate is $3.32 per month per gaslight. In addition, based on the gas use of 19 therms per month, service under this rate schedule is charged the Gas Adjustment Factor (GAF) under the Cost of Gas Adjustment Clause provisions and the LDAC.

Service under the Outdoor Lighting rate schedule is only opened to those customers taking service under this rate as of December 14, 1979. Because the rate service has been closed out for over twenty-four years, only 12 customers remain on this rate schedule, with test year gas volumes (based on 19 therms) of

2,728 therms. Although the number of customers and associated volumes are very low, this rate class was run through the ACOS and the Rate Design worksheet, resulting in a proposed monthly charge per gas light of $2.58, a reduction of $0.74 per month.

VII. COMMENRCIAL AND INDUSTRIAL RATE DESIGN

Q. What customer charges has the Company proposed for the small and medium commercial and industrial customer classes?

A. The proposed customer charges and associated percent of the cost-based charge are shown below:

	Monthly Charge	Approximate % of ACOS
G/T-40/50:	$19.00	50%
G/T-41/51:	$65.00	75%

Q. Why has the Company proposed these customer charges for the small and medium commercial and industrial classes?

A. The Company has proposed these customer charges to move approximately 30% and 50% closer, on average, to the cost based customer charges for the G/T-40/50 and G/T-41/51 customer classes, respectively. As shown on the table above, the monthly customer charges are, on average, still 50% and 75% of the cost-based charge for the G/T-40/50 and G/T-41/51 classes, respectively. The current customer charges are $12.61 for the G/T-40/50 classes and $45.04 for the G/T-41/51 classes, while the cost based charges are $34.63 for G/T-40, $42.57 for G/T-50, $82.80 for G/T-41 and $89.22 for G/T-51. Note that the Company is proposing to maintain the same customer charge for the two Low Annual C&I classes, and the same for the two Medium Annual C&I classes, as the cost-based charges are quite similar.

Q. What customer charges has the Company proposed for the large and extra-large commercial and industrial customer classes?

A. The proposed customer charges are shown below:

	Monthly Charge	% of ACOS
G/T-42/52:	$213.00	75%
G/T-43/53:	$781.00	100%

Q. Why has the Company proposed these customer charges for the large and extra-large commercial and industrial classes?

A. The Company has proposed these customer charges to move 60% closer to the G/T-42/52 cost based customer charge and a complete or 100% movement for the G/T-43/53 customer classes, whose extra high annual use (annual use of 250,000 therms or greater) and associated demand and volumetric charges dominate the customer charges.

The current customer charges are $109.37 for the G/T-42/52 classes and $298.53 for the G/T-43/53 classes, while the cost based charges are $261.13 (G/T-42), $307.22 (G/T-52), $799.10 (G/T-43) and $762.87 (G/T-53). Considering that the proposed customer charges, or resulting customer charge revenues represent only 3% and 1% of total charges to customers, or revenues, in the G/T-42/52 and G/T-43/53 classes, respectively, the proposed customer charges should not create an economic burden on customers in these classes. (See line 393 versus line 408 of Schedule JAF-2-1, page 16.) The bill impact analysis in Schedule JAF-2-7, referenced later, illustrates the limited impact and limited number of customers impacted by the customer charge increase.

Q. Is the remaining revenue requirement determined similar to the residential customer classes?

A. Yes. Please refer to page 11 & 12 of Schedule JAF-2-1.

Q. How were the volumetric rates for the commercial and industrial classes established?

A. The Company approached establishing volumetric rates for the small, medium and large commercial and industrial customer classes in the same manner as for the residential classes. The rate design for the extra-large volume rate (XLV) classes is different from the other customer classes. However, as previously mentioned, the Company opted to simplify volumetric rates by establishing flat rates for all of the C&I classes.

Q. Please explain how the G/T-40 volumetric rate was developed.

A. First, the Company observed that the calculated volumetric rate for the Off-peak period was substantially higher than the rate for the Peak period. See Schedule JAF-2-4. Considering that the ACOS indicated such a counter-seasonal disparity in volumetric rates, the Company derived an annualized flat rate, i.e., the same for both seasons, of $0.3090 per therm. To establish this flat rate, the Company moved $903,003 of revenue requirement from the Off-peak to the Peak period. See Schedule JAF-2-1, page 11 (Line 288 – 303).

Q. Please explain how the G/T-50 volumetric rate was developed.

A. First, the Company observed that the calculated seasonal volumetric rates, using the ACOS results, were quite similar as shown in Schedule JAF-2-4. Therefore, as with the G/T-40 class, the Company derived an annualized flat rate of $0.2818 per therm. To establish this flat rate, the Company moved $57,411 of revenue requirement from the Peak to the Off-peak period. See Schedule JAF-2-1, page 11 (Line 288 – 303).

Q. Please explain how the G/T-41 and G/T-51 volumetric rates were developed.

A. Both these classes showed reasonable seasonality based on the ACOS. Further, the bill impacts on Schedule JAF-2-6 gave no major cause for concern of imposing significant bill impacts to customers at certain consumption levels. Therefore, the Company developed seasonal flat rates as shown on lines 326 and 329 on page 13 of Schedule JAF-2-1.

Q. Please explain how the G/T-42 and G/T-52 volumetric rates were developed.

A. The development of the volumetric rates for these two classes was quite similar to that of the Medium Annual classes. Both these High Annual classes also showed reasonable seasonality based on the ACOS. Further, the bill impacts on Schedule JAF-2-6 gave no major cause for concern of imposing significant bill impacts to customers at certain consumption levels. Therefore, the Company developed seasonal flat rates as shown on lines 326 and 329 on page 14 of Schedule JAF-2-1.

Q. Is the Company maintaining the existing design of the extra-large volume demand-based rate structure?

A. Yes. The design of the extra-large volume demand-based rate classes established pursuant to D.P.U. 95-104 will be preserved.

Q. Please describe the existing demand-based rate structure.

A. The existing demand-based rate structure includes a monthly customer charge, a seasonal demand-based component and a one-tier volumetric rate. First, the customer charge was established. Then, the demand component was set to collect 70% of the remaining revenue requirement, and the volumetric rate was calculated to recover the remaining revenue. Refer to lines 274 through 333 of Schedule JAF-2-1 for these computations.

Q. Did the Company consider developing different base rates for the G/T-43 and G/T-53 customer classes?

A. Yes. The Company considered separate rates for the two demand-based rate classes. However, the results of Mr. Harrison's cost of service study showed that the cost-based rates for the two customer classes are quite similar. Please refer to page 2 of Schedule JAF-2-4. The preliminary base rates for the G/T-43 and G/T-53 customer classes are shown on lines 3 through 12. With the customer charge set at $781 for both classes the winter volumetric rates only varied by $0.0035 per therm and the summer volumetric rate were different by $0.0005 per therm. G/T-43 winter demand rate was higher by $0.2142 per therm. However, the G/T-43 summer demand rate was lower by $0.14 per therm. As a result of these similarities, the Company decided to maintain a single base rate structure for these two Extra High Annual customer classes.

Q. How much revenue requirement has the Company shifted as a result of combining the two demand-base rate classes?

A. Please refer to line 347 of Schedule JAF-2-1. This line shows that the Company's proposal causes a shift of $26,832 from the G/T-53 customer class to the G/T-43 customer class.

Q. Has the Company considered revisions to the existing demand-based rate structure?

A. Yes. The Company considered revising the demand-based rates. However, in consulting with field personnel who have direct contact with the extra-large volume customers, the Company found that the Sales and Key Account representatives and the customers they service are reasonably comfortable with the current rate structure. Also, considering that the demand charges are based

upon a real-time maximum daily use each month, throughout the year, the rate structure presents a reasonably equitable approach to charging for distribution service. Finally, the daily telephonic meter reading device needed for this rate structure is also needed for most of these customers to administer non-daily metered distribution (transportation) service every month pursuant to the Company's Distribution and Default Service Terms and Conditions. Thus, the Company, irrespective of the need to administer the demand base rates, needs to use and maintain the necessary daily metering capability. Therefore, the Company has decided to maintain the existing rate structure.

VIII. SPECIAL CONTRACT CUSTOMERS

Q. Does the Company serve any customers according to special contracts, which are outside of its tariff?

A. Yes. The Company serves five customers according to special rate agreements, which have been approved by the Department.

Q. Has the Company assigned any of the proposed revenue increase to its special contract customers?

A. Yes. One of the special contract customers has been assigned a distribution rate increase pursuant to its contract, and as a result of the Company's rate case. The details concerning the specific rates, which will be charged to these customers is being filed separately with confidential treatment requested.

Q. Why are the other four special contract customers maintaining their current rate structures?

A. In the case of three of these other special contract customers, their contracts include inflation escalation clauses. Hence, these three contracts are not tied to

the Company's rate case filing. In the case of the other customer, any rate increase pursuant to the contract, is tied to any change in the Company's firm Off-system rate, which no longer exists. As directed by the Department, if for any reason this, or any special contract, customer's rate does not exceed long-run marginal costs, the Company would cease service or file for a sufficient rate increase.

Q. Has the Company verified that the rates for all five of the special contract customers exceed the Company marginal cost of service?

A. Yes. The Company applied the rates from Mr. Harrison marginal cost of service study to determine that the rates for all of the special contracts exceed the marginal cost of service.

Q. How much of the Company's incremental revenue requirement has been assigned to the one special contract customer?

A. The pricing provision for this special contract customer sets out increases to the rates and charges at a percentage equivalent to the percentage of the Company's overall increase to its distribution (or base) revenues. The Company's proposed increase represents a 15.7% increase to test year distribution revenues. This percentage is based on the $22.24 million proposed increase presented in Schedule JES-2 divided by $141.35 million of test year distribution revenues – sum of column 1, lines 5, 6 and 7 of Schedule JAF-1-1, sheet 1. The 15.7% of the annual revenues generated from the special contract pricing of this special contract customer has been allocated to that customer, rather than to tariff customers. The total allocation of the proposed rate increase to the special contract customer is $418,748.

IX. REVENUE PROOF

Q. Has the Company provided a revenue proof for its proposed rates?

A. Yes. Please refer to pages 15 and 16 of Schedule JAF-2-1. The computations shown on lines 393 through 403 demonstrate that the proposed rates multiplied by the test year billing determinants produces the Company's proposed base revenue requirement.

X. BILL IMPACT ANALYSES

Q. Did the Company perform bill impact analyses by customer class?

A. Yes. The class-level bill impacts are presented on pages 15 and 16 of Schedule JAF-2-1.

Q. Briefly summarize the class-level bill impacts resulting from the Company's proposal?

A. As stated earlier, all of the customer class bill impacts were less than 6%, before the allocation of the residential low income discount revenue shortfall. Some classes exceed the 6% impact after this allocation. The final resulting class bill impacts (excluding the residential discount classes and outdoor lighting) range from an increase of 2.73% to 7.83%.

Q. How the did Company evaluate intra-class bill impacts?

A. Please refer to pages 1 through 12 of Schedule JAF-2-6. This schedule shows the bill impacts for each customer class at various percentiles. The Company evaluated each customer class' bill impacts using the 25th, 50th, and 75th percentiles.

Q. Please describe the residential bill impacts.

A. The Residential Non-heating bill impacts by strata are presented on page 1 of Schedule JAF-2-6 and show an approximate $3.30 per month impact, or 23%, at the 25th percentile to a $1.70 per month impact, or 5.4%, at the 75th percentile.

The Residential Heating bill impacts by strata presented on page 3 of Schedule JAF-2-6 indicate that a very tight or consistent percent impact between the 25th, 50th, and 75th percentiles, ranging between 2.8% and 3.3%.

Q. Please describe the Commercial and Industrial ("C&I") bill impacts.

A. The C&I bill impacts by strata presented on Schedule JAF-2-6 indicate a reasonably tight or consistent percent impact between the 25th, 50th, and 75th percentiles, with the exception of the G/T-50 class. These impacts between the 25th, 50th and 75th percentiles, indicate the following:

	25th	50th	75th	Page
• G/T-50:	13%	3%	5%	5
• G/T-40:	7%	3%	4%	6
• G/T-51:	8%	8%	8%	7
• G/T-41:	6%	6%	6%	8
• G/T-52:	4%	3%	2%	9
• G/T-42:	5%	5%	5%	10
• G/T-53:	4%	3%	3%	11
• G/T-43:	5%	4%	4%	12

Flat rates have been proposed for all of the C&I classes. This generally allows for the lower volumetric rate at the low-end consumption level to offset much of the customer charge increase. This has been the case with all classes except the G/T-

50 class. This class' relatively large increase at the 25th percentile is primarily due to the low annual consumption level of 300 therms at the 25th percentile as compared to 1,200 therms at the 50th percentile and 2,750 therms at the 75th percentile. This low consumption level has only allowed for a small volumetric reduction resulting in a monthly bill increase of $5.63, as compared to the customer charge increase of $6.39 ($19.00 vs. $12.61).

Q. Has the Company prepared typical bill analyses?

A. Yes. Please refer to pages 1 through 8 of Schedule JAF-2-7. This schedule presents typical bill analyses using the average monthly usage of each customer class. The consumption levels shown are used for bill impact analyses submitted with the Company's Cost of Gas filings. For residential heating, the Company used the standard use of 1,250 therms annually. This annual consumption level that the Company regularly uses for assessing bill impacts for this class reflects the gas use of a single family home for space heating, water heating, cooking, and clothes drying.

Q. Does this conclude your testimony on Rate Design?

A. Yes.

XI. ANNUAL BASE RATE ADJUSMENT MECHANISM ("ABRAM")

Q. What is the purpose of your testimony on an Annual Base Rate Adjustment Mechanism?

A. I have been asked to support Bay State's proposed Annual Base Rate Adjustment Mechanism ("ABRAM"). The ABRAM provides for annual changes to base rates applicable to firm sales and firm transportation customer classes pursuant to Bay State's Performance Based Rate ("PBR") plan and the Steel Infrastructure

Replacement ("SIR") program and to reflect the annualized impact of energy efficiency savings ("EES").

Q. What is the purpose of the ABRAM?

A. The ABRAM allows Bay State subject to the jurisdiction of the Department to implement separate mechanisms that provide for annual base rate adjustments. The first mechanism is the Performance-Based Rate ("PBR") plan as described in the Testimony of Mr. Kaufmann, Exhibit BSG/LRK-1. The PBR program replaces Bay State's rate freeze with an incentive-based rate mechanism. The PBR program includes price cap, earnings sharing and exogenous components. The price cap component limits the change in base rates to the rate of input price inflation representative of the gas industry less offsets for productivity and a consumer dividend. The earnings sharing component provides for sharing of earnings in the event that Bay State's return on equity is either 400 basis points greater than or less than its authorized return on equity. Lastly, the exogenous cost component allows the Company to reflect costs or cost reductions that result from unforeseen events beyond Bay State's control. The proposed PBR program is patterned after that approved by the Department for Boston Gas Company.

The base rates established through the PBR mechanism are adjusted to reflect the therm savings associated with Bay State's delivery of its Department-approved energy efficiency programs. This adjustment is consistent with the Department's precedent regarding Lost Base Revenues ("LBR") associated with demand-side management programs and obviates the need for a separate LBR recovery mechanism.

The last adjustment incorporates the Steel Infrastructure Replacement ("SIR") program. As described in the Testimony of Messrs. Bryant (Exhibit BSG/SHB-

1), Cote (Exhibit BSG/DGC-1) and Skirtich (Exhibit BSG/JES-1), the SIR program entails the accelerated replacement of steel distribution mains and related facilities in order to maintain safe and reliable service. The revenue requirements associated with the accelerated replacements that occur under the SIR program are applied as an adjustment to the Company's base rates each year.

Q. Are you supporting tariff terms that set forth the operation of these base rate adjustment mechanisms?

A. Yes. The Annual Base Rate Adjustment Mechanism ("ABRAM") tariff, M.D.T.E. No. 63, sets forth the terms and conditions for making the annual adjustments necessary under these programs. Incorporating the details of the adjustment mechanisms in Bay State's tariff should clarify the operation of the programs so that the Department and parties to this proceeding are better able to understand Bay State's proposal. The tariff is also important to allow customers to understand the basis for the annual changes to base rates.

Although the mechanisms operate distinctly from one another, incorporating their impact in rates through a single tariff, increases the ease with which the annual adjustments are filed by the Company, implemented and reviewed by the Department. The proposed tariff is provided as Schedule JAF-2-8.

Q. Please provide an overview of the steps involved in calculating the annual base rate adjustment.

A. The ABRAM entails an adjustment to each base rate element applicable to service rendered under each of the Company's firm Rate Schedules. The basic formula is set forth in Section 5.0 of the ABRAM tariff and encompasses three general steps to arrive at revised rates. The first step is the application of the PBR price cap adjustment to the rate for the prior year exclusive of SIR revenue requirements.

Next, the PBR-adjusted base rate is further adjusted to reflect the impact of EES. Lastly, the result of these calculations is increased by the amount of the SIR Base Rate. As described in the ABRAM tariff, the SIR base rate for the upcoming year encompasses the total revenue requirements for the SIR program based on investments made in the most recent year as well as in prior years that the mechanism was in effect.

Q. Have you prepared an illustrative rate calculation of the ABRAM?.

A. Yes. JAF-2-9 illustrates the calculations to be performed each year consistent with the ABRAM. This Schedule provides illustrative rate calculations for the rate adjustments to be effective November 1, 2006 based on an assumed PBR adjustment of 1.7% (gas industry price input inflation less productivity and consumer dividend offsets) and a SIR Base Rate Adjustment based on $20 million of capital investment.

The illustrative ABRAM calculations follow the structure of the basic formula specified in the tariff. Specifically, the starting point for the rate adjustments are the base rates effective for the prior year as indicated in Column (B) of Schedule JAF-2-9. Next, the prior year's SIR Base Rate Adjustment shown in Column (C) is subtracted from the current rates to yield existing rates exclusive of any SIR program revenues, which is shown in Column (D). The PBR Price Cap Adjustment is applied to the values in Column (D) as an equal percentage change for each rate schedule. As I will explain later in my testimony, the uniform PBR percentage change to each rate schedule may be effectuated through differentiated changes to individual rate elements as shown in Column (E) based on the billing determinants provided in Column (J). The PBR percentage adjustments in Column (E) are applied to the values in Column (D) to yield the PBR-Adjusted

Base Rates indicated in Column (F). These calculations encompass the first of the three general steps I described earlier in my testimony.

The next two of the general steps adjust base rates for EES and SIR revenue requirements. The energy efficiency adjustment factors are indicated in Column (G). The SIR Base Rate Adjustment is applied to existing base rates by way of a monthly charge adjustment to each Customer Charge and a per therm adjustment to each volumetric base rate element. The Customer Charge and per therm adjustments are determined by first allocating the proportion of total SIR revenue requirement to each element of base rates equal to the corresponding percentage of base revenues generated from those elements. The resulting allocated SIR revenue requirements by base rate elment is then divided by the Prior Year weather normalized billing determinants. This approach preserves the existing rate design that results from Department approval of new rates in this instant case.

Based on $20 million of accelerated capital expenditures allowable for recovery in accordance with the SIR program, the SIR revenue requirements would be approximately $6 million. The SIR Base Rate adjustment for each rate element is provided in Column (H) and is calculated in Schedule JAF-10. The total adjusted base rates established pursuant to the ABRAM are equal to the PBR-Adjusted base rates shown in Column (F) multiplied by the EES factor from Column (G) plus the SIR Base Rate in Column (H). The adjusted base rates under the ABRAM are shown in Column (I).

Q. What billing determinants are used in the ABRAM calculations?

A. The billing determinants used in the base rate adjustment calculations are based upon the actual throughput volumes and customer counts, by rate element, for the previous calendar year, normalized for weather variances that occurred during the

calendar year. The use of actual volumes adjusted for the impact of weather is consistent with the PBR mechanism that the Department approved for Boston Gas (KeySpan-NE) and serves to derive appropriate rate levels consistent with the development of billing determinants in a general rate case proceeding.

Q. Will the billing determinants established in this proceeding be relied upon to derive future PBR rate adjustments?

A. No, the billing determinants will be updated each year based on normalized current data because the revenue changes resulting from revised base rates will not be trued up in any way.

Q. How is the PBR rate Price Cap Adjustment determined?

A. The average unit price for each Rate Schedule is changed each year under the PBR program in accordance with the formula set forth in Section 7.3 of the ABRAM. The formula is equal to the rate of input price inflation representative of the gas distribution industry less an X factor that represents productivity improvements and a consumer dividend. As explained by Mr. Kaufmann, the proposed X factor to be used each year of the term of the PBR program is 0.41%. In addition to the price cap calculation, the PBR formula also recognizes the impact of significant exogenous events and provides for earnings sharing above a threshold amount.

Q. What are the criteria for including exogenous costs in the PBR program?

A. Also as explained by Mr. Kaufmann, exogenous costs under the PBR program are generally defined as costs or cost reductions associated with unforeseen events that are beyond Bay State's ability to control or influence. For instance, a change in tax laws or regulations that uniquely affects the local gas distribution industry would be eligible for inclusion in the PBR formula because the impact of such a

change would not be already accounted for within any other element of the PBR formula. Exogenous costs must be material in nature in order to qualify for PBR treatment. Exogenous costs whose impact exceeds $600,000, positive or negative, are reflected in the Z factor of the PBR formula. The $600,000 threshold represents the exogenous factor applicable to operating revenues of 0.001253 established by the Department in D.T.E. 98-128 and D.T.E. 01-56 (Colonial Gas) and most recently in D.T.E. 03-40 (KeySpan), multiplied by the Company's test year operating revenues of $481,909,253 (Schedule JAF-1-1, page 2).

Q. Please describe the earnings sharing component of the PBR program.

A. The earnings sharing component of the program provides the Company and customers with protections in the event that earnings in any given year deviate significantly from the return on equity authorized by the Department in this proceeding. Because the term of the program is five years, the earnings sharing mechanism provides protection in the event that the productivities achieved under the program deviate materially from those anticipated at the inception of the program. If the Company's actual return on equity in a given year is more than 400 basis points above or below its authorized return on equity, the Company shall share 25% of the earnings variance with customers. If the actual return on equity is within the bandwidth, no earnings sharing shall apply.

Q. Is the PBR Adjustment applied equally to all customer classes?

A. Yes. This is accomplished by maintaining a uniform change in the average unit price for service provided to each customer class. The Company may, at its discretion, apply a non-uniform percentage PBR adjustment to the various base rate elements of an individual Rate Schedule. For instance, the Company could apply a larger proportion of the PBR increase to the customer charge and less to

the volumetric charges. The level of discretion afforded to Bay State is small as the maximum percentage change to any individual base rate element is limited to the result of the PBR price cap formula for that year plus the X factor.

Q. What is the basis for the proposed energy efficiency adjustment incorporated in the ABRAM?

A. The Department's policy with respect to approved demand-side management programs has been to allow utilities to recover LBR associated with EES attributable to these programs. LBR recovery is allowed if the impact on throughput and revenues is both substantial and quantifiable. The Department's practice with respect to Bay State has been to allow the Company to collect LBR via a separate factor that is a component of the LDAC.

The PBR price cap formula does not implicitly recognize or account for LBR that is attributable to energy efficiency therm savings during the previous year(s). Failure to adjust for energy efficiency savings in conjunction with an indexed based PBR mechanism would perpetuate under-earning by the Company. The Department's approval of an exogenous adjustment to Bay State's current rates during the period of the rate freeze for LBR reflects this same principle. See D.T.E. 03-36, D.T.E. 04-57 and D.T.E. 04-93. An adjustment for the impact of energy efficiency savings is equally necessary in conjunction with future PBR rate adjustments.

The implementation of the PBR rate adjustment provides a unique opportunity to streamline the treatment of LBR because base rate adjustments are made every year. During the effectiveness of the PBR program, Bay State will not seek to recover LBR through an independent filing mechanism. Essentially integrating the LBR recovery with the PBR rate adjustments has numerous benefits. The

LBR adjustment is made once each year, rather than accumulating energy efficiency savings over multiple years under the rolling period method (RPM) currently used by the Department. Regulatory oversight and compliance is simplified and customers' prices change less frequently with the elimination of the separate LBR mechanism. The actual energy efficiency savings can be calculated and verified as part of the proceeding to review the Company's ABRAM filings. Lastly, through a bill frequency process each year the Company can determine the impact of these therm savings by rate components, allowing for a more accurate derivation of the incremental base rate and resulting base revenue impact associated with the therm savings. This bill frequency process will take customer account data for each customer that installed one or more energy efficiency measures during the year, spread the annual therm savings of the measures by month, and then compare the associated monthly gas use with and without the monthly therm savings attributable to the measures to establish the therm savings by block and rate period. Schedule JAF-9 provides illustrative EES savings calculated consistent with Section 8 of the ABRAM tariff.

Q. Please describe the calculation of the SIR program revenues to be included in the annual base rate adjustment tariff.

A. The eligible SIR revenues are determined each year in a manner that is consistent with traditional rate base-related ratemaking. Section 9.6 of the ABRAM tariff reflects the SIR revenue requirements formula, which is the sum of the pretax return on the SIR program rate base, depreciation expense, property taxes and carrying costs calculated for the duration of the period from the time plant is placed in service until the associated revenue requirements are recovered through rates. It is important to note that SIR program rate base only includes accelerated gross plant investments in infrastructure improvement activities. The value of non-accelerated SIR-related gross plant investments as described by Mr. Cote, is

subtracted from the total SIR-related plant investments each year to determine the amount that is included for recovery through the SIR base rates.

The allowable SIR revenues will also reflect any reduction to test year O&M expense levels associated with fewer corrosion leak repairs occurring during a given SIR program year. The Company fully expects that over time the number of corrosion leaks needing to be repaired will decline as a result of the additional SIR program-related capital being spent. An example calculation of the derivation of the SIR revenue requirements is provided by Mr. Skirtich in Schedule JES-17 of his testimony, which is consistent with the level of SIR revenue requirements indicated in Schedule JAF-10.

Q. Why is Bay State proposing to apply carrying costs to the plant investments recovered through the SIR base rate adjustment mechanism?

A. As explained by Mr. Skirtich, typically, base rates are set so that base revenues recover future revenue requirements on a current basis. However, the SIR base rate adjustment mechanism is based on actual investments during a past period. There is lag of between ten and twenty-two months before recovery begins. The financing costs associated with carrying the SIR program investments over such a duration are appropriately reflected as a component of the associated revenue requirements.

Q. Why is there no energy efficiency savings adjustments reflected in the calculation of the SIR base rate adjustment?

A. Unlike the PBR rate adjustment, the SIR base rate adjustment involves calculating rates each year by dividing a total revenue requirement by current year weather normalized billing determinants. Thus, because the billing determinants each year, reflecting EES, are divided into a revenue requirement to derive SIR base

rates, it is not necessary to adjust for therm savings associated with the Company's energy efficiency programs.

Q. What is the process that will be used to place the annual base rate adjustment into effect?

A. Bay State will make an annual filing with the Department on or before June 1st of each year beginning in 2006. The annual filing will contain revised tariff sheets necessary to implement base rate changes effective November 1st. The revised tariff sheets will include a revised summary rate adjustment table to replace the one contained in M.D.T.E. No. 63, beginning at page 17 as well as replacement sheets for each firm rate schedule reflecting the adjusted base rates.

In addition to the proposed revised tariff pages, Bay State will also file supporting schedules that provide a step-by-step calculation of each of the base rate adjustments reflected in the ABRAM. The data relied upon to determine the base rate adjustments are verifiable and the associated calculations reflected in the supporting schedules are straightforward. Bay State believes that the five-month review period affords the Department with adequate time to investigate and approve Bay State's annual filings.

XII. CONCLUSION

Q. Does this conclude your testimony on Rate Design and an Annual Base Rate Adjustment Mechanism?

A Yes, it does.

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
1	**CURRENT BASE RATES**											
2	Monthly Customer Charge		$7.47	$5.97		$7.46	$5.97	$3.32	$12.61	$12.61	$45.04	$45.04
3	Winter Volumetric Rates											
4	First Block Rate		$0.4000	$0.2247		$0.4349	$0.2869		$0.3694	$0.3597	$0.1979	$0.1708
5	Second Block Rate		$0.2076	$0.0709		$0.3758	$0.2396		$0.2315	$0.2268	$0.1572	$0.1315
6	Summer Volumetric Rates											
7	First Block Rate		$0.2317	$0.1243		$0.3848	$0.2517		$0.3288	$0.3240	$0.1246	$0.1000
8	Second Block Rate		$0.1639	$0.0700		$0.2965	$0.1811		$0.1855	$0.1884	$0.0988	$0.0765
9	Demand Rate											
10	Winter											
11	Summer											
12												
13	First Block Size											
14	Winter		90	90		12	12		125	125	1,000	700
15	Summer		30	30		10	10		35	80	300	500
16												
17	**TEST YEAR BILLING DETERMINANTS**											
18	**Number of Bills**											
19	Sales Customers - Annual	2,666,054	2,449,833	216,221	400,456	380,442	20,014	144	190,903	35,847	43,826	15,250
20	Sales Customers - Winter	1,341,210	1,227,579	113,631	194,724	184,413	10,311	72	96,712	18,101	21,670	7,692
21	Sales Customers - Summer	1,324,844	1,222,254	102,590	205,732	196,029	9,703	72	94,191	17,746	22,156	7,558
22												
23	Transportation - Annual	440	440	0	59	59	0	0	9,303	4,061	12,369	5,823
24	Transportation - Winter	223	223	0	29	29	0	0	4,602	2,070	6,291	3,026
25	Transportation - Summer	217	217	0	30	30	0	0	4,701	1,991	6,078	2,797
26												
27	Total - Annual	2,666,494	2,450,273	216,221	400,515	380,501	20,014	144	200,206	39,908	56,195	21,073
28	Total - Winter	1,341,433	1,227,802	113,631	194,753	184,442	10,311	72	101,314	20,171	27,961	10,718
29	Total - Summer	1,325,061	1,222,471	102,590	205,762	196,059	9,703	72	98,892	19,737	28,234	10,355
30												
31	**First Block Therms**											
32	Sales Customers - Winter	107,074,126	98,497,478	8,576,648	1,687,563	1,604,160	83,403	1,395	8,836,019	1,240,429	17,789,142	4,608,855
33	Sales Customers - Summer	30,311,351	27,899,767	2,411,584	1,464,808	1,389,153	75,655	1,333	1,131,629	736,181	2,742,440	3,120,285
34												
35	Transportation Customers - Winter	18,105	18,105	0	306	306	0	0	505,134	155,589	5,568,728	1,960,146
36	Transportation Customers- Summer	5,269	5,269	0	265	265	0	0	89,954	98,920	1,118,124	1,236,700
37												
38	Total First Block - Winter	107,092,231	98,515,583	8,576,648	1,687,869	1,604,466	83,403	1,395	9,341,153	1,396,018	23,357,870	6,569,001
39	Total First Block- Summer	30,316,620	27,905,036	2,411,584	1,465,073	1,389,418	75,655	1,333	1,221,583	835,101	3,860,564	4,356,985
40												
41	**Second Block Therms**											
42	Sales Customers - Winter	94,806,098	86,404,748	8,401,350	2,053,651	1,856,385	197,266	0	12,040,801	1,371,743	15,722,941	3,507,671
43	Sales Customers - Summer	15,512,165	13,758,545	1,753,620	1,188,236	1,078,831	109,405	0	1,302,761	1,097,851	2,381,956	2,482,096
44												
45	Transportation Customers - Winter	44,795	44,795	0	721	721	0	0	1,115,993	342,115	7,439,176	2,664,232
46	Transportation Customers- Summer	11,380	11,380	0	616	616	0	0	188,945	201,158	1,398,085	1,789,398
47												
48	Total Second Block - Winter	94,850,893	86,449,543	8,401,350	2,054,372	1,857,106	197,266	0	13,156,794	1,713,858	23,162,117	6,171,903
49	Total Second Block- Summer	15,523,545	13,769,925	1,753,620	1,188,852	1,079,447	109,405	0	1,491,706	1,299,009	3,780,041	4,271,494
50												
51	**Total Therms**											
52	Total Therms - Annual	247,783,289	226,640,087	21,143,202	6,396,166	5,930,437	465,729	2,728	25,211,236	5,243,986	54,160,592	21,369,383
53	Total Therms - Winter	201,943,124	184,965,126	16,977,998	3,742,241	3,461,572	280,669	1,395	22,497,947	3,109,876	46,519,987	12,740,904
54	Total Therms - Summer	45,840,165	41,674,961	4,165,204	2,653,925	2,468,865	185,060	1,333	2,713,289	2,134,110	7,640,605	8,628,479
55	**Peak Day Therms**											
56	Total Peak Therms - Winter											
57	Total Peak Therms - Summer											

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
1	**CURRENT BASE RATES**							
2	Monthly Customer Charge	$109.37	$109.37	$298.53	$298.53			
3	Winter Volumetric Rates							
4	First Block Rate	$0.1658	$0.1638	$0.0389	$0.0389			
5	Second Block Rate	$0.1317	$0.1288					
6	Summer Volumetric Rates							
7	First Block Rate	$0.0687	$0.0712	$0.0170	$0.0170			
8	Second Block Rate	$0.0573	$0.0569					
9	Demand Rate							
10	Winter			$1.9787	$1.9787			
11	Summer			$0.8723	$0.8723			
12								
13	First Block Size							
14	Winter	9,000	10,000					
15	Summer	2,200	8,000					
16								
17	**TEST YEAR BILLING DETERMINANTS**							
18	**Number of Bills**							Linked to Revenue File
19	Sales Customers - Annual	3,331	1,100	61	91	0		line 20 + line 21
20	Sales Customers - Winter	1,612	558	32	56	0		
21	Sales Customers - Summer	1,719	542	29	35	0		
22								
23	Transportation - Annual	4,101	1,889	120	708	60		line 24 + line 25
24	Transportation - Winter	2,050	972	60	354	30		
25	Transportation - Summer	2,051	917	60	354	30		
26								
27	Total - Annual	7,432	2,989	181	799	60	3,395,996	line 28 + line 29
28	Total - Winter	3,662	1,530	92	410	30	1,702,146	line 20 + line 24
29	Total - Summer	3,770	1,459	89	389	30	1,693,850	line 21 + line 25
30								
31	**First Block Therms**							
32	Sales Customers - Winter	10,546,755	3,147,730	3,128,697	2,286,988	0		
33	Sales Customers - Summer	1,723,995	2,077,886	1,303,249	867,009	0		
34								
35	Transportation Customers - Winter	14,755,633	7,257,566	4,082,507	26,368,965	68,058,131		
36	Transportation Customers- Summer	2,478,355	5,128,242	953,578	24,699,265	48,156,552		
37								
38	Total First Block - Winter	25,302,388	10,405,296	7,211,204	28,655,953	68,058,131		line 32 + line 35
39	Total First Block- Summer	4,202,350	7,206,128	2,256,827	25,566,274	48,156,552		line 33 + line 36
40								
41	**Second Block Therms**							
42	Sales Customers - Winter	4,052,965	656,853	0	0	0		
43	Sales Customers - Summer	1,159,973	783,422	0	0	0		
44								
45	Transportation Customers - Winter	7,451,026	3,694,479	0	0	0		
46	Transportation Customers- Summer	1,966,704	2,759,090	0	0	0		
47								
48	Total Second Block - Winter	11,503,991	4,351,332	0	0	0		line 42 + line 45
49	Total Second Block- Summer	3,126,677	3,542,512	0	0	0		line 43 + line 46
50								
51	**Total Therms**							
52	Total Therms - Annual	44,135,406	25,505,268	9,468,031	54,222,227	116,214,683	609,712,995	line 53 + line 54
53	Total Therms - Winter	36,806,379	14,756,628	7,211,204	28,655,953	68,058,131	446,043,769	line 38 + line 48
54	Total Therms - Summer	7,329,027	10,748,640	2,256,827	25,566,274	48,156,552	163,669,226	line 39 + line 49
55	**Peak Day Therms**							
56	Total Peak Therms - Winter			342,526	1,388,815			
57	Total Peak Therms - Summer			103,257	1,184,822			

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
58												
59	**TEST YEAR REVENUE AND AVERAGE RATES**											
60	**Base Revenue Proof**											
61	Customer Revenue											
62	Winter	$9,850,058	$9,171,681	$678,377	$1,437,494	$1,375,937	$61,557	$239	$1,277,570	$254,356	$1,259,363	$482,739
63	Summer	$9,744,321	$9,131,858	$612,462	$1,520,527	$1,462,600	$57,927	$239	$1,247,028	$248,884	$1,271,659	$466,389
64	Volumetric Revenue - First Block											
65	Winter	$41,333,406	$39,406,233	$1,927,173	$721,711	$697,782	$23,928	$0	$3,450,622	$502,148	$4,622,522	$1,121,985
66	Summer	$6,765,357	$6,465,597	$299,760	$553,690	$534,648	$19,042	$0	$401,656	$270,573	$481,026	$435,699
67	Volumetric Revenue - Second Block											
68	Winter	$18,542,581	$17,946,925	$595,656	$745,165	$697,900	$47,265	$0	$3,045,798	$388,703	$3,641,085	$811,605
69	Summer	$2,379,644	$2,256,891	$122,753	$339,869	$320,056	$19,813	$0	$276,711	$244,733	$373,468	$326,769
70	Demand Revenue											
71	Winter											
72	Summer											
73	Total Base Revenue											
74	Annual	$88,615,366	$84,379,185	$4,236,181	$5,318,457	$5,088,924	$229,532	$478	$9,699,385	$1,909,397	$11,649,124	$3,645,186
75	Winter	$69,726,045	$66,524,839	$3,201,206	$2,904,370	$2,771,620	$132,750	$239	$7,773,989	$1,145,207	$9,522,971	$2,416,329
76	Summer	$18,889,322	$17,854,346	$1,034,976	$2,414,087	$2,317,304	$96,783	$239	$1,925,396	$764,190	$2,126,154	$1,228,857
77												
78	**Test Year Revenues Other Than Base**											
79	Direct Gas Adjustment Factor											
80	Winter	$174,520,722	$159,967,958	$14,552,764	$2,954,414	$2,734,150	$220,264	$1,046	$18,045,768	$2,077,451	$27,427,776	$6,173,431
81	Summer	$37,128,614	$33,832,934	$3,295,680	$2,083,413	$1,941,005	$142,408	$1,020	$2,072,310	$1,426,365	$4,348,236	$4,371,925
82	Indirect Gas Adjustment Factor											
83	Winter	$10,654,378	$9,770,054	$884,324	$140,140	$129,799	$10,341	$46	$1,042,083	$119,382	$1,627,923	$320,877
84	Summer	$2,625,689	$2,387,022	$238,667	$153,346	$142,650	$10,696	$79	$136,326	$106,741	$299,777	$329,979
85	Distribution Adjustment Factor											
86	Winter	$2,770,292	$2,543,322	$226,970	$20,423	$19,096	$1,327	$2	$264,368	$37,414	$549,519	$157,285
87	Summer	$715,107	$650,130	$64,977	$32,908	$30,614	$2,294	$6	$55,351	$43,536	$155,868	$176,021
88												
89	**Test Year Average Rates**											
90	Direct Gas Adjustment Factor											
91	Winter		$0.8645	$0.8645		$0.7897	$0.7897	$0.7498	$0.8644	$0.7953	$0.8184	$0.7606
92	Summer		$0.8103	$0.8103		$0.7853	$0.7853	$0.7652	$0.8513	$0.7777	$0.8485	$0.7804
93	Indirect Gas Adjustment Factor											
94	Winter		$0.0528	$0.0528		$0.0375	$0.0375	$0.0330	$0.0499	$0.0457	$0.0486	$0.0395
95	Summer		$0.0573	$0.0573		$0.0578	$0.0578	$0.0593	$0.0560	$0.0582	$0.0585	$0.0589
96	Distribution Adjustment Factor											
97	Winter		$0.0137	$0.0137		$0.0055	$0.0055	$0.0014	$0.0119	$0.0119	$0.0119	$0.0119
98	Summer		$0.0156	$0.0156		$0.0124	$0.0124	$0.0045	$0.0204	$0.0204	$0.0204	$0.0204
99	Deferred Gas Cost Factor											
100	Winter		$0.0467	$0.0467		$0.0467	$0.0467	$0.0467	$0.0467	$0.0467	$0.0467	$0.0467
101	Summer		$0.0467	$0.0467		$0.0467	$0.0467	$0.0467	$0.0467	$0.0467	$0.0467	$0.0467
102												
103	**Imputed Gas Costs for Trans. Cust. (TY)**											
104	Direct Gas Adjustment Factor											
105	Winter	$57,311	$57,311	$0	$859	$859	$0	$0	$1,476,953	$419,052	$11,253,365	$3,733,137
106	Summer	$14,267	$14,267	$0	$733	$733	$0	$0	$250,434	$247,382	$2,252,534	$2,502,711
107	Indirect Gas Adjustment Factor											
108	Winter	$3,320	$3,320	$0	$38	$38	$0	$0	$80,920	$22,746	$631,887	$182,819
109	Summer	$954	$954	$0	$51	$51	$0	$0	$15,618	$17,465	$147,198	$178,237

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
58								
59	**TEST YEAR REVENUE AND AVERAGE RATES**							
60	**Base Revenue Proof**							
61	Customer Revenue							
62	Winter	$400,513	$167,336	$27,465	$122,397	$1,673,238		line 2 * line 28
63	Summer	$412,325	$159,571	$26,569	$116,128	$1,700,847		line 2 * line 29
64	Volumetric Revenue - First Block							
65	Winter	$4,195,136	$1,704,387	$280,516	$1,114,717	$73,688		line 4 * line 38
66	Summer	$288,701	$513,076	$38,366	$434,627	$54,492		line 7 * line 39
67	Volumetric Revenue - Second Block							
68	Winter	$1,515,076	$560,452					line 5 * line 48
69	Summer	$179,159	$201,569					line 8 * line 49
70	Demand Revenue							
71	Winter			$677,756	$2,748,048	$0		line 10 * line 57
72	Summer			$90,071	$1,033,520	$0		line 11 * line 58
73	Total Base Revenue							
74	Annual	$6,990,909	$3,306,391	$1,140,743	$5,569,437	$3,502,265	$141,347,140	line 75 + line 76
75	Winter	$6,110,724	$2,432,175	$985,737	$3,985,162	$1,746,926	$108,749,875	line 62 + line 65 + line 68 + line 71
76	Summer	$880,185	$874,216	$155,006	$1,584,275	$1,755,339	$32,597,265	line 63 + line 66 + line 69 + line 72
77								
78	**Test Year Revenues Other Than Base**							
79	Direct Gas Adjustment Factor						$307,478,651	
80	Winter	$11,386,539	$2,931,479	$2,283,880	$1,820,147		$249,622,653	
81	Summer	$2,406,876	$2,249,653	$1,097,293	$670,293		$57,855,998	
82	Indirect Gas Adjustment Factor							
83	Winter	$701,197	$150,322	$143,101	$98,211		$14,997,660	
84	Summer	$172,174	$176,541	$77,805	$53,494		$4,131,951	
85	Distribution Adjustment Factor							
86	Winter	$434,212	$182,500	$79,946	$351,731		$4,847,692	
87	Summer	$149,511	$219,272	$46,039	$521,551		$2,115,170	
88								
89	**Test Year Average Rates**							Some classes are combined.
90	Direct Gas Adjustment Factor							
91	Winter	$0.7711	$0.7800	$0.7711	$0.7800			line 80 / (line 32 + line 42)
92	Summer	$0.8369	$0.7832	$0.8369	$0.7832			line 81 / (line 33 + line 43)
93	Indirect Gas Adjustment Factor							
94	Winter	$0.0476	$0.0408	$0.0476	$0.0408			line 83 / (line 32 + line 42)
95	Summer	$0.0833	$0.0682	$0.0833	$0.0682			line 84 / (line 33 + line 43)
96	Distribution Adjustment Factor							
97	Winter	$0.0119	$0.0119	$0.0119	$0.0119			line 86 / line 53
98	Summer	$0.0204	$0.0204	$0.0204	$0.0204			line 87 / line 54
99	Deferred Gas Cost Factor							
100	Winter	$0.0467	$0.0467	$0.0467	$0.0467			INPUT from COS
101	Summer	$0.0467	$0.0467	$0.0467	$0.0467			INPUT from COS
102								
103	**Imputed Gas Costs for Trans. Cust. (TY)**							Calculated using average rates and transportation volumes.
104	Direct Gas Adjustment Factor							
105	Winter	$18,160,054	$9,054,121	$3,338,573	$21,799,382		$69,292,806	(line 91 + line 100) * (line 35 + line 45)
106	Summer	$3,927,415	$6,545,332	$842,530	$20,496,779		$37,080,117	(line 92 + line 101) * (line 36 + line 46)
107	Indirect Gas Adjustment Factor							
108	Winter	$1,057,570	$446,838	$194,425	$1,075,840		$3,696,404	line 94 * (line 35 + line 45)
109	Summer	$370,188	$538,074	$79,415	$1,684,985		$3,032,185	line 95 * (line 36 + line 46)

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
110												
111	**Summary of TY Rev. w/ Imputed Gas Costs**											
112	Test Year Base Revenue											
113	Annual	$88,615,366	$84,379,185	$4,236,181	$5,318,457	$5,088,924	$229,532	$478	$9,699,385	$1,909,397	$11,649,124	$3,645,186
114	Winter	$69,726,045	$66,524,839	$3,201,206	$2,904,370	$2,771,620	$132,750	$239	$7,773,989	$1,145,207	$9,522,971	$2,416,329
115	Summer	$18,889,322	$17,854,346	$1,034,976	$2,414,087	$2,317,304	$96,783	$239	$1,925,396	$764,190	$2,126,154	$1,228,857
116	Direct Cost of Gas Revenue											
117	Annual	$211,720,914	$193,872,470	$17,848,444	$5,039,419	$4,676,747	$362,672	$2,066	$21,845,465	$4,170,250	$45,281,911	$16,781,203
118	Winter	$174,578,033	$160,025,269	$14,552,764	$2,955,273	$2,735,009	$220,264	$1,046	$19,522,721	$2,496,503	$38,681,141	$9,906,568
119	Summer	$37,142,881	$33,847,201	$3,295,680	$2,084,146	$1,941,738	$142,408	$1,020	$2,322,744	$1,673,747	$6,600,770	$6,874,636
120	Indirect Cost of Gas Revenue											
121	Annual	$13,284,341	$12,161,350	$1,122,991	$293,575	$272,538	$21,037	$125	$1,274,947	$266,334	$2,706,786	$1,011,912
122	Winter	$10,657,698	$9,773,374	$884,324	$140,178	$129,837	$10,341	$46	$1,123,003	$142,128	$2,259,810	$503,696
123	Summer	$2,626,643	$2,387,976	$238,667	$153,397	$142,701	$10,696	$79	$151,944	$124,206	$446,975	$508,216
124	Deferred Gas Costs											
125	Annual	$11,561,095	$10,574,277	$986,818	$298,440	$276,703	$21,737	$127	$1,088,006	$207,518	$1,803,283	$640,304
126	Winter	$9,422,371	$8,629,955	$792,415	$174,614	$161,514	$13,100	$65	$974,385	$121,918	$1,564,112	$378,823
127	Summer	$2,138,724	$1,944,321	$194,403	$123,826	$115,188	$8,637	$62	$113,620	$85,600	$239,171	$261,480
128	LDAC Revenue											
129	Annual	$3,485,399	$3,193,452	$291,947	$53,331	$49,710	$3,621	$8	$319,719	$80,950	$705,387	$333,306
130	Winter	$2,770,292	$2,543,322	$226,970	$20,423	$19,096	$1,327	$2	$264,368	$37,414	$549,519	$157,285
131	Summer	$715,107	$650,130	$64,977	$32,908	$30,614	$2,294	$6	$55,351	$43,536	$155,868	$176,021
132	Total											
133	Annual	$328,667,115	$304,180,734	$24,486,381	$11,003,222	$10,364,622	$638,599	$2,804	$34,227,522	$6,634,448	$62,146,491	$22,411,911
134	Winter	$267,154,438	$247,496,759	$19,657,679	$6,194,858	$5,817,077	$377,782	$1,398	$29,658,467	$3,943,170	$52,577,553	$13,362,701
135	Summer	$61,512,677	$56,683,974	$4,828,702	$4,808,363	$4,547,546	$260,818	$1,406	$4,569,056	$2,691,279	$9,568,938	$9,049,209
136												
137	**COST STUDY INFORMATION**											
138												
139	Target ACS Base Revenue											
140	Annual	$100,492,047			$10,856,303			$345	$11,303,039	$2,347,139	$12,855,832	$4,199,180
141	Winter	$67,185,084			$5,808,404			$243	$7,702,146	$1,390,455	$10,179,177	$2,876,642
142	Summer	$33,306,963			$5,047,899			$101	$3,600,893	$956,684	$2,676,656	$1,322,539
143												
144	Direct Gas Cost for New Rates											
145	Annual	$220,161,443	$201,369,526	$18,791,916	$5,553,949	$5,149,614	$404,335	$2,374	$20,721,910	$3,861,651	$34,343,363	$11,913,936
146	Winter	$179,486,460	$164,391,763	$15,094,697	$3,213,507	$2,972,427	$241,080	$1,198	$18,561,038	$2,243,719	$29,794,722	$6,971,671
147	Summer	$40,674,983	$36,977,763	$3,697,220	$2,340,442	$2,177,187	$163,255	$1,176	$2,160,872	$1,617,932	$4,548,641	$4,942,265
148												
149	Indirect Gas Cost for New Rates											
150	Annual	$12,195,262	$11,164,011	$1,031,251	$230,087	$212,979	$17,108	$90	$1,219,427	$160,448	$1,979,482	$497,484
151	Winter	$11,365,857	$10,409,995	$955,861	$200,903	$185,831	$15,072	$75	$1,175,365	$140,274	$1,886,730	$435,857
152	Summer	$829,406	$754,015	$75,390	$29,183	$27,148	$2,036	$15	$44,062	$20,174	$92,752	$61,626
153												
154	Direct Cost of Gas Rates (New)											
155	Winter	$0.8891	$0.8891	$0.8891	$0.8589	$0.8589	$0.8589	$0.8589	$0.8891	$0.8589	$0.8891	$0.8589
156	Summer	$0.8876	$0.8876	$0.8876	$0.8822	$0.8822	$0.8822	$0.8822	$0.8876	$0.8822	$0.8876	$0.8822
157	Indirect Cost of Gas Rates (New)											
158	Winter	$0.0563	$0.0563	$0.0563	$0.0537	$0.0537	$0.0537	$0.0537	$0.0563	$0.0537	$0.0563	$0.0537
159	Summer	$0.0181	$0.0181	$0.0181	$0.0110	$0.0110	$0.0110	$0.0110	$0.0181	$0.0110	$0.0181	$0.0110
160												
161	Target Customer Charge-MCOS	$32.45			$33.41				$47.73	$51.52	$85.47	$82.21
162	Target Customer Charge-ACS	$23.30			$24.22			$0.61	$34.63	$42.57	$82.80	$89.22
163	Unit Marginal Cost ($ / winter therm)	$0.1156			$0.0652			NA	$0.1396	$0.0683	$0.1255	$0.0643
164	Unit Marginal Cost ($ / summer therm)	$0.0640			$0.0307			NA	$0.0804	$0.0324	$0.0711	$0.0306

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
110								
111	**Summary of TY Rev. w/ Imputed Gas Costs**							
112	Test Year Base Revenue							
113	Annual	$6,990,909	$3,306,391	$1,140,743	$5,569,437	$3,502,265		line 114 + line 115
114	Winter	$6,110,724	$2,432,175	$985,737	$3,985,162	$1,746,926		line 75
115	Summer	$880,185	$874,216	$155,006	$1,584,275	$1,755,339		line 76
116	Direct Cost of Gas Revenue							
117	Annual	$35,880,883	$20,780,586	$7,562,276	$44,786,601		$413,851,574	line 118 + line 119
118	Winter	$29,546,593	$11,985,600	$5,622,453	$23,619,529			line 80 + line 105
119	Summer	$6,334,291	$8,794,985	$1,939,823	$21,167,072			line 81 + line 106
120	Indirect Cost of Gas Revenue							
121	Annual	$2,301,129	$1,311,775	$494,746	$2,912,531		$25,858,200	line 122 + line 123
122	Winter	$1,758,767	$597,160	$337,526	$1,174,051			line 83 + line 108
123	Summer	$542,362	$714,615	$157,220	$1,738,479			line 84 + line 109
124	Deferred Gas Costs							$17,079,967
125	Annual	$816,017	$311,118	$206,853	$147,207		$17,079,967	line 126 + line 127
126	Winter	$681,414	$177,572	$146,026	$106,741			line 100 * (line 32 + line 42)
127	Summer	$134,604	$133,546	$60,827	$40,466			line 101 * (line 33 + line 43)
128	LDAC Revenue							
129	Annual	$583,723	$401,772	$125,985	$873,282		$6,962,862	line 130 + line 131
130	Winter	$434,212	$182,500	$79,946	$351,731			line 86
131	Summer	$149,511	$219,272	$46,039	$521,551			line 87
132	Total							
133	Annual	$46,572,662	$26,111,642	$9,530,603	$54,289,057		$601,597,478	line 134 + line 135
134	Winter	$38,531,710	$15,375,007	$7,171,688	$29,237,214			line 114 + line 118 + line 122 + line 126 + line 130
135	Summer	$8,040,952	$10,736,635	$2,358,915	$25,051,843			line 115 + line 119 + line 123 + line 127 + line 131
136								
137	**COST STUDY INFORMATION**							
138								
139	Target ACS Base Revenue							
140	Annual	$8,252,580	$3,549,167	$1,455,970	$5,790,935	$3,921,013	$161,102,537	line 141 + line 142
141	Winter	$6,953,781	$2,626,714	$1,284,399	$4,397,478		$110,404,524	without special contracts
142	Summer	$1,298,798	$922,452	$171,571	$1,393,457		$50,698,013	without special contracts
143								
144	Direct Gas Cost for New Rates							
145	Annual	$15,540,169	$5,792,104	$3,938,465	$2,729,254		$324,558,618	line 146 + line 147
146	Winter	$12,980,232	$3,267,937	$2,781,643	$1,964,403		$261,266,529	
147	Summer	$2,559,938	$2,524,167	$1,156,822	$764,851		$63,292,089	
148								
149	Indirect Gas Cost for New Rates							
150	Annual	$874,164	$235,780	$199,734	$132,348		$17,724,307	line 151 + line 152
151	Winter	$821,964	$204,306	$176,146	$122,811		$16,530,288	
152	Summer	$52,200	$31,474	$23,589	$9,537		$1,194,018	
153								
154	Direct Cost of Gas Rates (New)							
155	Winter	$0.8891	$0.8589	$0.8891	$0.8589			line 146 / (line 32 + line 42)
156	Summer	$0.8876	$0.8822	$0.8876	$0.8822			line 147 / (line 33 + line 43)
157	Indirect Cost of Gas Rates (New)							
158	Winter	$0.0563	$0.0537	$0.0563	$0.0537			line 151 / (line 32 + line 42)
159	Summer	$0.0181	$0.0110	$0.0181	$0.0110			line 152 / (line 33 + line 43)
160								
161	Target Customer Charge-MCOS	$351.39	$355.73	$1,001.16	$906.18			Linked to COS Schedules
162	Target Customer Charge-ACS	$261.13	$307.22	$799.10	$762.87			
163	Unit Marginal Cost ($ / winter therm)	$0.1134	$0.0543	$0.1272	$0.0618			
164	Unit Marginal Cost ($ / summer therm)	$0.0634	$0.0254	$0.0669	$0.0272			

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
165	**Imputed Gas Costs for Trans. Cust.**											
166	Direct Gas Adjustment Factor											
167	Winter	$57,311	$57,311	$0	$859	$859	$0	$0	$1,476,953	$419,052	$11,253,365	$3,733,137
168	Summer	$14,267	$14,267	$0	$733	$733	$0	$0	$250,434	$247,382	$2,252,534	$2,502,711
169	Indirect Gas Adjustment Factor											
170	Winter	$3,320	$3,320	$0	$38	$38	$0	$0	$80,920	$22,746	$631,887	$182,819
171	Summer	$954	$954	$0	$51	$51	$0	$0	$15,618	$17,465	$147,198	$178,237
172												
173	**Incremental LDAC Revenue**											
174												
175	Incremental LDAC Rate											
176	Winter	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114
177	Summer	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114
178	Incremental LDAC Revenue											
179	Winter	$2,303,953	$2,110,252	$193,701	$42,695	$39,493	$3,202	$16	$256,677	$35,480	$530,743	$145,360
180	Summer	$522,987	$475,466	$47,520	$30,278	$28,167	$2,111	$15	$30,956	$24,348	$87,171	$98,442
181												
182	**Revenue Other Than Base (New)**											
183												
184	Direct Cost of Gas Revenue											
185	Annual	$220,233,021	$201,441,105	$18,791,916	$5,555,541	$5,151,206	$404,335	$2,374	$22,449,297	$4,528,085	$47,849,261	$18,149,783
186	Winter	$179,543,771	$164,449,074	$15,094,697	$3,214,366	$2,973,286	$241,080	$1,198	$20,037,991	$2,662,770	$41,048,087	$10,704,807
187	Summer	$40,689,250	$36,992,030	$3,697,220	$2,341,175	$2,177,920	$163,255	$1,176	$2,411,306	$1,865,315	$6,801,175	$7,444,976
188	Indirect Cost of Gas Revenue											
189	Annual	$12,199,536	$11,168,284	$1,031,251	$230,176	$213,068	$17,108	$90	$1,315,966	$200,659	$2,758,567	$858,539
190	Winter	$11,369,176	$10,413,315	$955,861	$200,942	$185,870	$15,072	$75	$1,256,285	$163,020	$2,518,618	$618,677
191	Summer	$830,360	$754,969	$75,390	$29,234	$27,199	$2,036	$15	$59,681	$37,639	$239,950	$239,863
192	LDAC Revenue											
193	Annual	$6,312,338	$5,779,170	$533,168	$126,304	$117,370	$8,934	$39	$607,352	$140,778	$1,323,301	$577,108
194	Winter	$5,074,245	$4,653,574	$420,671	$63,118	$58,589	$4,529	$18	$521,045	$72,894	$1,080,262	$302,645
195	Summer	$1,238,094	$1,125,596	$112,497	$63,186	$58,781	$4,405	$21	$86,307	$67,884	$243,039	$274,463
196	Total											
197	Annual	$238,744,895	$218,388,559	$20,356,336	$5,912,021	$5,481,644	$430,377	$2,503	$24,372,615	$4,869,522	$51,931,130	$19,585,430
198	Winter	$195,987,192	$179,515,963	$16,471,229	$3,478,425	$3,217,744	$260,681	$1,291	$21,815,321	$2,898,685	$44,646,966	$11,626,129
199	Summer	$42,757,703	$38,872,596	$3,885,107	$2,433,596	$2,263,900	$169,696	$1,212	$2,557,294	$1,970,838	$7,284,164	$7,959,301
200												
201	**REVENUE ALLOCATION**											
202												
203	Percent ACS Base Revenue											
204	Annual	62.38%			6.74%			0.0002%	7.02%	1.46%	7.98%	2.61%
205	Winter	60.85%			5.26%			0.0002%	6.98%	1.26%	9.22%	2.61%
206	Summer	65.70%			9.96%			0.0002%	7.10%	1.89%	5.28%	2.61%
207	Base Revenue Requirement											
208	Other Fees Increase											
209	Revenue Assigned to Special Contracts											
210												
211	Incremental LDAC	$2,826,939			$72,973			$31	$287,633	$59,828	$617,914	$243,802
212	Remaining Revenue Requirement											
213	Target Allocation of Revenue Requirement	$96,950,986			$10,473,757			$333	$10,904,751	$2,264,432	$12,402,828	$4,051,213
214	Base Revenue Increment											
215	Total Revenue											
216	Test Year Revenue	$328,667,115			$11,003,222			$2,804	$34,227,522	$6,634,448	$62,146,491	$22,411,911
217	Target Revenue	$335,695,881			$16,385,778			$2,835	$35,277,366	$7,133,955	$64,333,958	$23,636,643
218	Increase at Target	$7,028,766			$5,382,556			$31	$1,049,844	$499,506	$2,187,467	$1,224,732
219	Percent Increase at Target	2.14%			48.92%			1.10%	3.07%	7.53%	3.52%	5.46%

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
165	**Imputed Gas Costs for Trans. Cust.**						$113,101,512	Hold Constant at Test Year Levels
166	Direct Gas Adjustment Factor						$113,101,512	
167	Winter	$18,160,054	$9,054,121	$3,338,573	$21,799,382		$69,292,806	line 105
168	Summer	$3,927,415	$6,545,332	$842,530	$20,496,779		$37,080,117	line 106
169	Indirect Gas Adjustment Factor							
170	Winter	$1,057,570	$446,838	$194,425	$1,075,840		$3,696,404	line 108
171	Summer	$370,188	$538,074	$79,415	$1,684,985		$3,032,185	line 109
172								
173	**Incremental LDAC Revenue**						$5,630,282	Exhibit BSG/JES-4
174								
175	Incremental LDAC Rate						$0.0114	line 173 / (total therms-special contracts)
176	Winter	$0.0114	$0.0114	$0.0114	$0.0114			Company Total: line 175
177	Summer	$0.0114	$0.0114	$0.0114	$0.0114			
178	Incremental LDAC Revenue						$5,630,282	check
179	Winter	$419,921	$168,357	$82,272	$326,933		$4,312,407	line 53 * line 176
180	Summer	$83,616	$122,630	$25,748	$291,684		$1,317,875	line 54 * line 177
181								
182	**Revenue Other Than Base (New)**							
183								
184	Direct Cost of Gas Revenue							
185	Annual	$37,627,638	$21,391,558	$8,119,568	$45,025,415		$430,931,541	line 186 + line 187
186	Winter	$31,140,285	$12,322,059	$6,120,216	$23,763,785		$330,559,335	line 146 + line 167
187	Summer	$6,487,352	$9,069,499	$1,999,352	$21,261,630		$100,372,206	line 147 + line 168
188	Indirect Cost of Gas Revenue							
189	Annual	$2,301,922	$1,220,693	$473,575	$2,893,174		$24,452,896	line 190 + line 191
190	Winter	$1,879,534	$651,144	$370,571	$1,198,652		$20,226,692	line 151 + line 170
191	Summer	$422,388	$569,549	$103,004	$1,694,522		$4,226,204	line 152 + line 171
192	LDAC Revenue							
193	Annual	$1,087,260	$692,760	$234,005	$1,491,899		$12,593,144	line 194 + line 195
194	Winter	$854,133	$350,857	$162,218	$678,664		$9,160,099	line 130 + line 179
195	Summer	$233,127	$341,902	$71,787	$813,235		$3,433,045	line 131 + line 180
196	Total							
197	Annual	$41,016,820	$23,305,010	$8,827,147	$49,410,488		$467,977,581	line 198 + line 199
198	Winter	$33,873,952	$13,324,060	$6,653,005	$25,641,101		$359,946,127	line 186 + line 190 + line 194
199	Summer	$7,142,868	$9,980,950	$2,174,142	$23,769,387		$108,031,454	line 187 + line 191 + line 195
200								
201	**REVENUE ALLOCATION**							
202								
203	Percent ACS Base Revenue							
204	Annual	5.12%	2.20%	0.90%	3.59%	NA	100.00%	line 140 / (company total - sp contracts)
205	Winter	6.30%	2.38%	1.16%	3.98%	NA	100.00%	line 141 / (company total - sp contracts)
206	Summer	2.56%	1.82%	0.34%	2.75%	NA	100.00%	line 142 / (company total - sp contracts)
207	Base Revenue Requirement						$165,023,551	
208	Other Fees Increase						$46,525	Schs. JAF-1-8, 1-10; Input
209	Revenue Assigned to Special Contracts					$3,921,013	$3,921,013	Test year plus allocated increase
210								
211	Incremental LDAC	$503,537	$290,988	$108,020	$618,617	$0	$5,630,282	line 179 + line 180
212	Remaining Revenue Requirement						$155,425,730	line 208 - sum (lines 208, 209, and 211)
213	Target Allocation of Revenue Requirement	$7,961,782	$3,424,104	$1,404,665	$5,586,879		$155,425,730	line 204 * Company Total line 212
214	Base Revenue Increment						$17,580,855	line 213 -(Company Total:line 74-Contracts:line 74)
215	Total Revenue							
216	Test Year Revenue	$46,572,662	$26,111,642	$9,530,603	$54,289,057		$601,597,478	line 133
217	Target Revenue	$48,978,602	$26,729,114	$10,231,812	$54,997,367		$623,403,311	line 197 + line 213
218	Increase at Target	$2,405,939	$617,472	$701,210	$708,310		$21,805,834	line 217 - line 216
219	Percent Increase at Target	5.17%	2.36%	7.36%	1.30%		3.62%	line 218 / line 216

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
220	**Revenue Increase Cap of 6%**	**$19,720,027**			**$660,193**			**$168**	**$2,053,651**	**$398,067**	**$3,728,789**	**$1,344,715**
221	Revenue to Re-allocate	NA			$4,722,363			NA	NA	$101,439	NA	NA
222												
223	Total Revenue to Re-allocate											
224	Test Year Revenue for Re-allocation	$328,667,115			NA			$2,804	$34,227,522	NA	$62,146,491	$22,411,911
225	Percent Assignment	57.22%						0.00%	5.96%		10.82%	3.90%
226	First Re-allocation	$2,834,024						$24	$295,136		$535,875	$193,253
227	Increase with First Re-allocation	$9,862,790			$660,193			$55	$1,344,980	$398,067	$2,723,343	$1,417,985
228	Revenue to Re-allocate	none			none			none	none	none	none	$73,271
229	Test Year Revenue for Re-allocation	$328,667,115			NA			NA	$34,227,522	NA	$62,146,491	NA
230	Percent Assignment	65.03%							6.77%		12.30%	
231	Second Re-allocation	$56,206							$5,853		$10,628	
232	Increase with Second Re-allocation	$9,918,995			$660,193			$55	$1,350,834	$398,067	$2,733,970	$1,344,715
233	Revenue to Re-allocate	none			none			none	none	none	none	none
234												
235												
236												
237												
238												
239												
240	Change from Target Allocation	$2,890,229			-$4,722,363			$24	$300,990	-$101,439	$546,503	$119,982
241												
242	**Base Revenue Requirement**	$99,841,215			$5,751,394			$357	$11,205,741	$2,162,993	$12,949,332	$4,171,195
243	Total Revenue Requirement	$338,586,110			$11,663,415			$2,860	$35,578,356	$7,032,515	$64,880,461	$23,756,625
244	Percent Increase	3.02%			6.00%			1.97%	3.95%	6.00%	4.40%	6.00%
245												
246												
247	**RATE DESIGN**											
248												
249	**Proposed Block Sizes**											
250												
251	First Block Size											
252	Winter		**125**	NA		**12**	NA	NA	NA	NA	NA	NA
253	Summer		**30**	NA		**10**	NA	NA	NA	NA	NA	NA
254												
255	Test Year Therms											
256	Annual	247,783,289	226,640,087	21,143,202	6,396,166	5,930,437	465,729	2,728	25,211,236	5,243,986	54,160,592	21,369,383
257	Winter	201,943,124	184,965,126	16,977,998	3,742,241	3,461,572	280,669	1,395	22,497,947	3,109,876	46,519,987	12,740,904
258	Summer	45,840,165	41,674,961	4,165,204	2,653,925	2,468,865	185,060	1,333	2,713,289	2,134,110	7,640,605	8,628,479
259												
260	Percent of Therms in Proposed 1st Block											
261	Winter	67.61%	67.61%	67.61%	45.10%	45.10%	45.10%	100.00%	100.00%	100.00%	100.00%	100.00%
262	Summer	66.14%	66.14%	66.14%	55.20%	55.20%	55.20%	100.00%	100.00%	100.00%	100.00%	100.00%
263												
264	Proposed First Block Therms											
265	Winter	136,535,894	125,056,889	11,479,005	1,687,869	1,561,278	126,591	1,395	22,497,947	3,109,876	46,519,987	12,740,904
266	Summer	30,316,620	27,905,036	2,411,584	1,465,073	1,389,418	75,655	1,333	2,713,289	2,134,110	7,640,605	8,628,479
267												
268	Proposed Second Block Therms											
269	Winter	65,407,230	59,908,237	5,498,993	2,054,372	1,900,294	154,078	0	0	0	0	0
270	Summer	15,523,545	13,769,925	1,753,620	1,188,852	1,079,447	109,405	0	0	0	0	0
271												
272	Base Revenue Requirement	$99,841,215			$5,751,394			$357	$11,205,741	$2,162,993	$12,949,332	$4,171,195
273												

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
220	**Revenue Increase Cap of 6%**	**$2,794,360**	**$1,566,699**	**$571,836**	**$3,257,343**			line 216 * 6%
221	Revenue to Re-allocate	NA	NA	$129,374	NA		$4,953,176	line 218 - line 220
222								
223	Total Revenue to Re-allocate						$4,953,176	line 221 - line 222
224	Test Year Revenue for Re-allocation	$46,572,662	$26,111,642	NA	$54,289,057		$574,429,205	line 216
225	Percent Assignment	8.11%	4.55%		9.45%		100.00%	line 224 / Company Total line 224
226	First Re-allocation	$401,586	$225,155		$468,123		$4,953,176	line 225 * Company Total line 223
227	Increase with First Re-allocation	$2,807,525	$842,627	$571,836	$1,176,432		$21,805,834	line 220 or line 226 + line 218
228	Revenue to Re-allocate	$13,165	none	none	none		$86,436	line 227 - line 220
229	Test Year Revenue for Re-allocation	NA	$26,111,642	NA	$54,289,057		$505,441,827	line 224
230	Percent Assignment		5.17%		10.74%		100.00%	line 229 / Company Total line 229
231	Second Re-allocation		$4,465		$9,284		$86,436	line 230 * Company Total line 228
232	Increase with Second Re-allocation	$2,794,360	$847,092	$571,836	$1,185,716		$21,805,834	line 227 + line 231 or line 220
233	Revenue to Re-allocate	none	none	none	none		$0	
234								
235								
236								
237								
238								
239								
240	Change from Target Allocation	$388,420	$229,620	-$129,374	$477,407		$0	line 232 - line 218
241								
242	**Base Revenue Requirement**	$8,350,202	$3,653,724	$1,275,292	$6,064,285		$155,425,730	line 213 + line 240
243	Total Revenue Requirement	$49,367,022	$26,958,734	$10,102,439	$55,474,773		$623,403,311	line 217 + line 240
244	Percent Increase	6.00%	3.24%	6.00%	2.18%			(line 243 - line 216) / line 216
245								
246								
247	**RATE DESIGN**							
248								
249	**Proposed Block Sizes**							
250								
251	First Block Size							
252	Winter	NA	NA	NA	NA			See Ex. BSG/JAF-2; Schedule JAF-2-3
253	Summer	NA	NA	NA	NA			See Ex. BSG/JAF-2; Schedule JAF-2-3
254								
255	Test Year Therms							
256	Annual	44,135,406	25,505,268	9,468,031	54,222,227		493,498,312	line 257 + line 258
257	Winter	36,806,379	14,756,628	7,211,204	28,655,953			line 53
258	Summer	7,329,027	10,748,640	2,256,827	25,566,274			line 54
259								
260	Percent of Therms in Proposed 1st Block							See Ex. BSG/JAF-2; Schedule JAF-2-3
261	Winter	100.00%	100.00%	100.00%	100.00%			
262	Summer	100.00%	100.00%	100.00%	100.00%			
263								
264	Proposed First Block Therms							
265	Winter	36,806,379	14,756,628	7,211,204	28,655,953			line 257 * line 261
266	Summer	7,329,027	10,748,640	2,256,827	25,566,274			line 258 * line 262
267								
268	Proposed Second Block Therms							
269	Winter	0	0	0	0			line 257 - line 265
270	Summer	0	0	0	0			line 258 - line 266
271								
272	Base Revenue Requirement	$8,350,202	$3,653,724	$1,275,292	$6,064,285		$155,425,730	line 242
273								

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
274	Proposed Customer Charge	$12.10			$11.60			$2.48	$19.00	$19.00	$65.00	$65.00
275	Customer Charge Revenue	$32,264,577			$4,645,974			$357	$3,803,914	$758,252	$3,652,675	$1,369,745
276	Winter Customer Charge Revenue	$16,231,339			$2,259,135				$1,924,966	$383,249	$1,817,465	$696,670
277	Remaining Revenue	$67,576,638			$1,105,420			$0	$7,401,827	$1,404,741	$9,296,657	$2,801,450
278												
279	Volumetric Revenue Requirement	$67,576,638			$1,105,420			$0	$7,401,827	$1,404,741	$9,296,657	$2,801,450
280	Demand-Based Revenue Requirement	$0			$0			$0	$0	$0	$0	$0
281	Average Volumetric Rate	$0.2727			$0.1728			$0.0000	$0.2936	$0.2679	$0.1716	$0.1311
282	ACS Seasonal Split - Volumetric Req.											
283	Winter Percentage	74.68%			57.15%			70.64%	77.04%	63.39%	90.86%	77.05%
284	Summer Percentage	25.32%			42.85%			29.36%	22.96%	36.61%	9.14%	22.95%
285	Average Volumetric Rate - Winter	$0.2499			$0.1688			$0.0000	$0.2535	$0.2863	$0.1816	$0.1694
286	Average Volumetric Rate - Summer	$0.3732			$0.1785			$0.0000	$0.6264	$0.2410	$0.1112	$0.0745
287	Volumetric Revenue Requirement - Winter	$50,467,690			$631,759			$0	$5,702,223	$890,474	$8,446,662	$2,158,410
288	Volumetric Revenue Requirement - Summer	$17,108,948			$473,661			$0	$1,699,604	$514,267	$849,994	$643,040
289												
290	Unit Marginal Cost ($ / winter therm)	$0.1156			$0.0652			NA	$0.1396	$0.0683	$0.1255	$0.0643
291	Unit Marginal Cost ($ / summer therm)	$0.0640			$0.0307			NA	$0.0804	$0.0324	$0.0711	$0.0306
292	Ratio of Second Block to MC											
293	Winter	1.80			2.30			NA	flat	flat	flat	flat
294	Summer	NA			NA			NA	flat	flat	flat	flat
295												
296	Second Block Rate											
297	Winter	$0.2081			$0.1499			$0.0000	$0.2936	$0.2679	$0.1816	$0.1694
298	Summer	$0.2081			$0.1499			$0.0000	$0.2936	$0.2679	$0.1112	$0.0745
299												
300	Revenue Generated											
301	Annual	$51,571,553			$958,858			$0	$7,401,827	$1,404,741	$9,296,657	$2,801,450
302	Winter	$42,030,763			$561,004			$0	$6,605,226	$833,063	$8,446,662	$2,158,410
303	Summer	$9,540,791			$397,854			$0	$796,601	$571,678	$849,994	$643,040
304												
305	Remaining Revenue											
306	Annual	$16,005,085			$146,562			$0	$0	$0	$0	$0
307	Winter	$8,436,927			$70,755			$0	$0	$0	$0	$0
308	Summer	$7,568,158			$75,807			$0	$0	$0	$0	$0
309												
310	First Block Surcharge											
311	Winter	$0.0959			$0.0465			NA	NA	NA	NA	NA
312	Summer	$0.0959			$0.0465			NA	NA	NA	NA	NA
313												
314	Demand Charge Revenue Requirement											
315	Winter	NA			NA			NA	NA	NA	NA	NA
316	Summer	NA			NA			NA	NA	NA	NA	NA
317												
318	Demand Charge Rates											
319	Winter	NA			NA			NA	NA	NA	NA	NA
320	Summer	NA			NA			NA	NA	NA	NA	NA
321												

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
274	Proposed Customer Charge	$213.00	$213.00	$781.00	$781.00			See Ex. BSG/JAF-2; Schedule JAF-2-2
275	Customer Charge Revenue	$1,583,016	$636,657	$141,361	$624,019		$49,480,547	line 274 * line 27
276	Winter Customer Charge Revenue	$780,006	$325,890	$71,852	$320,210			line 274 * line 28
277	Remaining Revenue	$6,767,186	$3,017,067	$1,133,931	$5,440,266		$105,945,183	line 272 - line 275
278								
279	Volumetric Revenue Requirement	$6,767,186	$3,017,067	$340,179	$1,632,080			For 43 & 53, 30% of the remaining revenues
280	Demand-Based Revenue Requirement	$0	$0	$793,751	$3,808,186			are assigned to the volumetric charges.
281	Average Volumetric Rate	$0.1533	$0.1183	$0.0359	$0.0301			line 279 / line 256
282	ACS Seasonal Split - Volumetric Req.							
283	Winter Percentage	92.57%	79.00%	92.24%	78.91%			(line 141 - line 276) / (line 140 - line 275)
284	Summer Percentage	7.43%	21.00%	7.76%	21.09%			100% - line 283
285	Average Volumetric Rate - Winter	$0.1702	$0.1615	$0.0435	$0.0449			line 287 / line 257
286	Average Volumetric Rate - Summer	$0.0686	$0.0590	$0.0117	$0.0135			line 288 / line 258
287	Volumetric Revenue Requirement - Winter	$6,264,141	$2,383,423	$313,769	$1,287,891			line 283 * line 279
288	Volumetric Revenue Requirement - Summer	$503,045	$633,644	$26,410	$344,188			line 279 - line 287
289								
290	Unit Marginal Cost ($ / winter therm)	$0.1134	$0.0543	$0.1272	$0.0618			line 163
291	Unit Marginal Cost ($ / summer therm)	$0.0634	$0.0254	$0.0669	$0.0272			line 164
292	Ratio of Second Block to MC							
293	Winter	flat	flat	flat	flat			Inputs
294	Summer	flat	flat	flat	flat			
295								
296	Second Block Rate							
297	Winter	$0.1702	$0.1615	$0.0447	$0.0447			line 293 * line 290 or line 287 / line 53
298	Summer	$0.0686	$0.0590	$0.0133	$0.0133			line 294 * line 291 or line 288 / line 54
299								
300	Revenue Generated							
301	Annual	$6,767,186	$3,017,067	$352,079	$1,620,180			line 302 + line 303
302	Winter	$6,264,141	$2,383,423	$322,019	$1,279,642			line 257 * line 297
303	Summer	$503,045	$633,644	$30,061	$340,538			line 258 * line 298
304								
305	Remaining Revenue							
306	Annual	$0	$0	$0	$0			line 307 + line 308
307	Winter	$0	$0	$0	$0			line 287 - line 302
308	Summer	$0	$0	$0	$0			line 288 - line 303
309								
310	First Block Surcharge							
311	Winter	NA	NA	NA	NA			line 307 / line 265
312	Summer	NA	NA	NA	NA			line 308 / line 266
313								
314	Demand Charge Revenue Requirement							
315	Winter	NA	NA	$732,127	$3,005,080			line 280 * line 283
316	Summer	NA	NA	$61,624	$803,106			line 280 - line 315
317								
318	Demand Charge Rates							
319	Winter	NA	NA	$2.1586	$2.1586			line 315 / line 56
320	Summer	NA	NA	$0.6713	$0.6713			line 316 / line 57
321								

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
322	**Base Rates w/o Low Inc. Discount**											
323												
324	Monthly Customer Charge	$12.10			$11.60			$2.48	$19.00	$19.00	$65.00	$65.00
325	Winter Volumetric Rates											
326	First Block Rate	$0.3041			$0.1964			$0.0	$0.2936	$0.2679	$0.1816	$0.1694
327	Second Block Rate	$0.2081			$0.1499			$0.0	NA	NA	NA	NA
328	Summer Volumetric Rates											
329	First Block Rate	$0.3041			$0.1964			$0.0	$0.2936	$0.2679	$0.1112	$0.0745
330	Second Block Rate	$0.2081			$0.1499			$0.0	NA	NA	NA	NA
331	Demand Rate											
332	Winter	NA			NA			NA	NA	NA	NA	NA
333	Summer	NA			NA			NA	NA	NA	NA	NA
334												
335	**Revenue Generated**											
336	Monthly Customer Charge	$32,264,577			$4,645,974			$357	$3,803,914	$758,252	$3,652,675	$1,369,745
337	Winter Volumetric Rates											
338	First Block Rate	$41,514,453			$331,490			NA	$6,605,226	$833,063	$8,446,662	$2,158,410
339	Second Block Rate	$13,613,317			$307,974			NA	NA	NA	NA	NA
340	Summer Volumetric Rates											
341	First Block Rate	$9,217,927			$287,734			NA	$796,601	$571,678	$849,994	$643,040
342	Second Block Rate	$3,230,942			$178,222			NA	NA	NA	NA	NA
343	Demand Rate											
344	Winter	NA			NA			NA	NA	NA	NA	NA
345	Summer	NA			NA			NA	NA	NA	NA	NA
346	TOTAL PROPOSED BASE REVENUE	$99,841,215			$5,751,394			$357	$11,205,741	$2,162,993	$12,949,332	$4,171,195
347	check	$0			$0			$0	$0	$0	$0	$0
348	**Class Bill Impacts**											
349	Total Test Year Revenue	$328,667,115			$11,003,222			$2,804	$34,227,522	$6,634,448	$62,146,491	$22,411,911
350	Total Proposed Revenue	$338,586,110			$11,663,415			$2,860	$35,578,356	$7,032,515	$64,880,461	$23,756,625
351	check											
352	Percent Change	3.02%			6.00%			1.97%	3.95%	6.00%	4.40%	6.00%
353												
354												
355	**Allocation of Low-Income Discount**											
356	Distribution Rate Base	$228,590,466			$17,817,354			$948	$25,270,507	$4,722,501	$36,540,684	$11,146,787
357	20% Burner-tip Discount Amount (1)			$5,741,123			$148,352					
358	Allocation Percentages	59.18%			4.61%			0.0002%	6.54%	1.22%	9.46%	2.89%
359	Amount Allocated (1)	$3,485,461			$271,672			$14	$385,315	$72,007	$557,158	$169,962
360												
361	Volumetric Surcharge (1)	$0.0141			$0.0425			NA	$0.0153	$0.0137	$0.0103	$0.0080
362												
363	Revised Discount Amount (2)			$5,800,605			$152,308					
364	Amount Allocated (2)	$3,523,005			$274,599			$15	$389,466	$72,783	$563,160	$171,793
365												
366	Volumetric Surcharge (2)	$0.0142			$0.0429			NA	$0.0154	$0.0139	$0.0104	$0.0080
367												
368	Revised Discount Amount (3)			$5,801,246			$152,351					
369	Amount Allocated (3)	$3,523,409			$274,630			$15	$389,510	$72,791	$563,225	$171,812
370												
371	Volumetric Surcharge (3)	$0.0142			$0.0429			NA	$0.0154	$0.0139	$0.0104	$0.0080
372												
373	Proposed Base Revenue		$94,714,695	$2,848,676		$5,694,645	$179,027	$371	$11,595,251	$2,235,784	$13,512,556	$4,343,008
374	Revised Total Revenue		$313,103,254	$23,205,012		$11,176,290	$609,404	$2,874	$35,967,866	$7,105,306	$65,443,686	$23,928,438
375	Total Test Year Revenue		$304,180,734	$24,486,381		$10,364,622	$638,599	$2,804	$34,227,522	$6,634,448	$62,146,491	$22,411,911
376	Revised Percent Change		2.93%	-5.23%		7.83%	-4.57%	2.49%	5.08%	7.10%	5.31%	6.77%

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
322	**Base Rates w/o Low Inc. Discount**							
323								
324	Monthly Customer Charge	$213.00	$213.00	$781.00	$781.00			line 274
325	Winter Volumetric Rates							
326	First Block Rate	$0.1702	$0.1615	$0.0447	$0.0447			line 311 + line 327 or line 297
327	Second Block Rate	NA	NA	NA	NA			line 297
328	Summer Volumetric Rates							
329	First Block Rate	$0.0686	$0.0590	$0.0133	$0.0133			line 312 + line 330 or line 298
330	Second Block Rate	NA	NA	NA	NA			line 298
331	Demand Rate							
332	Winter	NA	NA	$2.1586	$2.1586			line 319
333	Summer	NA	NA	$0.6713	$0.6713			line 320
334								
335	**Revenue Generated**							
336	Monthly Customer Charge	$1,583,016	$636,657	$141,361	$624,019			line 324* line 27
337	Winter Volumetric Rates							
338	First Block Rate	$6,264,141	$2,383,423	$322,019	$1,279,642			line 326 * line 265
339	Second Block Rate	NA	NA	NA	NA			line 327 * line 269
340	Summer Volumetric Rates							
341	First Block Rate	$503,045	$633,644	$30,061	$340,538			line 329 * line 266
342	Second Block Rate	NA	NA	NA	NA			line 330 * line 270
343	Demand Rate							
344	Winter	NA	NA	$739,364	$2,997,844			line 332 * line 56
345	Summer	NA	NA	$69,320	$795,411		$0	line 333 * line 57
346	TOTAL PROPOSED BASE REVENUE	$8,350,202	$3,653,724	$1,302,124	$6,037,453		$155,425,730	sum (lines 336 through 345)
347	check	$0	$0	$26,832	-$26,832			
348	**Class Bill Impacts**							
349	Total Test Year Revenue	$46,572,662	$26,111,642	$9,530,603	$54,289,057		$601,597,478	line 133
350	Total Proposed Revenue	$49,367,022	$26,958,734	$10,129,271	$55,447,941		$623,403,311	line 346 + line 197
351	check							
352	Percent Change	6.00%	3.24%	6.28%	2.13%			(line 350 - line 349) / line 349
353								
354								
355	**Allocation of Low-Income Discount**							
356	Distribution Rate Base	$26,258,806	$11,106,815	$4,945,453	$19,854,998		$386,255,320	COS Input
357	20% Burner-tip Discount Amount (1)						$5,889,475	Schedule JAF-2-5; line 45
358	Allocation Percentages	6.80%	2.88%	1.28%	5.14%		100.00%	line 356 / Company Total line 356
359	Amount Allocated (1)	$400,384	$169,352	$75,406	$302,741		$5,889,475	line 358 * Company Total line 357
360								
361	Volumetric Surcharge (1)	$0.0091	$0.0066	$0.0059	$0.0059			line 359 / line 52
362								
363	Revised Discount Amount (2)						$5,952,913	Schedule JAF-2-5; line 69
364	Amount Allocated (2)	$404,697	$171,177	$76,219	$306,002		$5,952,913	line 358 * Company Total line 363
365								
366	Volumetric Surcharge (2)	$0.0092	$0.0067	$0.0060	$0.0060			line 364 / line 52
367								
368	Revised Discount Amount (3)						$5,953,597	Schedule JAF-2-5; line 95
369	Amount Allocated (3)	$404,744	$171,196	$76,227	$306,038			line 358 * Company Total line 368
370								
371	Volumetric Surcharge (3)	$0.0092	$0.0067	$0.0060	$0.0060			line 369 / line 52
372								
373	Proposed Base Revenue	$8,754,946	$3,824,920	$1,378,351	$6,343,491		**$155,425,723**	JAF-2-5; line 121 or line 346 + line 369
374	Revised Total Revenue	$49,771,766	$27,129,930	$10,205,498	$55,753,978		$623,403,304	JAF-2-5; line 122 or line 350 + line 369
375	Total Test Year Revenue	$46,572,662	$26,111,642	$9,530,603	$54,289,057		$601,597,478	line 349
376	Revised Percent Change	6.87%	3.90%	7.08%	2.70%			(line 374 - line 375) / line 375

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter	C&I (51) Med. Annual Low Winter
377												
378	**Proposed Rates w/ Low Income Discount**											
379												
380	Monthly Customer Charge	NA	$12.10	$6.25	NA	$11.60	$6.25	$2.58	$19.00	$19.00	$65.00	$65.00
381	Winter Volumetric Rates											
382	First Block Rate	NA	$0.3183	$0.0708	NA	$0.2393	$0.1158	$0.0	$0.3090	$0.2818	$0.1920	$0.1774
383	Second Block Rate	NA	$0.2224		NA	$0.1928		$0.0				
384	Summer Volumetric Rates											
385	First Block Rate	NA	$0.3183	$0.0708	NA	$0.2393	$0.1158	$0.0	$0.3090	$0.2818	$0.1216	$0.0826
386	Second Block Rate	NA	$0.2224		NA	$0.1928		$0.0				
387	Demand Rate											
388	Winter	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
389	Summer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
390												
391	**Revenue Proof**											
392												
393	Monthly Customer Charge	NA	$29,648,303	$1,351,381	NA	$4,413,812	$125,088	$371	$3,803,914	$758,252	$3,652,675	$1,369,745
394	Winter Volumetric Rates											
395	First Block Rate	NA	$39,802,475	$1,202,328	NA	$373,664	$32,507	$0	$6,952,816	$876,231	$8,930,431	$2,260,849
396	Second Block Rate	NA	$13,320,681		NA	$366,468		$0	NA	NA	NA	NA
397	Summer Volumetric Rates											
398	First Block Rate	NA	$8,881,474	$294,967	NA	$332,532	$21,433	$0	$838,521	$601,301	$929,450	$712,414
399	Second Block Rate	NA	$3,061,762		NA	$208,169		$0	NA	NA	NA	NA
400	Demand Rate											
401	Winter	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
402	Summer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
403	TOTAL BASE REVENUE		$94,714,695	$2,848,676		$5,694,645	$179,027	$371	$11,595,251	$2,235,784	$13,512,556	$4,343,008
404												
405	**Class Bill Impacts**											
406												
407	Total Test Year Revenue	NA	$304,180,734	$24,486,381	NA	$10,364,622	$638,599	$2,804	$34,227,522	$6,634,448	$62,146,491	$22,411,911
408	Total Proposed Revenue	NA	$313,103,254	$23,205,012	NA	$11,176,290	$609,404	$2,874	$35,967,866	$7,105,306	$65,443,686	$23,928,438
409												
410	Percent Change	NA	2.93%	-5.23%	NA	7.83%	-4.57%	2.49%	5.08%	7.10%	5.31%	6.77%

line	Description	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Special Contract	Company Total	Notes
377								
378	**Proposed Rates w/ Low Income Discount**							
379								
380	Monthly Customer Charge	$213.00	$213.00	$781.00	$781.00			line 324
381	Winter Volumetric Rates							
382	First Block Rate	$0.1794	$0.1682	$0.0507	$0.0507			line 326 + line 371
383	Second Block Rate							line 327 + line 371
384	Summer Volumetric Rates							
385	First Block Rate	$0.0778	$0.0657	$0.0193	$0.0193			line 329 + line 371
386	Second Block Rate							line 330 + line 371
387	Demand Rate							
388	Winter	NA	NA	$2.1586	$2.1586			line 332
389	Summer	NA	NA	$0.6713	$0.6713			line 333
390								
391	**Revenue Proof**							
392								
393	Monthly Customer Charge	$1,583,016	$636,657	$141,361	$624,019			line 27 * line 380
394	Winter Volumetric Rates							
395	First Block Rate	$6,601,674	$2,482,472	$365,300	$1,451,633			line 265 * line 382 or line 53 * line 382
396	Second Block Rate	NA	NA	NA	NA			line 269 * line 383
397	Summer Volumetric Rates							
398	First Block Rate	$570,256	$705,791	$43,606	$493,985			line 266 * line 385 or line 54 * line 385
399	Second Block Rate	NA	NA	NA	NA			line 270 * line 386
400	Demand Rate							
401	Winter	NA	NA	$739,364	$2,997,844			line 56 * line 388
402	Summer	NA	NA	$69,320	$795,411			line 57 * line 389
403	TOTAL BASE REVENUE	$8,754,946	$3,824,920	$1,358,950	$6,362,892		**$155,425,723**	Sum lines 393 through 402
404								
405	**Class Bill Impacts**							
406								
407	Total Test Year Revenue	$46,572,662	$26,111,642	$9,530,603	$54,289,057		$601,597,478	line 375
408	Total Proposed Revenue	$49,771,766	$27,129,930	$10,186,098	$55,773,379		$623,403,304	line 197 + line 403
409								
410	Percent Change	6.87%	3.90%	6.88%	2.73%		**3.62%**	(line 408 - line 407) / line 407

BAY STATE GAS COMPANY
DEVELOPMENT OF CUSTOMER CHARGES

Bay State:

Rate Class	Current	ACOS	Current vs. ACOS - %	Proposal as a % of ACOS: 50% of ACOS	75% of ACOS	100% of ACOS	* (Avg of 2 Sim) Proposed	Increase	Movement to ACOS
R-1	$ 7.46	**$ 24.22**	30.8%	**$ 12.11**			**$ 11.60**	$ 4.14	25%
R-3	$ 7.47	**$ 23.30**	32.1%	**$ 11.65**			**$ 12.10**	$ 4.63	29%
G-40	$ 12.61	**$ 34.63**	36.4%	**$ 17.31**			**$ 19.00**	$ 6.39	29%
G-41	$ 45.04	**$ 82.80**	54.4%		**$ 62.10**		**$ 65.00**	$ 19.96	53%
G-42	$ 109.37	**$ 261.13**	41.9%		**$ 195.85**		**$ 213.00**	$ 103.63	68%
G-43	$ 298.53	**$ 799.10**	37.4%			**$ 799.10**	**$ 781.00**	$ 482.47	96%
G-50	$ 12.61	**$ 42.57**	29.6%	**$ 21.29**			**$ 19.00**	$ 6.39	21%
G-51	$ 45.04	**$ 89.22**	50.5%		**$ 66.91**		**$ 65.00**	$ 19.96	45%
G-52	$ 109.37	**$ 307.22**	35.6%		**$ 230.42**		**$ 213.00**	$ 103.63	52%
G-53	$ 298.53	**$ 762.87**	39.1%			**$ 762.87**	**$ 781.00**	$ 482.47	104%

* Proposed Customer Charge is average of 2 similar classes: (a) Res Non-ht & Ht.; (b) C&I Low; (c) C&I Med; (d) C&I High; (e) C&I Xtra High.

Witness: J. Ferro
DTE-05-27
Exhibit BSG/JAF-2
Schedule JAF-2-3

Bay State Gas Company
Development of Block Sizes

Rate Class	Summer Block Size Current	Summer Block Size @ 50% of non-0 Bills	Summer Block Size Proposed	Current Percent of non-0 Bills	Proposed Percent of non-0 Bills	Current Percent of Therms	Therms @ 50% of non-0 Bills	Proposed Percent of Therms
Residential Non-Heating	10	11	10	46.50%	46.50%	55.20%	56.02%	55.20%
Residential Heating	30	27	30	57.36%	57.36%	66.14%	62.16%	66.14%
G/T-40	35	14	flat	73.11%	100.00%	45.02%	25.78%	100.00%
G/T-50	80	64	flat	54.18%	100.00%	39.13%	33.08%	100.00%
G/T-41	300	147	flat	69.46%	100.00%	50.53%	31.54%	100.00%
G/T-51	500	672	flat	30.80%	100.00%	50.50%	61.82%	100.00%
G/T-42	2,200	1,252	flat	69.35%	100.00%	57.34%	39.81%	100.00%
G/T-52	8,000	5,338	flat	67.54%	100.00%	67.04%	53.62%	100.00%

Rate Class	Winter Block Size Current	Winter Block Size @ 50% of non-0 Bills	Winter Block Size Proposed	Current Percent of non-0 Bills	Proposed Percent of non-0 Bills	Current Percent of Therms	Therms @ 50% of non-0 Bills	Proposed Percent of Therms
Residential Non-Heating	12	16	12	40.59%	40.59%	45.10%	51.47%	45.10%
Residential Heating	90	134	125	26.82%	45.29%	53.03%	70.69%	67.61%
G/T-40	125	152	flat	43.34%	100.00%	41.52%	47.72%	100.00%
G/T-50	125	100	flat	55.18%	100.00%	44.89%	38.02%	100.00%
G/T-41	1,000	1,222	flat	38.83%	100.00%	50.21%	57.43%	100.00%
G/T-51	700	895	flat	35.63%	100.00%	51.56%	60.66%	100.00%
G/T-42	9,000	8,302	flat	55.05%	100.00%	68.74%	65.54%	100.00%
G/T-52	10,000	7,319	flat	66.78%	100.00%	70.51%	59.60%	100.00%

Bay State Gas Company
Preliminary Rate Design Summary

line	Description	Residential Heating Total	Residential Non-Heating Total	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter
1	**Preliminary Base Rates**						
2							
3	Monthly Customer Charge	$12.10	$11.60	$2.95	$19.00	$19.00	$65.00
4	Winter Volumetric Rates						
5	First Block Rate	$0.2812	$0.1868	$0.0000	$0.2535	$0.2888	$0.1817
6	Second Block Rate	$0.1850	$0.0717	$0.0000	NA	NA	NA
7	Summer Volumetric Rates						
8	First Block Rate	$0.4236	$0.1694	$0.0000	$0.6266	$0.2431	$0.1113
9	Second Block Rate	$0.2753	$0.0829	$0.0000	NA	NA	NA
10	Demand Rate						
11	Winter	NA	NA	NA	NA	NA	NA
12	Summer	NA	NA	NA	NA	NA	NA
13							
14	**Revenue Generated**						
15	Monthly Customer Charge	$32,264,577	$4,645,974	$424	$3,803,914	$758,252	$3,652,675
16	Winter Volumetric Rates						
17	First Block Rate	$38,388,022	$315,229	NA	$5,703,998	$898,182	$8,450,782
18	Second Block Rate	$12,100,726	$147,292	NA	NA	NA	NA
19	Summer Volumetric Rates						
20	First Block Rate	$12,841,896	$248,202	NA	$1,700,133	$518,718	$850,409
21	Second Block Rate	$4,274,192	$98,572	NA	NA	NA	NA
22	Demand Rate						
23	Winter	NA	NA	NA	NA	NA	NA
24	Summer	NA	NA	NA	NA	NA	NA
25	TOTAL PROPOSED BASE REVENUE	$99,869,413	$5,455,269	$424	$11,208,045	$2,175,153	$12,953,866
26	check	$0	$0	$0	$0	$0	$0
27	**Class Bill Impacts**						
28	Total Test Year Revenue	$328,575,683	$11,054,713	$2,834	$34,146,784	$6,675,136	$62,039,385
29	Total Proposed Revenue	$339,337,892	$11,717,996	$2,834	$36,139,652	$7,075,644	$64,307,787
30	check						
31	Percent Change	3.28%	6.00%	0.00%	5.84%	6.00%	3.66%

Bay State Gas Company
Preliminary Rate Design Summary

line	Description	C&I (51) Med. Annual Low Winter	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter
1	**Preliminary Base Rates**					
2						
3	Monthly Customer Charge	$65.00	$213.00	$213.00	$781.00	$781.00
4	Winter Volumetric Rates					
5	First Block Rate	$0.1743	$0.1708	$0.1617	$0.0485	$0.0450
6	Second Block Rate	NA	NA	NA	NA	NA
7	Summer Volumetric Rates					
8	First Block Rate	$0.0767	$0.0689	$0.0590	$0.0130	$0.0135
9	Second Block Rate	NA	NA	NA	NA	NA
10	Demand Rate					
11	Winter	NA	NA	NA	$2.3818	$2.1676
12	Summer	NA	NA	NA	$0.6650	$0.6790
13						
14	**Revenue Generated**					
15	Monthly Customer Charge	$1,369,745	$1,583,016	$636,657	$141,361	$624,019
16	Winter Volumetric Rates					
17	First Block Rate	$2,220,457	$6,287,119	$2,386,727	$349,646	$1,290,180
18	Second Block Rate	NA	NA	NA	NA	NA
19	Summer Volumetric Rates					
20	First Block Rate	$661,525	$504,890	$634,523	$29,430	$344,800
21	Second Block Rate	NA	NA	NA	NA	NA
22	Demand Rate					
23	Winter	NA	NA	NA	$815,841	$3,010,420
24	Summer	NA	NA	NA	$68,670	$804,533
25	TOTAL PROPOSED BASE REVENUE	$4,251,727	$8,375,026	$3,657,906	$1,404,949	$6,073,952
26	check	$0	$0	$0	$0	$0
27	**Class Bill Impacts**					
28	Total Test Year Revenue	$22,575,220	$46,525,761	$26,323,043	$9,545,610	$54,837,917
29	Total Proposed Revenue	$23,681,131	$48,762,296	$26,980,925	$10,118,346	$55,996,404
30	check					
31	Percent Change	4.90%	4.81%	2.50%	6.00%	2.11%

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
1	**Billing Determinants**						
2							
3	**Number of Bills**						
4	Total - Annual	2,666,494	2,450,273	216,221	400,515	380,501	20,014
5	Total - Winter	1,341,433	1,227,802	113,631	194,753	184,442	10,311
6	Total - Summer	1,325,061	1,222,471	102,590	205,762	196,059	9,703
7							
8	**First Block Therms**						
9	Total First Block - Winter	136,535,894	125,056,889	11,479,005	1,687,869	1,561,278	126,591
10	Total First Block- Summer	30,316,620	27,905,036	2,411,584	1,465,073	1,389,418	75,655
11							
12	**Second Block Therms**						
13	Total Second Block - Winter	65,407,230	59,908,237	5,498,993	2,054,372	1,900,294	154,078
14	Total Second Block- Summer	15,523,545	13,769,925	1,753,620	1,188,852	1,079,447	109,405
15							
16	**Proposed Rates (w/o Discount)**						
17							
18	Monthly Customer Charge		$12.10	$12.10		$11.60	$11.60
19	Winter Volumetric Rates						
20	First Block Rate		$0.3041	$0.3041		$0.1964	$0.1964
21	Second Block Rate		$0.2081	$0.2081		$0.1499	$0.1499
22	Summer Volumetric Rates						
23	First Block Rate		$0.3041	$0.3041		$0.1964	$0.1964
24	Second Block Rate		$0.2081	$0.2081		$0.1499	$0.1499
25							
26	**Resulting Base Revenue (w/o Discount)**						
27	Customer Charge	$32,264,577	$29,648,303	$2,616,274	$4,645,974	$4,413,812	$232,162
28	Winter Volumetric						
29	First Block	$41,514,453	$38,024,201	$3,490,252	$331,490	$306,628	$24,862
30	Second Block	$13,613,317	$12,468,802	$1,144,515	$307,974	$284,876	$23,098
31	Summer Volumetric						
32	First Block	$9,217,927	$8,484,672	$733,255	$287,734	$272,875	$14,858
33	Second Block	$3,230,942	$2,865,958	$364,984	$178,222	$161,821	$16,401
34	Total Base Revenue	$99,841,215	$91,491,937	$8,349,279	$5,751,394	$5,440,012	$311,382
35							

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
36							
37	**Other Revenue (new rates)**						
38	Direct Gas Costs (new)	$220,233,021	$201,441,105	$18,791,916	$5,555,541	$5,151,206	$404,335
39	Indirect Gas Costs (new)	$12,199,536	$11,168,284	$1,031,251	$230,176	$213,068	$17,108
40	LDAC (new)	$6,312,338	$5,779,170	$533,168	$126,304	$117,370	$8,934
41	**Total Other Revenue (new)**	$238,744,895	$218,388,559	$20,356,336	$5,912,021	$5,481,644	$430,377
42							
43	TOTAL REVENUE	$338,586,110	$309,880,496	$28,705,615	$11,663,415	$10,921,656	$741,759
44							
45	20% Burnertip Low-Income Discount (1)			$5,741,123			$148,352
46							
47	Total Revenue after Discount	$332,844,987			$11,515,063		
48	Volumetric Surcharge (1)		$0.0141			$0.0425	
49	**Proposed Rates (w/ LI Surcharge) (1)**						
50							
51	Monthly Customer Charge		$12.10			$11.60	
52	Winter Volumetric Rates						
53	First Block Rate		$0.3181			$0.2389	
54	Second Block Rate		$0.2222			$0.1924	
55	Summer Volumetric Rates						
56	First Block Rate		$0.3181			$0.2389	
57	Second Block Rate		$0.2222			$0.1924	
58							
59	**Resulting Base Revenue (w/ LI Surcharge) (1)**						
60	Customer Charge		$29,648,303	$2,616,274		$4,413,812	$232,162
61	Winter Volumetric						
62	First Block		$39,783,323	$3,651,722		$372,942	$30,239
63	Second Block		$13,311,506	$1,221,867		$365,589	$29,642
64	Summer Volumetric						
65	First Block		$8,877,200	$767,177		$331,890	$18,072
66	Second Block		$3,059,653	$389,651		$207,670	$21,048
67	Total Base Revenue		$94,679,985	$8,646,691		$5,691,903	$331,163
68	TOTAL REVENUE	$342,071,571	$313,068,544	$29,003,027	$11,935,087	$11,173,547	$761,540
69	20% Burnertip Low-Income Discount (2)			$5,800,605			$152,308
70							

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
71	Total Revenue after Discount	$336,270,966			$11,782,779		
72	Volumetric Surcharge (2)		$0.0142			$0.0429	
73							
74							
75	**Proposed Rates (w/ LI Surcharge) (2)**						
76							
77	Monthly Customer Charge		$12.10			$11.60	
78	Winter Volumetric Rates						
79	First Block Rate		$0.3183			$0.2393	
80	Second Block Rate		$0.2223			$0.1928	
81	Summer Volumetric Rates						
82	First Block Rate		$0.3183			$0.2393	
83	Second Block Rate		$0.2223			$0.1928	
84							
85	**Resulting Base Revenue (w/ LI Surcharge) (2)**						
86	Customer Charge		$29,648,303	$2,616,274		$4,413,812	$232,162
87	Winter Volumetric						
88	First Block		$39,802,271	$3,653,461		$373,657	$30,297
89	Second Block		$13,320,583	$1,222,700		$366,459	$29,713
90	Summer Volumetric						
91	First Block		$8,881,428	$767,543		$332,526	$18,106
92	Second Block		$3,061,740	$389,917		$208,164	$21,098
93	Total Base Revenue		$94,714,325	$8,649,895		$5,694,616	$331,376
94	TOTAL REVENUE	$342,109,115	$313,102,884	$29,006,231	$11,938,014	$11,176,260	$761,753
95	20% Burnertip Low-Income Discount (3)			$5,801,246			$152,351
96							
97	Total Revenue after Discount	$336,307,869			$11,785,663		
98	Volumetric Surcharge (3)		$0.0142			$0.0429	
99							

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
100	**Proposed Rates (w/ LI Surcharge) (3)**						
101							
102	Monthly Customer Charge		$12.10			$11.60	
103	Winter Volumetric Rates						
104	First Block Rate		$0.3183			$0.2393	
105	Second Block Rate		$0.2224			$0.1928	
106	Summer Volumetric Rates						
107	First Block Rate		$0.3183			$0.2393	
108	Second Block Rate		$0.2224			$0.1928	
109							
110	**Resulting Base Revenue (w/ LI Surcharge) (3)**						
111	Customer Charge		$29,648,303	$2,616,274		$4,413,812	$232,162
112	Winter Volumetric						
113	First Block		$39,802,475	$3,653,480		$373,664	$30,297
114	Second Block		$13,320,681	$1,222,709		$366,468	$29,714
115	Summer Volumetric						
116	First Block		$8,881,474	$767,547		$332,532	$18,107
117	Second Block		$3,061,762	$389,920		$208,169	$21,099
118	Total Base Revenue		$94,714,695	$8,649,929		$5,694,645	$331,379
119	TOTAL REVENUE		$313,103,254	$29,006,265		$11,176,290	$761,755
120	20% Burnertip Low-Income Discount (4)			$5,801,253			$152,351
121	Proposed Base Revenue		$94,714,695	$2,848,676		$5,694,645	$179,027
122	Proposed Total Revenue		$313,103,254	$23,205,012		$11,176,290	$609,404
123							
124	**Proposed Low-Income Rates**						
125							
126	Proposed Monthly Customer Charge			$6.25			$6.25
127	Customer Charge Revenue			$1,351,381			$125,088
128							
129	Remaining Revenue Requirement			$1,497,295			$53,940
130							
131	ACS Seasonal Split						
132	Winter Percentage			74.68%			57.15%
133	Summer Percentage			25.32%			42.85%

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
134							
135	Volumetric Revenue Requirement						
136	Winter			$1,118,212			$30,827
137	Summer			$379,083			$23,113
138							
139	Unit Marginal Cost ($ / winter therm)			$0.1156			$0.0652
140	Unit Marginal Cost ($ / summer therm)			$0.0640			$0.0307
141	Ratio of Second Block to MC						
142	Winter			NA			NA
143	Summer			NA			NA
144							
145	Second Block Rate						
146	Winter			$0.0708			$0.1158
147	Summer			$0.0708			$0.1158
148							
149	Revenue Generated (all volumes)						
150	Winter			$1,202,328			$32,507
151	Summer			$294,967			$21,433
152							
153	Remaining Revenue			$0			$0
154	Winter			-$84,116			-$1,679
155	Summer			$84,116			$1,679
156							
157	First Block Surcharge						
158	Winter			$0.0000			$0.0000
159	Summer			$0.0000			$0.0000
160							
161	**Proposed Base Rates**						
162							
163	Monthly Customer Charge			$6.25			$6.25
164	Winter Volumetric Rates						
165	All Volumes			$0.0708			$0.1158
166							
167	Summer Volumetric Rates						
168	All Volumes			$0.0708			$0.1158

Bay State Gas Company
Calculation of Residential Low-Income Discount

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income
169							
170							
171	**Resulting Base Revenue from LI Customers**						
172							
173	Monthly Customer Charge			$1,351,381			$125,088
174	Winter Volumetric Rates						
175	All Volumes			$1,202,328			$32,507
176							
177	Summer Volumetric Rates						
178	All Volumes			$294,967			$21,433
179							
180	TOTAL BASE REVENUE			$2,848,676			$179,027
181	Revenue Target			$2,848,676			$179,027

Bay State Gas Company
Resdential Non-Heating Bill Impact (R/T-1)

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$45	$45	$90	$70	$70	$139	55.50%	55.50%	55.50%	$4.14	0.00%
50	33	15	48	$88	$64	$152	$108	$87	$195	22.74%	35.71%	28.20%	$3.58	8.07%
85	**37**	**29**	**66**	**$95**	**$81**	**$175**	**$114**	**$102**	**$216**	**20.40%**	**26.22%**	**23.08%**	**$3.37**	**24.43%**
110	53	44	97	$114	$101	$216	$132	$120	$252	14.98%	18.83%	16.79%	$3.02	33.61%
140	68	57	125	$133	$119	$252	$148	$137	$284	11.40%	14.55%	12.89%	$2.71	44.00%
160	**83**	**67**	**150**	**$152**	**$130**	**$282**	**$165**	**$147**	**$312**	**8.60%**	**12.56%**	**10.43%**	**$2.45**	**50.33%**
200	100	79	179	$176	$146	$322	$186	$161	$347	5.99%	10.43%	8.00%	$2.15	62.02%
260	**132**	**97**	**229**	**$213**	**$165**	**$379**	**$220**	**$179**	**$399**	**3.07%**	**8.36%**	**5.38%**	**$1.70**	**76.07%**
300	163	117	279	$252	$190	$443	$255	$202	$457	0.96%	6.27%	3.25%	$1.20	82.80%
340	191	129	319	$289	$205	$493	$287	$216	$503	-0.49%	5.31%	1.92%	$0.79	87.83%
525	253	156	410	$367	$237	$604	$357	$246	$602	-2.63%	3.57%	-0.19%	-$0.10	97.36%
640	360	213	574	$502	$308	$810	$478	$311	$789	-4.78%	1.05%	-2.56%	-$1.73	98.75%
750	419	268	687	$574	$371	$945	$542	$370	$912	-5.50%	-0.40%	-3.49%	-$2.75	99.36%
925	520	302	822	$700	$412	$1,112	$655	$408	$1,063	-6.42%	-1.09%	-4.44%	-$4.12	99.76%
1,025	524	450	974	$707	$588	$1,295	$661	$571	$1,232	-6.45%	-2.98%	-4.88%	-$5.26	99.82%
1,075	466	577	1,043	$634	$743	$1,377	$596	$714	$1,310	-5.98%	-3.91%	-4.86%	-$5.58	99.86%
1,200	779	367	1,146	$1,027	$490	$1,517	$947	$480	$1,427	-7.74%	-2.10%	-5.92%	-$7.48	99.89%
1,250	238	993	1,231	$348	$1,240	$1,588	$340	$1,174	$1,515	-2.20%	-5.31%	-4.63%	-$6.13	99.91%
1,350	53	1,235	1,288	$113	$1,530	$1,644	$131	$1,443	$1,574	15.34%	-5.71%	-4.26%	-$5.83	99.92%
1,750	381	1,138	1,519	$525	$1,414	$1,939	$499	$1,335	$1,834	-5.02%	-5.57%	-5.42%	-$8.76	99.95%
2,100	1,174	697	1,871	$1,521	$886	$2,407	$1,389	$846	$2,235	-8.66%	-4.47%	-7.12%	-$14.28	99.97%
2,750	2,203	176	2,380	$2,813	$257	$3,069	$2,544	$265	$2,810	-9.53%	3.42%	-8.45%	-$21.61	99.98%
4,000	1,736	1,518	3,254	$2,226	$1,870	$4,096	$2,020	$1,757	$3,777	-9.26%	-6.02%	-7.78%	-$26.56	99.98%
6,000	3,301	1,185	4,486	$4,191	$1,470	$5,662	$3,777	$1,388	$5,165	-9.88%	-5.64%	-8.78%	-$41.41	100.00%

Bay State Gas Company
Resdential Non-Heating Low-Income Bill Impact (R/T-2)

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	0.00%
50	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	0.00%
85	46	20	66	$88	$59	$147	$85	$58	$143	-4.26%	-1.26%	-3.06%	-$0.37	16.61%
110	**70**	**28**	**97**	**$118**	**$68**	**$186**	**$112**	**$66**	**$178**	**-5.59%**	**-2.51%**	**-4.47%**	**-$0.69**	**24.80%**
140	82	44	126	$131	$85	$216	$123	$82	$205	-5.79%	-4.13%	-5.13%	-$0.92	33.74%
160	97	53	150	$148	$97	$244	$139	$92	$231	-5.94%	-4.47%	-5.36%	-$1.09	39.36%
200	**115**	**65**	**181**	**$169**	**$110**	**$279**	**$159**	**$105**	**$263**	**-6.04%**	**-5.10%**	**-5.67%**	**-$1.32**	**49.36%**
260	140	92	231	$196	$139	$335	$184	$131	$315	-6.14%	-5.16%	-5.73%	-$1.60	63.46%
300	158	121	279	$216	$171	$387	$203	$162	$365	-6.18%	-5.06%	-5.68%	-$1.83	70.58%
340	**181**	**141**	**322**	**$243**	**$194**	**$437**	**$228**	**$184**	**$412**	**-6.22%**	**-5.01%**	**-5.69%**	**-$2.07**	**76.14%**
525	233	183	415	$300	$238	$538	$281	$227	$508	-6.29%	-4.95%	-5.70%	-$2.55	92.16%
640	345	222	567	$424	$279	$704	$397	$266	$663	-6.37%	-4.91%	-5.79%	-$3.39	95.84%
750	411	274	685	$499	$337	$836	$467	$320	$788	-6.40%	-4.86%	-5.78%	-$4.03	97.96%
925	489	362	851	$586	$432	$1,019	$549	$411	$960	-6.43%	-4.82%	-5.75%	-$4.88	99.00%
1,025	711	259	970	$836	$321	$1,156	$782	$305	$1,087	-6.47%	-4.87%	-6.03%	-$5.81	99.41%
1,075	639	402	1,040	$752	$476	$1,227	$705	$453	$1,158	-6.18%	-4.80%	-5.65%	-$5.77	99.47%
1,200	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	99.47%
1,250	1,036	194	1,230	$1,197	$250	$1,447	$1,120	$238	$1,358	-6.41%	-4.93%	-6.16%	-$7.43	99.53%
1,350	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	99.53%
1,750	519	1,054	1,573	$618	$1,182	$1,800	$579	$1,126	$1,705	-6.28%	-4.72%	-5.25%	-$7.88	99.81%
2,100	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	99.81%
2,750	1,453	1,124	2,577	$1,664	$1,258	$2,922	$1,555	$1,199	$2,755	-6.51%	-4.69%	-5.72%	-$13.93	99.94%
4,000	0	0	0	$36	$36	$72	$38	$38	$75	4.69%	4.69%	4.69%	$0.28	99.94%
6,000	72	4,655	4,727	$118	$5,081	$5,198	$112	$4,844	$4,956	-4.95%	-4.66%	-4.67%	-$20.21	100.00%

Bay State Gas Company
Resdential Heating Bill Impact (R/T-3)

Annual Therms	Average Therms Winter	Summer	Annual	Current Bill Winter	Summer	Annual	Proposed Bill Winter	Summer	Annual	Percent Change Winter	Summer	Annual	$ Change Per Month	% of Bills
0	0	0	0	$45	$45	$90	$73	$73	$145	61.98%	61.98%	61.98%	$4.63	0.00%
50	0	0	0	$45	$45	$90	$73	$73	$145	61.98%	61.98%	61.98%	$4.63	0.00%
85	61	7	68	$130	$54	$184	$153	$83	$235	17.10%	52.66%	27.54%	$4.23	0.69%
110	85	11	96	$162	$58	$220	$182	$86	$269	12.49%	49.94%	22.32%	$4.08	1.12%
140	106	19	125	$192	$68	$260	$210	$98	$308	9.50%	43.45%	18.38%	$3.99	1.57%
160	125	25	150	$217	$74	$291	$234	$104	$338	7.68%	40.64%	16.05%	$3.89	1.86%
200	148	32	180	$250	$82	$332	$265	$113	$377	5.81%	37.38%	13.61%	$3.77	2.49%
260	186	46	232	$302	$97	$400	$314	$129	$442	3.69%	32.76%	10.76%	$3.58	3.67%
300	222	59	281	$351	$112	$463	$359	$145	$504	2.30%	29.39%	8.86%	$3.42	4.66%
340	250	71	321	$388	$127	$515	$394	$161	$555	1.46%	26.82%	7.72%	$3.32	5.80%
525	350	90	440	$526	$151	$676	$522	$186	$709	-0.62%	23.87%	4.83%	$2.72	12.93%
640	472	113	585	$691	$176	$867	$681	$214	$895	-1.41%	21.51%	3.25%	$2.34	19.33%
750	**564**	**132**	**697**	**$806**	**$199**	**$1,005**	**$799**	**$238**	**$1,037**	**-0.86%**	**19.86%**	**3.24%**	**$2.71**	**27.38%**
925	684	155	839	$953	$225	$1,178	$950	$266	$1,216	-0.36%	18.36%	3.21%	$3.15	42.25%
1,025	**797**	**178**	**975**	**$1,091**	**$250**	**$1,341**	**$1,088**	**$293**	**$1,380**	**-0.34%**	**17.19%**	**2.92%**	**$3.26**	**50.95%**
1,075	859	191	1,050	$1,167	$265	$1,433	$1,164	$309	$1,474	-0.27%	16.57%	2.85%	$3.40	55.14%
1,200	932	204	1,136	$1,253	$280	$1,533	$1,252	$325	$1,577	-0.14%	16.04%	2.81%	$3.59	64.64%
1,250	1,008	216	1,225	$1,343	$293	$1,637	$1,344	$339	$1,683	0.03%	15.60%	2.82%	$3.85	68.10%
1,350	**1,070**	**229**	**1,299**	**$1,418**	**$307**	**$1,725**	**$1,420**	**$354**	**$1,774**	**0.17%**	**15.21%**	**2.84%**	**$4.08**	**74.23%**
1,750	1,255	266	1,521	$1,637	$348	$1,985	$1,643	$397	$2,040	0.33%	14.12%	2.75%	$4.54	89.60%
2,100	1,571	330	1,901	$2,010	$418	$2,428	$2,017	$471	$2,488	0.39%	12.70%	2.51%	$5.07	95.29%
2,750	1,918	427	2,346	$2,423	$524	$2,947	$2,434	$583	$3,017	0.43%	11.27%	2.36%	$5.79	98.66%
4,000	2,486	676	3,162	$3,095	$796	$3,892	$3,110	$871	$3,981	0.48%	9.33%	2.29%	$7.42	99.77%
6,000	3,385	1,279	4,663	$4,160	$1,455	$5,614	$4,181	$1,566	$5,747	0.52%	7.65%	2.37%	$11.07	99.96%
6,600	4,440	1,754	6,194	$5,410	$1,977	$7,387	$5,440	$2,117	$7,557	0.55%	7.11%	2.30%	$14.18	99.97%
8,500	5,098	2,285	7,384	$6,191	$2,556	$8,747	$6,226	$2,729	$8,955	0.56%	6.77%	2.37%	$17.31	99.99%
9,500	6,799	2,384	9,184	$8,207	$2,666	$10,873	$8,255	$2,845	$11,100	0.58%	6.72%	2.09%	$18.90	99.99%
12,000	7,704	3,220	10,923	$9,280	$3,579	$12,859	$9,334	$3,809	$13,144	0.59%	6.44%	2.22%	$23.74	100.00%
15,000	11,509	2,216	13,725	$13,790	$2,482	$16,271	$13,873	$2,651	$16,524	0.60%	6.81%	1.55%	$21.03	100.00%
30,000	15,639	2,607	18,246	$18,685	$2,911	$21,595	$18,800	$3,104	$21,903	0.61%	6.63%	1.43%	$25.65	100.00%
47,000														
50,000														
60,000														
70,000														
90,000	60,266	18,356	78,623	$71,581	$20,135	$91,716	$72,035	$21,294	$93,329	0.63%	5.76%	1.76%	$134.50	100.00%

Bay State Gas Company
Resdential Heating Low-Income Bill Impact (R/T-4)

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$36	$36	$72	$38	$38	$75.00	4.69%	4.69%	4.69%	$0.28	0.41%
50	18	0	18	$57	$36	$93	$56	$38	$93.74	-2.12%	4.69%	0.49%	$0.04	0.49%
85	55	12	67	$101	$46	$147	$94	$48	$141.27	-6.96%	2.53%	-3.97%	-$0.49	0.92%
110	90	9	99	$144	$45	$189	$131	$47	$177.75	-8.90%	2.70%	-6.12%	-$0.97	1.27%
140	111	15	126	$168	$52	$220	$152	$53	$204.60	-9.54%	1.79%	-6.88%	-$1.26	1.65%
160	127	23	150	$191	$59	$250	$172	$60	$231.41	-10.00%	0.96%	-7.41%	-$1.54	1.96%
200	157	24	181	$223	$61	$285	$200	$62	$261.53	-10.49%	0.76%	-8.07%	-$1.91	2.72%
260	201	32	233	$277	$68	$346	$247	$69	$315.42	-11.06%	0.16%	-8.84%	-$2.55	4.18%
300	238	42	279	$321	$80	$401	$284	$80	$363.94	-11.37%	-0.55%	-9.21%	-$3.08	5.31%
340	269	51	321	$359	$91	$450	$318	$90	$407.30	-11.59%	-1.05%	-9.47%	-$3.55	6.85%
525	360	79	439	$468	$119	$587	$413	$117	$530.20	-11.64%	-1.94%	-9.67%	-$4.73	16.89%
640	**472**	**112**	**585**	**$595**	**$154**	**$749**	**$528**	**$150**	**$677.86**	**-11.25%**	**-2.55%**	**-9.46%**	**-$5.91**	**25.47%**
750	554	143	696	$687	$185	$872	$613	$180	$793.36	-10.76%	-2.65%	-9.04%	-$6.57	34.64%
925	**660**	**178**	**837**	**$807**	**$222**	**$1,029**	**$726**	**$216**	**$941.95**	**-10.06%**	**-2.57%**	**-8.45%**	**-$7.24**	**50.37%**
1,025	764	210	975	$919	$254	$1,173	$834	$248	$1,082.36	-9.22%	-2.40%	-7.74%	-$7.57	59.01%
1,075	826	224	1,050	$984	$268	$1,252	$898	$261	$1,158.92	-8.78%	-2.39%	-7.41%	-$7.73	62.90%
1,200	889	247	1,136	$1,051	$293	$1,344	$963	$286	$1,249.62	-8.35%	-2.30%	-7.03%	-$7.88	71.97%
1,250	**972**	**254**	**1,226**	**$1,138**	**$299**	**$1,437**	**$1,050**	**$292**	**$1,342.07**	**-7.77%**	**-2.24%**	**-6.62%**	**-$7.93**	**74.82%**
1,350	1,020	278	1,299	$1,189	$323	$1,513	$1,101	$316	$1,417.18	-7.46%	-2.13%	-6.32%	-$7.97	80.21%
1,750	1,199	318	1,517	$1,375	$364	$1,739	$1,285	$357	$1,641.63	-6.55%	-1.90%	-5.58%	-$8.08	92.82%
2,100	1,484	413	1,897	$1,674	$459	$2,132	$1,582	$452	$2,033.75	-5.50%	-1.43%	-4.63%	-$8.22	97.07%
2,750	1,843	496	2,339	$2,051	$542	$2,593	$1,957	$535	$2,491.92	-4.62%	-1.15%	-3.89%	-$8.41	99.47%
4,000	2,409	666	3,075	$2,644	$712	$3,356	$2,545	$707	$3,251.87	-3.74%	-0.79%	-3.11%	-$8.70	99.94%
6,000	2,970	1,657	4,627	$3,234	$1,703	$4,937	$3,131	$1,701	$4,832.67	-3.18%	-0.11%	-2.12%	-$8.73	100.00%

Bay State Gas Company
G/T-50: Commercial & Industrial Low Annual / Low Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	0.00%
50	23	0	23	$105	$76	$180	$142	$114	$256	35.73%	50.67%	42.00%	$6.31	0.10%
85	36	30	67	$122	$112	$235	$159	$150	$309	30.10%	33.55%	31.75%	$6.21	5.98%
110	52	45	97	$140	$131	$271	$176	$168	$344	25.89%	28.60%	27.20%	$6.14	9.77%
140	72	52	125	$168	$141	$308	$203	$178	$381	21.07%	26.49%	23.54%	$6.05	12.93%
160	84	66	150	$183	$155	$338	$218	$192	$410	19.05%	23.82%	21.24%	$5.99	14.64%
200	106	72	178	$210	$166	$377	$244	$203	$448	16.11%	22.13%	18.77%	$5.89	17.87%
260	133	98	230	$243	$197	$440	$276	$233	$509	13.49%	18.43%	15.71%	$5.76	22.39%
300	**164**	**116**	**280**	**$282**	**$218**	**$500**	**$314**	**$254**	**$568**	**11.17%**	**16.51%**	**13.50%**	**$5.63**	**24.89%**
340	183	136	319	$305	$241	$546	$336	$277	$613	10.10%	14.76%	12.15%	$5.53	26.84%
525	272	157	428	$418	$270	$688	$445	$305	$750	6.47%	13.04%	9.04%	$5.18	33.80%
640	355	226	581	$523	$353	$876	$546	$387	$933	4.51%	9.57%	6.55%	$4.78	37.34%
750	394	293	687	$571	$434	$1,005	$593	$466	$1,059	3.86%	7.47%	5.42%	$4.54	40.03%
925	501	335	835	$707	$488	$1,195	$724	$519	$1,244	2.48%	6.46%	4.11%	$4.09	44.86%
1,025	592	380	972	$820	$543	$1,363	$835	$574	$1,409	1.85%	5.64%	3.36%	$3.82	46.70%
1,075	605	443	1,048	$834	$616	$1,450	$850	$649	$1,498	1.81%	5.32%	3.30%	$3.99	47.71%
1,200	**681**	**456**	**1,137**	**$929**	**$630**	**$1,559**	**$942**	**$664**	**$1,606**	**1.46%**	**5.39%**	**3.05%**	**$3.96**	**50.24%**
1,250	755	474	1,229	$1,020	$652	$1,672	$1,033	$686	$1,719	1.28%	5.20%	2.81%	$3.91	51.03%
1,350	779	523	1,301	$1,048	$709	$1,757	$1,063	$744	$1,807	1.36%	4.95%	2.81%	$4.11	52.80%
1,750	895	652	1,547	$1,182	$852	$2,035	$1,204	$901	$2,105	1.83%	5.69%	3.44%	$5.84	61.15%
2,100	1,116	794	1,910	$1,431	$1,007	$2,439	$1,472	$1,072	$2,544	2.83%	6.44%	4.32%	$8.78	66.59%
2,750	**1,415**	**1,003**	**2,418**	**$1,770**	**$1,235**	**$3,006**	**$1,838**	**$1,324**	**$3,163**	**3.84%**	**7.20%**	**5.22%**	**$13.08**	**75.95%**
4,000	1,946	1,445	3,391	$2,365	$1,718	$4,083	$2,481	$1,858	$4,339	4.91%	8.15%	6.27%	$21.35	89.79%
6,000	2,562	1,986	4,548	$3,061	$2,306	$5,367	$3,234	$2,508	$5,742	5.64%	8.76%	6.98%	$31.23	99.33%
6,600	2,418	3,848	6,267	$2,900	$4,342	$7,242	$3,060	$4,759	$7,818	5.50%	9.61%	7.97%	$48.07	99.46%
8,500	4,731	2,568	7,299	$5,506	$2,943	$8,449	$5,876	$3,213	$9,089	6.74%	9.15%	7.58%	$53.36	99.75%
9,500	7,347	1,857	9,204	$8,446	$2,164	$10,610	$9,062	$2,354	$11,416	7.29%	8.76%	7.59%	$67.13	99.81%
12,000	6,453	3,862	10,315	$7,445	$4,356	$11,801	$7,973	$4,774	$12,748	7.09%	9.61%	8.02%	$78.91	99.91%
15,000	4,677	8,105	12,782	$5,367	$8,954	$14,321	$5,809	$9,895	$15,704	8.24%	10.51%	9.66%	$115.27	99.94%
30,000	13,865	3,611	17,475	$15,793	$4,082	$19,875	$16,998	$4,472	$21,470	7.63%	9.55%	8.02%	$132.91	100.00%

Bay State Gas Company
G/T-40: Commercial & Industrial Low Annual / High Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	0.00%
50	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	0.00%
85	64	4	68	$162	$78	$240	$196	$116	$312	21.17%	48.84%	30.20%	$6.04	1.09%
110	91	6	98	$199	$85	$284	$232	$123	$354	16.27%	44.76%	24.78%	$5.86	2.14%
140	117	7	125	$234	$86	$320	$265	$124	$389	13.13%	44.01%	21.43%	$5.72	3.39%
160	143	8	151	$268	$86	$354	$297	$124	$421	10.88%	44.01%	18.94%	$5.58	4.26%
200	169	12	181	$301	$90	$391	$329	$128	$456	9.13%	41.91%	16.67%	$5.43	6.40%
260	214	16	229	$362	$95	$457	$386	$133	$519	6.80%	39.38%	13.59%	$5.17	9.49%
300	262	18	280	$427	$99	$526	$449	$136	$585	5.01%	37.65%	11.16%	$4.90	11.64%
340	293	26	319	$469	$111	$580	$488	$148	$636	4.14%	33.21%	9.70%	$4.69	14.09%
525	**402**	**31**	**433**	**$615**	**$116**	**$731**	**$628**	**$153**	**$780**	**2.01%**	**31.53%**	**6.70%**	**$4.08**	**25.23%**
640	539	43	582	$796	$132	$927	$803	$168	$970	0.88%	27.27%	4.63%	$3.58	31.40%
750	645	50	695	$930	$141	$1,071	$937	$176	$1,113	0.75%	25.22%	3.97%	$3.54	36.67%
925	775	62	837	$1,096	$156	$1,252	$1,104	$191	$1,296	0.77%	22.26%	3.46%	$3.61	44.89%
1,025	900	73	973	$1,249	$172	$1,421	$1,264	$206	$1,470	1.19%	19.85%	3.45%	$4.08	48.69%
1,075	**972**	**78**	**1,050**	**$1,338**	**$177**	**$1,516**	**$1,357**	**$211**	**$1,568**	**1.41%**	**19.14%**	**3.48%**	**$4.40**	**50.59%**
1,200	1,049	87	1,136	$1,432	$188	$1,619	$1,454	$221	$1,676	1.59%	17.83%	3.47%	$4.69	54.87%
1,250	1,139	86	1,225	$1,542	$189	$1,731	$1,568	$222	$1,791	1.68%	17.68%	3.43%	$4.95	56.51%
1,350	1,203	99	1,302	$1,620	$205	$1,825	$1,650	$237	$1,887	1.82%	16.00%	3.41%	$5.19	59.56%
1,750	1,415	123	1,539	$1,882	$235	$2,117	$1,922	$267	$2,189	2.13%	13.58%	3.40%	$6.00	69.08%
2,100	**1,756**	**168**	**1,924**	**$2,294**	**$289**	**$2,583**	**$2,358**	**$322**	**$2,680**	**2.78%**	**11.38%**	**3.74%**	**$8.05**	**75.59%**
2,750	2,180	216	2,396	$2,804	$347	$3,151	$2,898	$382	$3,280	3.38%	9.97%	4.11%	$10.78	83.98%
4,000	2,972	345	3,317	$3,759	$507	$4,265	$3,912	$547	$4,458	4.07%	7.85%	4.52%	$16.06	94.83%
6,000	3,976	537	4,513	$4,967	$729	$5,695	$5,193	$783	$5,977	4.56%	7.53%	4.94%	$23.44	99.63%
6,600	5,581	661	6,242	$6,902	$870	$7,772	$7,246	$939	$8,186	4.99%	7.98%	5.32%	$34.48	99.70%
8,500	5,857	1,438	7,295	$7,232	$1,775	$9,007	$7,597	$1,908	$9,504	5.04%	7.50%	5.52%	$41.46	99.85%
9,500	4,365	4,452	8,817	$5,438	$5,271	$10,708	$5,693	$5,665	$11,358	4.69%	7.49%	6.07%	$54.14	99.86%
12,000	8,704	1,643	10,347	$10,662	$2,011	$12,674	$11,236	$2,162	$13,398	5.38%	7.50%	5.71%	$60.34	99.92%
15,000	9,834	3,096	12,929	$12,022	$3,698	$15,720	$12,678	$3,975	$16,653	5.46%	7.49%	5.94%	$77.75	99.94%
30,000	17,665	5,085	22,750	$21,455	$6,004	$27,459	$22,686	$6,453	$29,139	5.74%	7.49%	6.12%	$140.00	99.99%
47,000	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	99.99%
50,000	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	99.99%
60,000	0	0	0	$76	$76	$151	$114	$114	$228	50.67%	50.67%	50.67%	$6.39	99.99%
70,000	50,688	10,915	61,603	$61,195	$12,767	$73,962	$64,883	$13,722	$78,604	6.03%	7.48%	6.28%	$386.87	100.00%

Bay State Gas Company
G/T-51: Commercial & Industrial Medium Annual / Low Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
0	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.00%
50	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.00%
85	55	8	63	$326	$279	$605	$450	$399	$849	38.15%	42.88%	40.33%	$20.34	0.19%
110	97	0	97	$370	$270	$640	$498	$390	$888	34.56%	44.32%	38.68%	$20.64	0.30%
140	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.30%
160	134	16	149	$408	$286	$695	$539	$406	$945	32.09%	41.83%	36.11%	$20.90	0.41%
200	177	0	177	$452	$270	$723	$587	$390	$977	29.75%	44.32%	35.20%	$21.20	0.48%
260	173	57	230	$448	$329	$777	$583	$448	$1,031	29.95%	36.47%	32.70%	$21.18	0.73%
300	267	0	267	$545	$270	$815	$687	$390	$1,077	26.08%	44.32%	32.12%	$21.83	0.78%
340	315	18	332	$595	$288	$883	$741	$408	$1,149	24.59%	41.54%	30.12%	$22.16	0.89%
525	433	14	447	$717	$284	$1,001	$873	$404	$1,277	21.78%	42.13%	27.56%	$23.00	1.03%
640	596	0	596	$884	$270	$1,154	$1,054	$390	$1,444	19.21%	44.32%	25.09%	$24.13	1.07%
750	479	205	684	$763	$477	$1,240	$923	$597	$1,520	20.95%	25.18%	22.58%	$23.33	1.19%
925	541	287	828	$827	$558	$1,385	$992	$678	$1,671	19.96%	21.52%	20.59%	$23.77	1.32%
1,025	964	0	964	$1,263	$270	$1,533	$1,463	$390	$1,853	15.89%	44.32%	20.90%	$26.70	1.43%
1,075	1,033	0	1,033	$1,326	$270	$1,596	$1,540	$390	$1,930	16.14%	44.32%	20.91%	$27.82	1.48%
1,200	1,112	61	1,173	$1,414	$332	$1,746	$1,627	$451	$2,078	15.06%	36.14%	19.06%	$27.73	1.58%
1,250	1,226	0	1,226	$1,533	$270	$1,804	$1,756	$390	$2,146	14.52%	44.32%	18.99%	$28.54	1.62%
1,350	1,204	91	1,295	$1,506	$363	$1,869	$1,729	$483	$2,212	14.83%	33.04%	18.37%	$28.61	1.78%
1,750	1,390	80	1,470	$1,700	$351	$2,051	$1,937	$471	$2,407	13.90%	34.17%	17.36%	$29.68	2.07%
2,100	1,816	115	1,931	$2,141	$386	$2,527	$2,413	$506	$2,919	12.71%	31.06%	15.52%	$32.68	2.37%
2,750	1,980	488	2,467	$2,309	$760	$3,069	$2,595	$881	$3,475	12.38%	15.83%	13.24%	$33.85	3.00%
4,000	2,729	691	3,421	$3,081	$966	$4,047	$3,430	$1,086	$4,516	11.32%	12.49%	11.60%	$39.12	4.00%
6,000	3,143	2,195	5,338	$3,506	$2,479	$5,985	$3,890	$2,602	$6,491	10.94%	4.94%	8.45%	$42.15	19.41%
6,600	**3,674**	**2,608**	**6,282**	**$4,051**	**$2,893**	**$6,944**	**$4,482**	**$3,017**	**$7,499**	**10.64%**	**4.27%**	**7.99%**	**$46.22**	**25.32%**
8,500	4,278	3,197	7,475	$4,663	$3,482	$8,145	$5,152	$3,611	$8,763	10.50%	3.70%	7.59%	$51.51	43.75%
9,500	**5,295**	**3,724**	**9,019**	**$5,678**	**$4,001**	**$9,679**	**$6,286**	**$4,142**	**$10,428**	**10.70%**	**3.53%**	**7.73%**	**$62.39**	**50.14%**
12,000	6,238	4,453	10,691	$6,613	$4,717	$11,331	$7,337	$4,877	$12,213	10.94%	3.38%	7.79%	$73.55	63.00%
15,000	**7,940**	**5,352**	**13,292**	**$8,298**	**$5,601**	**$13,899**	**$9,231**	**$5,782**	**$15,013**	**11.24%**	**3.24%**	**8.02%**	**$92.86**	**75.62%**
30,000	12,562	8,598	21,160	$12,874	$8,792	$21,666	$14,376	$9,054	$23,430	11.67%	2.98%	8.14%	$146.99	95.27%
47,000	20,597	13,893	34,491	$20,831	$13,996	$34,828	$23,324	$14,389	$37,712	11.96%	2.80%	8.28%	$240.39	99.94%
50,000														
60,000	40,540	10,154	50,694	$40,579	$10,321	$50,900	$45,528	$10,622	$56,150	12.20%	2.91%	10.31%	$437.43	100.00%

Bay State Gas Company
G/T-41: Commercial & Industrial Medium Annual / High Winter

Annual Therms	Average Therms Winter	Average Therms Summer	Average Therms Annual	Current Bill Winter	Current Bill Summer	Current Bill Annual	Proposed Bill Winter	Proposed Bill Summer	Proposed Bill Annual	Percent Change Winter	Percent Change Summer	Percent Change Annual	$ Change Per Month	% of Bills
0	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.00%
50	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.00%
85	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	0.00%
110	46	48	94	$322	$324	$646	$443	$442	$885	37.73%	36.36%	37.04%	$19.94	0.04%
140	92	23	116	$374	$297	$670	$497	$415	$912	32.97%	40.06%	36.11%	$20.17	0.09%
160	146	0	146	$434	$270	$705	$559	$390	$949	28.83%	44.32%	34.77%	$20.41	0.11%
200	153	22	175	$442	$294	$737	$568	$413	$981	28.37%	40.38%	33.17%	$20.36	0.14%
260	219	7	226	$516	$279	$795	$644	$398	$1,043	24.77%	42.81%	31.10%	$20.61	0.19%
300	181	96	276	$474	$376	$849	$600	$492	$1,092	26.71%	30.87%	28.55%	$20.20	0.23%
340	323	0	323	$634	$270	$905	$766	$390	$1,156	20.78%	44.32%	27.81%	$20.96	0.29%
525	421	0	421	$742	$270	$1,012	$877	$390	$1,267	18.24%	44.32%	25.20%	$21.26	0.34%
640	342	235	576	$653	$527	$1,181	$786	$638	$1,424	20.27%	20.96%	20.58%	$20.25	0.40%
750	557	94	651	$896	$374	$1,270	$1,037	$490	$1,526	15.68%	31.07%	20.20%	$21.38	0.44%
925	795	86	881	$1,162	$365	$1,527	$1,312	$481	$1,793	12.84%	31.90%	17.39%	$22.14	0.64%
1,025	980	12	993	$1,372	$283	$1,656	$1,529	$403	$1,931	11.38%	42.09%	16.64%	$22.96	0.80%
1,075	980	62	1,042	$1,371	$338	$1,710	$1,527	$456	$1,983	11.39%	34.67%	16.00%	$22.79	0.87%
1,200	1,041	95	1,136	$1,441	$376	$1,817	$1,599	$492	$2,091	11.00%	30.87%	15.11%	$22.87	1.05%
1,250	0	0	0	$270	$270	$540	$390	$390	$780	44.32%	44.32%	44.32%	$19.96	1.05%
1,350	1,288	27	1,316	$1,717	$300	$2,017	$1,885	$419	$2,304	9.76%	39.58%	14.19%	$23.86	1.21%
1,750	1,460	83	1,542	$1,911	$360	$2,271	$2,085	$477	$2,561	9.11%	32.34%	12.79%	$24.21	1.63%
2,100	1,753	187	1,940	$2,241	$476	$2,717	$2,426	$588	$3,014	8.25%	23.62%	10.94%	$24.78	1.99%
2,750	2,310	161	2,471	$2,864	$448	$3,313	$3,070	$562	$3,632	7.18%	25.29%	9.63%	$26.58	2.60%
4,000	3,239	183	3,422	$3,908	$472	$4,381	$4,148	$585	$4,733	6.14%	23.81%	8.05%	$29.38	4.25%
6,000	**4,705**	**551**	**5,256**	**$5,549**	**$877**	**$6,425**	**$5,851**	**$975**	**$6,826**	**5.45%**	**11.17%**	**6.23%**	**$33.37**	**24.09%**
6,600	5,600	680	6,280	$6,537	$1,018	$7,555	$6,889	$1,111	$8,000	5.38%	9.12%	5.88%	$37.05	31.63%
8,500	**6,657**	**835**	**7,493**	**$7,695**	**$1,189**	**$8,884**	**$8,118**	**$1,275**	**$9,393**	**5.49%**	**7.30%**	**5.73%**	**$42.44**	**49.52%**
9,500	8,017	995	9,011	$9,178	$1,361	$10,539	$9,695	$1,443	$11,138	5.64%	6.01%	5.68%	$49.92	55.53%
12,000	9,489	1,183	10,672	$10,785	$1,568	$12,353	$11,405	$1,644	$13,049	5.74%	4.86%	5.63%	$57.98	67.30%
15,000	**11,759**	**1,593**	**13,352**	**$13,246**	**$2,011**	**$15,258**	**$14,037**	**$2,077**	**$16,115**	**5.97%**	**3.28%**	**5.62%**	**$71.41**	**76.42%**
30,000	18,299	2,407	20,707	$20,330	$2,893	$23,223	$21,631	$2,941	$24,571	6.40%	1.64%	5.80%	$112.31	94.88%
47,000	30,134	5,081	35,214	$33,143	$5,768	$38,912	$35,365	$5,772	$41,137	6.70%	0.06%	5.72%	$185.44	99.86%
50,000	32,666	14,501	47,167	$35,886	$15,875	$51,761	$38,305	$15,749	$54,055	6.74%	-0.79%	4.43%	$191.12	99.89%
60,000	49,398	6,778	56,177	$53,965	$7,589	$61,553	$57,727	$7,569	$65,296	6.97%	-0.26%	6.08%	$311.90	99.94%
70,000	10,253	55,166	65,419	$11,610	$59,474	$71,084	$12,291	$58,821	$71,111	5.87%	-1.10%	0.04%	$2.32	99.96%
90,000	56,697	14,419	71,116	$61,828	$15,751	$77,578	$66,199	$15,663	$81,861	7.07%	-0.56%	5.52%	$356.95	99.98%
100,000														
120,000														
200,000	116,736	24,784	141,520	$126,893	$26,878	$153,771	$135,884	$26,641	$162,526	7.09%	-0.88%	5.69%	$729.57	100.00%

Bay State Gas Company
G/T-52: Commercial & Industrial High Annual / Low Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
750														0.00%
925														0.00%
1,025	957	0	957	$1,655	$656	$2,311	$2,292	$1,278	$3,570	38.49%	94.75%	54.47%	$104.89	0.40%
1,075														0.40%
1,200														0.40%
1,250														0.40%
1,350														0.40%
1,750	762	772	1,533	$1,451	$1,419	$2,870	$2,085	$2,046	$4,131	43.68%	44.13%	43.90%	$105.01	0.80%
2,100	287	1,725	2,012	$956	$2,363	$3,319	$1,582	$2,995	$4,577	65.54%	26.74%	37.91%	$104.85	0.90%
2,750														0.90%
4,000														0.90%
6,000														0.90%
6,600	6,412	1	6,413	$7,345	$657	$8,003	$8,069	$1,279	$9,348	9.85%	94.61%	16.81%	$112.09	1.31%
8,500														1.31%
9,500														1.31%
12,000	10,623	0	10,623	$11,739	$656	$12,395	$12,529	$1,278	$13,807	6.73%	94.75%	11.39%	$117.65	2.21%
15,000	14,630	148	14,778	$15,920	$804	$16,724	$16,773	$1,426	$18,200	5.36%	77.48%	8.83%	$123.01	2.61%
30,000	15,321	5,263	20,585	$16,642	$5,866	$22,508	$17,506	$6,519	$24,025	5.19%	11.13%	6.74%	$126.43	4.92%
47,000	25,096	16,298	41,394	$26,837	$16,785	$43,622	$27,857	$17,502	$45,359	3.80%	4.27%	3.98%	$144.72	18.84%
50,000	**29,895**	**18,422**	**48,316**	**$31,844**	**$18,887**	**$50,731**	**$32,939**	**$19,617**	**$52,556**	**3.44%**	**3.86%**	**3.60%**	**$152.10**	**24.32%**
60,000	33,076	21,919	54,995	$35,164	$22,349	$57,512	$36,309	$23,099	$59,409	3.26%	3.36%	3.30%	$158.01	40.21%
70,000	**40,715**	**25,251**	**65,966**	**$43,132**	**$25,646**	**$68,778**	**$44,398**	**$26,417**	**$70,815**	**2.94%**	**3.00%**	**2.96%**	**$169.72**	**50.08%**
90,000	47,348	32,098	79,446	$50,052	$32,424	$82,475	$51,423	$33,234	$84,657	2.74%	2.50%	2.65%	$181.82	63.53%
100,000	55,696	39,347	95,044	$58,649	$39,591	$98,240	$60,266	$40,451	$100,716	2.76%	2.17%	2.52%	$206.34	68.12%
120,000	**63,443**	**45,609**	**109,052**	**$66,673**	**$45,775**	**$112,449**	**$68,469**	**$46,684**	**$115,153**	**2.69%**	**1.98%**	**2.41%**	**$225.38**	**75.98%**
200,000	86,886	62,032	148,918	$90,361	$61,848	$152,209	$93,299	$63,035	$156,334	3.25%	1.92%	2.71%	$343.80	89.76%
250,000	125,202	93,430	218,632	$128,989	$92,471	$221,460	$133,876	$94,291	$228,167	3.79%	1.97%	3.03%	$558.88	95.08%
300,000	158,629	114,975	273,604	$162,693	$113,485	$276,178	$169,279	$115,740	$285,019	4.05%	1.99%	3.20%	$736.72	97.89%
340,000	175,249	132,707	307,956	$179,451	$130,782	$310,233	$186,882	$133,394	$320,276	4.14%	2.00%	3.24%	$836.94	99.10%
450,000	179,279	186,478	365,758	$183,514	$183,227	$366,742	$191,150	$186,924	$378,074	4.16%	2.02%	3.09%	$944.40	99.60%
525,000														99.60%
750,000	158,094	387,933	546,027	$161,215	$379,723	$540,939	$168,712	$387,484	$556,196	4.65%	2.04%	2.82%	$1,271.48	100.00%

Bay State Gas Company
G/T-42: Commercial & Industrial High Annual / High Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
525														0.00%
640	604	0	604	$1,286	$656	$1,942	$1,923	$1,278	$3,201	49.51%	94.75%	64.80%	$104.89	0.16%
750														0.16%
925														0.16%
1,025														0.16%
1,075														0.16%
1,200														0.16%
1,250														0.16%
1,350														0.16%
1,750														0.16%
2,100	1,197	567	1,764	$1,905	$1,255	$3,160	$2,557	$1,888	$4,445	34.21%	50.47%	40.67%	$107.09	0.32%
2,750														0.32%
4,000	3,140	77	3,216	$3,932	$738	$4,669	$4,632	$1,361	$5,993	17.81%	84.52%	28.35%	$110.30	0.61%
6,000														0.61%
6,600														0.61%
8,500	7,552	101	7,654	$8,536	$764	$9,300	$9,346	$1,388	$10,734	9.50%	81.67%	15.43%	$119.54	1.09%
9,500	4,335	4,443	8,778	$5,178	$5,348	$10,526	$5,908	$6,061	$11,969	14.10%	13.33%	13.71%	$120.25	1.41%
12,000	10,804	0	10,804	$11,928	$656	$12,584	$12,820	$1,278	$14,098	7.48%	94.75%	12.03%	$126.14	1.86%
15,000	11,097	1,948	13,046	$12,232	$2,714	$14,946	$13,131	$3,376	$16,507	7.35%	24.38%	10.44%	$130.08	2.58%
30,000	18,389	2,049	20,438	$19,838	$2,819	$22,657	$20,919	$3,483	$24,402	5.45%	23.55%	7.70%	$145.44	4.58%
47,000	**36,716**	**4,995**	**41,710**	**$38,954**	**$5,930**	**$44,884**	**$40,493**	**$6,654**	**$47,147**	**3.95%**	**12.21%**	**5.04%**	**$188.65**	**25.40%**
50,000	41,916	6,468	48,384	$44,352	$7,486	$51,839	$46,051	$8,241	$54,291	3.83%	10.08%	4.73%	$204.38	32.00%
60,000	**47,402**	**7,280**	**54,682**	**$50,035**	**$8,344**	**$58,379**	**$51,907**	**$9,115**	**$61,022**	**3.74%**	**9.24%**	**4.53%**	**$220.26**	**51.35%**
70,000	55,387	9,351	64,737	$58,172	$10,513	$68,685	$60,438	$11,344	$71,782	3.89%	7.91%	4.51%	$258.08	63.62%
90,000	**69,422**	**9,615**	**79,037**	**$72,420**	**$10,795**	**$83,215**	**$75,429**	**$11,630**	**$87,058**	**4.15%**	**7.73%**	**4.62%**	**$320.25**	**76.06%**
100,000	80,849	13,569	94,419	$84,034	$14,933	$98,967	$87,633	$15,885	$103,518	4.28%	6.38%	4.60%	$379.24	80.06%
120,000	92,131	17,062	109,193	$95,440	$18,603	$114,042	$99,683	$19,645	$119,328	4.45%	5.61%	4.64%	$440.49	87.58%
200,000	124,448	28,016	152,464	$128,066	$30,071	$158,137	$134,201	$31,436	$165,637	4.79%	4.54%	4.74%	$625.02	97.66%
250,000	179,939	39,193	219,133	$184,058	$41,748	$225,806	$193,473	$43,469	$236,942	5.12%	4.12%	4.93%	$928.04	99.23%
300,000	236,278	46,082	282,360	$240,903	$48,943	$289,846	$253,648	$50,884	$304,532	5.29%	3.97%	5.07%	$1,223.81	99.68%
340,000	238,486	69,875	308,361	$243,130	$73,773	$316,903	$256,005	$76,498	$332,503	5.30%	3.69%	4.92%	$1,300.02	99.84%
450,000	325,421	51,329	376,749	$330,847	$54,388	$385,235	$348,860	$56,535	$405,395	5.44%	3.95%	5.23%	$1,679.99	100.00%

Bay State Gas Company
G/T-53: Commercial & Industrial Extra High Annual / Low Winter

Annual Therms	Average Therms Winter	Summer	Annual	Current Bill Winter	Summer	Annual	Proposed Bill Winter	Summer	Annual	Percent Change Winter	Summer	Annual	$ Change Per Month	% of Bills
														0.00%
750														0.00%
925														0.00%
1,025														0.00%
1,075														0.00%
1,200														0.00%
1,250														0.00%
1,350														0.00%
1,750														0.00%
2,100														0.00%
2,750														0.00%
4,000														1.49%
6,000														1.49%
6,600														2.97%
8,500														2.97%
9,500														2.97%
12,000														2.97%
15,000														4.46%
30,000														4.46%
47,000														4.46%
50,000														5.32%
60,000														5.32%
70,000														5.32%
90,000														6.81%
100,000	85,987	5,460	91,447	$91,098	$7,422	$98,521	$96,925	$10,272	$107,197	6.40%	38.39%	8.81%	$723.02	7.92%
120,000	107,922	0	107,922	$100,901	$1,791	$102,692	$106,296	$4,686	$110,982	5.35%	161.62%	8.07%	$690.82	9.41%
200,000	159,184	35,859	195,042	$162,916	$37,489	$200,405	$170,856	$40,381	$211,237	4.87%	7.71%	5.40%	$902.66	15.97%
250,000	124,296	93,990	218,286	$130,380	$93,692	$224,073	$137,467	$96,962	$234,429	5.44%	3.49%	4.62%	$863.06	**26.86%**
300,000	**162,800**	**111,686**	**274,487**	**$166,788**	**$110,984**	**$277,772**	**$174,862**	**$114,327**	**$289,189**	**4.84%**	**3.01%**	**4.11%**	**$951.39**	35.03%
340,000	194,569	122,317	316,885	$200,114	$121,938	$322,052	$209,302	$125,194	$334,496	4.59%	2.67%	3.86%	$1,036.99	**52.72%**
450,000	**219,688**	**174,538**	**394,227**	**$227,353**	**$173,007**	**$400,360**	**$237,502**	**$176,469**	**$413,971**	**4.46%**	**2.00%**	**3.40%**	**$1,134.20**	62.50%
525,000	260,565	228,384	488,949	$272,883	$225,585	$498,468	$284,705	$229,278	$513,983	4.33%	1.64%	3.11%	$1,292.92	**74.63%**
750,000	**306,557**	**284,440**	**590,997**	**$317,070**	**$279,970**	**$597,039**	**$330,134**	**$283,984**	**$614,118**	**4.12%**	**1.43%**	**2.86%**	**$1,423.24**	100.00%
9,999,999	1,041,006	975,895	2,016,901	$1,047,579	$952,916	$2,000,495	$1,082,752	$960,410	$2,043,161	3.36%	0.79%	2.13%	$3,555.50	

Bay State Gas Company
G/T-43: Commercial & Industrial Extra High Annual / High Winter

Annual	Average Therms			Current Bill			Proposed Bill			Percent Change			$ Change	% of
Therms	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Winter	Summer	Annual	Per Month	Bills
														0.00%
750														0.00%
925														0.00%
1,025														0.00%
1,075														0.00%
1,200														0.00%
1,250														0.00%
1,350														0.00%
1,750														0.00%
2,100														0.00%
2,750														6.63%
4,000														6.63%
6,000														6.63%
6,600														6.63%
8,500														6.63%
9,500														6.63%
12,000														6.63%
15,000														6.63%
30,000														13.26%
47,000														13.26%
50,000														13.26%
60,000														13.26%
70,000														19.89%
90,000														19.89%
100,000														19.89%
120,000														19.89%
200,000														
250,000	**222,220**	**22,681**	**244,901**	**$227,670**	**$26,195**	**$253,865**	**$237,737**	**$29,027**	**$266,764.11**	**4.42%**	**10.81%**	**5.08%**	**$1,074.93**	**25.97%**
300,000	295,260	36	295,296	$310,885	$1,846	$312,731	$324,126	$4,737	$328,862.42	4.26%	156.64%	5.16%	$1,344.29	32.60%
340,000	**251,477**	**63,967**	**315,444**	**$255,193**	**$69,084**	**$324,278**	**$266,004**	**$72,153**	**$338,156.93**	**4.24%**	**4.44%**	**4.28%**	**$1,156.62**	**45.86%**
450,000	293,225	89,159	382,384	$298,988	$95,455	$394,443	$311,269	$98,623	$409,892.31	4.11%	3.32%	3.92%	$1,287.47	67.40%
525,000	**362,935**	**107,741**	**470,676**	**$372,867**	**$115,072**	**$487,939**	**$387,673**	**$118,275**	**$505,947.95**	**3.97%**	**2.78%**	**3.69%**	**$1,500.73**	**80.11%**
750,000	479,386	112,914	592,300	$482,812	$120,788	$603,600	$500,611	$123,942	$624,552.28	3.69%	2.61%	3.47%	$1,746.06	86.74%
9,999,999	953,220	192,458	1,145,678	$961,820	$208,004	$1,169,824	$994,674	$210,560	$1,205,234.35	3.42%	1.23%	3.03%	$2,950.82	100.00%

BAY STATE GAS COMPANY
Typical Residential Heating Bill (R-3)

Typical Usage In Therms

Line No.	Residential Heating (R-3)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
1			90	55	30	30	42	71	109	150	187	188	166	132	1,250	318	932
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$7.47	$7.47	$7.47	$7.47	$7.47	$7.47	$7.47							$45	$45	
5	First 30 therms @	$0.2317	$6.95	$6.95	$6.95	$6.95	$6.95	$6.95							$42	$42	
6	Excess 30 therms @	$0.1639	$9.83	$4.10	$0.00	$0.00	$1.97	$6.72							$23	$23	
7																	
8	Peak																
9	Cust. Chg	$7.47							$7.47	$7.47	$7.47	$7.47	$7.47	$7.47	$45		$45
10	First 90 therms @	$0.4000							$36.00	$36.00	$36.00	$36.00	$36.00	$36.00	$216		$216
11	Excess 90 therms @	$0.2076							$3.94	$12.46	$20.14	$20.35	$15.78	$8.72	$81		$81
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$12.10	$12.10	$12.10	$12.10	$12.10	$12.10	$12.10							$73	$73	
16	First 30 therms @	$0.3183	$9.55	$9.55	$9.55	$9.55	$9.55	$9.55							$57	$57	
17	Excess 30 therms @	$0.2224	$13.34	$5.56	$0.00	$0.00	$2.67	$9.12							$31	$31	
18																	
19	Peak																
20	Cust. Chg	$12.10							$12.10	$12.10	$12.10	$12.10	$12.10	$12.10	$73		$73
21	First 125 therms @	$0.3183							$34.70	$39.79	$39.79	$39.79	$39.79	$39.79	$234		$234
22	Excess 125 therms @	$0.2224							$0.00	$5.56	$13.79	$14.01	$9.12	$1.56	$44		$44
23																	
24	Test Year Total Base Rate Amount		$24.26	$18.52	$14.42	$14.42	$16.39	$21.14	$47.41	$55.93	$63.61	$63.82	$59.25	$52.19	$451	$109	$342
25	Revised Total Base Rate Amount		$34.99	$27.21	$21.65	$21.65	$24.32	$30.77	$46.80	$57.45	$65.68	$65.90	$61.01	$53.45	$511	$161	$350
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.9143	$0.9143	$0.9143	$0.9143	$0.9143	$0.9143	$0.9640	$0.9640	$0.9640	$0.9640	$0.9640	$0.9640			
29	LDAF		$0.0156	$0.0156	$0.0156	$0.0156	$0.0156	$0.0156	$0.0137	$0.0137	$0.0137	$0.0137	$0.0137	$0.0137			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454			
33	LDAF		$0.0270	$0.0270	$0.0270	$0.0270	$0.0270	$0.0270	$0.0251	$0.0251	$0.0251	$0.0251	$0.0251	$0.0251			
34																	
35	**Test Year**		$107.95	$69.66	$42.32	$42.32	$55.44	$87.16	$153.98	$202.58	$246.44	$247.62	$221.55	$181.25	$1,658	$405	$1,253
36	**Revised**		$118.94	$78.51	$49.63	$49.63	$63.49	$96.99	$152.58	$203.02	$247.16	$248.35	$222.11	$181.55	$1,712	$457	$1,255
37	**Difference**		$10.99	$8.84	$7.31	$7.31	$8.05	$9.82	($1.40)	$0.44	$0.72	$0.73	$0.56	$0.31	$54	$52	$1
38																	
39	% Chg		10.18%	12.70%	17.28%	17.28%	14.51%	11.27%	-0.91%	0.22%	0.29%	0.29%	0.25%	0.17%	3.24%	12.93%	0.11%
40																	
41	Average monthly impact														$ 4.47	$ 8.72	$ 0.23

BAY STATE GAS COMPANY
Typical Residential Non-Heating Bill (R-1)

Line No.	Residential Non-Heating (R-1)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
			Typical Usage In Therms														
1			17	17	15	14	7	15	15	18	19	20	19	19	195	85	110
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$7.46	$7.46	$7.46	$7.46	$7.46	$7.46	$7.46							$45	$45	
5	First 10 therms @	$0.3848	$3.85	$3.85	$3.85	$3.85	$2.69	$3.85							$22	$22	
6	Excess 10 therms @	$0.2965	$2.08	$2.08	$1.48	$1.19	$0.00	$1.48							$8	$8	
7																	
8	Peak																
9	Cust. Chg	$7.46							$7.46	$7.46	$7.46	$7.46	$7.46	$7.46	$45		$45
10	First 12 therms @	$0.4349							$5.22	$5.22	$5.22	$5.22	$5.22	$5.22	$31		$31
11	Excess 12 therms @	$0.3758							$1.13	$2.26	$2.63	$3.01	$2.63	$2.63	$14		$14
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$11.60	$11.60	$11.60	$11.60	$11.60	$11.60	$11.60							$70	$70	
16	First 10 therms @	$0.2393	$2.39	$2.39	$2.39	$2.39	$1.68	$2.39							$14	$14	
17	Excess 10 therms @	$0.1928	$1.35	$1.35	$0.96	$0.77	$0.00	$0.96							$5	$5	
18																	
19	Peak																
20	Cust. Chg	$11.60							$11.60	$11.60	$11.60	$11.60	$11.60	$11.60	$70		$70
21	First 12 therms @	$0.2393							$2.87	$2.87	$2.87	$2.87	$2.87	$2.87	$17		$17
22	Excess 12 therms @	$0.1928							$0.58	$1.16	$1.35	$1.54	$1.35	$1.35	$7		$7
23																	
24	Test Year Total Base Rate Amount		$13.38	$13.38	$12.79	$12.49	$10.15	$12.79	$13.81	$14.93	$15.31	$15.69	$15.31	$15.31	$165	$75	$90
25	Revised Total Base Rate Amount		$15.34	$15.34	$14.96	$14.76	$13.28	$14.96	$15.05	$15.63	$15.82	$16.01	$15.82	$15.82	$183	$89	$94
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.8898	$0.8898	$0.8898	$0.8898	$0.8898	$0.8898	$0.8739	$0.8739	$0.8739	$0.8739	$0.8739	$0.8739			
29	LDAF		$0.0124	$0.0124	$0.0124	$0.0124	$0.0124	$0.0124	$0.0055	$0.0055	$0.0055	$0.0055	$0.0055	$0.0055			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126			
33	LDAF		$0.0238	$0.0238	$0.0238	$0.0238	$0.0238	$0.0238	$0.0169	$0.0169	$0.0169	$0.0169	$0.0169	$0.0169			
34																	
35	**Test Year**		$28.72	$28.72	$26.32	$25.12	$16.47	$26.32	$27.00	$30.76	$32.02	$33.27	$32.02	$32.02	$339	$152	$187
36	**Revised**		$30.93	$30.93	$28.71	$27.60	$19.69	$28.71	$28.99	$32.36	$33.48	$34.60	$33.48	$33.48	$363	$167	$196
37	**Difference**		$2.21	$2.21	$2.39	$2.48	$3.22	$2.39	$2.00	$1.60	$1.46	$1.33	$1.46	$1.46	$24	$15	$9
38																	
39	% Chg		7.70%	7.70%	9.07%	9.86%	19.58%	9.07%	7.39%	5.19%	4.57%	4.00%	4.57%	4.57%	7.15%	9.82%	4.98%
40																	
41	Average monthly impact														$ 2.02	$ 2.48	$ 1.55

BAY STATE GAS COMPANY
Typical C&I Low Annual/Low Winter (G-50)

Line No.	C&I Low Annual/Low Winter (G-50)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
			Typical Usage In Therms														
1			125	105	101	93	99	119	172	172	202	199	200	166	1,753	642	1,111
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$12.61	$12.61	$12.61	$12.61	$12.61	$12.61	$12.61							$76	$76	
5	First 80 therms @	$0.3240	$25.92	$25.92	$25.92	$25.92	$25.92	$25.92							$156	$156	
6	Excess 80 therms @	$0.1884	$8.48	$4.71	$3.96	$2.45	$3.58	$7.35							$31	$31	
7																	
8	Peak																
9	Cust. Chg	$12.61							$12.61	$12.61	$12.61	$12.61	$12.61	$13	$76		$76
10	First 125 therms @	$0.3597							$44.96	$44.96	$44.96	$44.96	$44.96	$45	$270		$270
11	Excess 125 therms @	$0.2268							$10.66	$10.66	$17.46	$16.78	$17.01	$9	$82		$82
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$19.00	$19.00	$19.00	$19.00	$19.00	$19.00	$19.00							$114	$114	
16	First 99999 therms @	$0.2818	$35.23	$29.59	$28.46	$26.21	$27.90	$33.53							$181	$181	
17	Excess 99999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00							$0	$0	
18																	
19	Peak																
20	Cust. Chg	$19.00							$19.00	$19.00	$19.00	$19.00	$19.00	$19	$114		$114
21	First 99999 therms @	$0.2818							$48.47	$48.47	$56.92	$56.08	$56.36	$46.78	$313		$313
22	Excess 99999 therms @								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
23																	
24	Test Year Total Base Rate Amount		$47.01	$43.24	$42.49	$40.98	$42.11	$45.88	$68.23	$68.23	$75.04	$74.36	$74.58	$67	$689	$262	$427
25	Revised Total Base Rate Amount		$54.23	$48.59	$47.46	$45.21	$46.90	$52.53	$67.47	$67.47	$75.92	$75.08	$75.36	$65.78	$722	$295	$427
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.8826	$0.8826	$0.8826	$0.8826	$0.8826	$0.8826	$0.8877	$0.8877	$0.8877	$0.8877	$0.8877	$0.8877			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$159.88	$138.06	$133.69	$124.96	$131.51	$153.34	$222.96	$222.96	$256.76	$253.38	$254.50	$216.21	$2,268	$841	$1,427
36	**Revised**		$169.85	$145.71	$140.89	$131.23	$138.47	$162.61	$228.44	$228.44	$264.98	$261.32	$262.54	$221	$2,356	$889	$1,467
37	**Difference**		$9.97	$7.66	$7.20	$6.27	$6.97	$9.27	$5.48	$5.48	$8.22	$7.95	$8.04	$4.93	$87	$47	$40
38																	
39	% Chg		6.23%	5.55%	5.38%	5.02%	5.30%	6.05%	2.46%	2.46%	3.20%	3.14%	3.16%	2.28%	3.85%	5.63%	2.81%
40																	
41	Average monthly impact														$ 7.29	$ 7.89	$ 6.68

BAY STATE GAS COMPANY
Typical C&I Low Annual/High Winter (G-40)

Line No.	C&I Low Annual/High Winter (G-40)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
			Typical Usage In Therms														
1			84	38	25	24	25	49	103	216	300	300	271	169	1,604	245	1,359
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$12.61	$12.61	$12.61	$12.61	$12.61	$12.61	$12.61							$76	$76	
5	First 35 therms @	$0.3288	$11.51	$11.51	$8.22	$7.89	$8.22	$11.51							$59	$59	
6	Excess 35 therms @	$0.1855	$9.09	$0.56	$0.00	$0.00	$0.00	$2.60							$12	$12	
7																	
8	Peak																
9	Cust. Chg	$12.61							$12.61	$12.61	$12.61	$12.61	$12.61	$12.61	$76		$76
10	First 125 therms @	$0.3694							$38.05	$46.18	$46.18	$46.18	$46.18	$46.18	$269		$269
11	Excess 125 therms @	$0.2315							$0.00	$21.07	$40.51	$40.51	$33.80	$10.19	$146		$146
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$19.00	$19.00	$19.00	$19.00	$19.00	$19.00	$19.00							$114	$114	
16	First 99999 therms @	$0.3090	$25.96	$11.74	$7.73	$7.42	$7.73	$15.14							$76	$76	
17	Excess 99999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00							$0	$0	
18																	
19	Peak																
20	Cust. Chg	$19.00							$19.00	$19.00	$19.00	$19.00	$19.00	$19.00	$114		$114
21	First 99999 therms @	$0.3090							$31.83	$66.74	$92.70	$92.70	$83.74	$52.22	$420		$420
22	Excess 99999 therms @								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
23																	
24	Test Year Total Base Rate Amount		$33.21	$24.68	$20.83	$20.50	$20.83	$26.72	$50.66	$79.85	$99.30	$99.30	$92.58	$68.97	$637	$147	$491
25	Revised Total Base Rate Amount		$44.96	$30.74	$26.73	$26.42	$26.73	$34.14	$50.83	$85.74	$111.70	$111.70	$102.74	$71.22	$724	$190	$534
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.9540	$0.9540	$0.9540	$0.9540	$0.9540	$0.9540	$0.9610	$0.9610	$0.9610	$0.9610	$0.9610	$0.9610			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$115.06	$61.70	$45.19	$43.89	$45.19	$74.46	$150.87	$290.00	$391.17	$391.17	$356.24	$233.39	$2,198	$385	$1,813
36	**Revised**		$123.71	$66.37	$50.16	$48.92	$50.16	$80.08	$150.60	$294.98	$402.31	$402.31	$365.26	$234.93	$2,270	$419	$1,850
37	**Difference**		$8.65	$4.66	$4.97	$5.03	$4.97	$5.62	($0.26)	$4.98	$11.14	$11.14	$9.02	$1.54	$71	$34	$38
38																	
39	% Chg		7.52%	7.56%	11.00%	11.46%	11.00%	7.54%	-0.17%	1.72%	2.85%	2.85%	2.53%	0.66%	3.25%	8.80%	2.07%
40																	
41	Average monthly impact														$ 5.96	$ 5.65	$ 6.26

BAY STATE GAS COMPANY
Typical C&I Medium Annual/Low Winter (G-51)

Typical Usage In Therms

Line No.	C&I Medium Annual/Low Winter (G-51)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
1			790	794	763	726	731	807	941	1,210	1,364	1,294	1,321	1,078	11,819	4,611	7,208
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$45.04	$45.04	$45.04	$45.04	$45.04	$45.04	$45.04							$270	$270	
5	First 500 therms @	$0.1000	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00							$300	$300	
6	Excess 500 therms @	$0.0765	$22.19	$22.49	$20.12	$17.29	$17.67	$23.49							$123	$123	
7																	
8	Peak																
9	Cust. Chg	$45.04							$45.04	$45.04	$45.04	$45.04	$45.04	$45.04	$270		$270
10	First 700 therms @	$0.1708							$119.56	$119.56	$119.56	$119.56	$119.56	$119.56	$717		$717
11	Excess 700 therms @	$0.1315							$31.69	$67.07	$87.32	$78.11	$81.66	$49.71	$396		$396
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$65.00	$65.00	$65.00	$65.00	$65.00	$65.00	$65.00							$390	$390	
16	First 99999 therms @	$0.0826	$65.25	$65.58	$63.02	$59.97	$60.38	$66.66							$381	$381	
17	Excess 99999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00							$0	$0	
18																	
19	Peak																
20	Cust. Chg	$65.00							$65.00	$65.00	$65.00	$65.00	$65.00	$65.00	$390		$390
21	First 99999 therms @	$0.1774							$166.93	$214.65	$241.97	$229.56	$234.35	$191.24	$1,279		$1,279
22	Excess 99999 therms @								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
23																	
24	Test Year Total Base Rate Amount		$117.23	$117.53	$115.16	$112.33	$112.71	$118.53	$196.29	$231.67	$251.92	$242.71	$246.26	$214.31	$2,077	$693	$1,383
25	Revised Total Base Rate Amount		$130.25	$130.58	$128.02	$124.97	$125.38	$131.66	$231.93	$279.65	$306.97	$294.56	$299.35	$256.24	$2,440	$771	$1,669
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.8860	$0.8860	$0.8860	$0.8860	$0.8860	$0.8860	$0.8468	$0.8468	$0.8468	$0.8468	$0.8468	$0.8468			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$833.28	$837.21	$806.74	$770.38	$775.29	$849.99	$1,004.33	$1,270.69	$1,423.18	$1,353.87	$1,380.60	$1,139.99	$12,446	$4,873	$7,573
36	**Revised**		$861.00	$865.03	$833.80	$796.52	$801.56	$878.13	$1,112.61	$1,412.09	$1,583.54	$1,505.61	$1,535.67	$1,265.14	$13,451	$5,036	$8,415
37	**Difference**		$27.72	$27.82	$27.06	$26.14	$26.27	$28.14	$108.29	$141.40	$160.36	$151.74	$155.06	$125.15	$1,005	$163	$842
38																	
39	% Chg		3.33%	3.32%	3.35%	3.39%	3.39%	3.31%	10.78%	11.13%	11.27%	11.21%	11.23%	10.98%	8.08%	3.35%	11.12%
40																	
41	Average monthly impact														$ 83.76	$ 27.19	$ 140.33

BAY STATE GAS COMPANY
Typical C&I Medium Annual/High Winter (G-41)

Typical Usage In Therms

Line No.	C&I Medium Annual/High Winter (G-41)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
1			665	302	164	146	174	374	824	2,139	2,170	2,294	1,971	1,270	12,493	1,825	10,668
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$45.04	$45.04	$45.04	$45.04	$45.04	$45.04	$45.04							$270	$270	
5	First 300 therms @	$0.1246	$37.38	$37.38	$20.43	$18.19	$21.68	$37.38							$172	$172	
6	Excess 300 therms @	$0.0988	$36.06	$0.20	$0.00	$0.00	$0.00	$7.31							$44	$44	
7																	
8	Peak																
9	Cust. Chg	$45.04							$45.04	$45.04	$45.04	$45.04	$45.04	$45.04	$270		$270
10	First 1000 therms @	$0.1979							$163.07	$197.90	$197.90	$197.90	$197.90	$197.90	$1,153		$1,153
11	Excess 1000 therms @	$0.1572							$0.00	$179.05	$183.92	$203.42	$152.64	$42.44	$761		$761
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$65.00	$65.00	$65.00	$65.00	$65.00	$65.00	$65.00							$390	$390	
16	First 99999 therms @	$0.1216	$80.86	$36.72	$19.94	$17.75	$21.16	$45.48							$222	$222	
17	Excess 99999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00							$0	$0	
18																	
19	Peak																
20	Cust. Chg	$65.00							$65.00	$65.00	$65.00	$65.00	$65.00	$65.00	$390		$390
21	First 99999 therms @	$0.1920							$158.21	$410.69	$416.64	$440.45	$378.43	$243.84	$2,048		$2,048
22	Excess 99999 therms @								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
23																	
24	Test Year Total Base Rate Amount		$118.48	$82.62	$65.47	$63.23	$66.72	$89.73	$208.11	$421.99	$426.86	$446.36	$395.58	$285.38	$2,671	$486	$2,184
25	Revised Total Base Rate Amount		$145.86	$101.72	$84.94	$82.75	$86.16	$110.48	$223.21	$475.69	$481.64	$505.45	$443.43	$308.84	$3,050	$612	$2,438
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.9537	$0.9537	$0.9537	$0.9537	$0.9537	$0.9537	$0.9137	$0.9137	$0.9137	$0.9137	$0.9137	$0.9137			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$766.26	$376.80	$225.23	$205.45	$236.21	$454.04	$970.80	$2,401.85	$2,435.42	$2,569.68	$2,219.94	$1,460.90	$14,323	$2,264	$12,059
36	**Revised**		$769.30	$384.85	$238.69	$219.63	$249.28	$461.10	$1,021.42	$2,547.74	$2,583.72	$2,727.65	$2,352.74	$1,539.09	$15,095	$2,323	$12,772
37	**Difference**		$3.04	$8.05	$13.47	$14.18	$13.07	$7.06	$50.61	$145.89	$148.30	$157.96	$132.80	$78.19	$773	$59	$714
38																	
39	% Chg		0.40%	2.14%	5.98%	6.90%	5.53%	1.55%	5.21%	6.07%	6.09%	6.15%	5.98%	5.35%	5.39%	2.60%	5.92%
40																	
41	Average monthly impact														$ 64.39	$ 9.81	$ 118.96

BAY STATE GAS COMPANY
Typical C&I High Annual/Low Winter (G-52)

Typical Usage In Therms

Line No.	C&I High Annual/Low Winter (G-52)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
1			11,042	10,120	9,172	8,320	9,745	11,262	12,094	14,442	17,547	16,095	15,704	14,183	149,726	59,661	90,065
2	**Current Base Rates**																
3	Off-Peak																
4	Cust. Chg	$109.37	$109.37	$109.37	$109.37	$109.37	$109.37	$109.37							$656	$656	
5	First 8000 therms @	$0.0712	$569.60	$569.60	$569.60	$569.60	$569.60	$569.60							$3,418	$3,418	
6	Excess 8000 therms @	$0.0569	$173.09	$120.63	$66.69	$18.21	$99.29	$185.61							$664	$664	
7																	
8	Peak																
9	Cust. Chg	$109.37							$109.37	$109.37	$109.37	$109.37	$109.37	$109.37	$656		$656
10	First 10000 therms @	$0.1638							$1,638.00	$1,638.00	$1,638.00	$1,638.00	$1,638.00	$1,638.00	$9,828		$9,828
11	Excess 10000 therms @	$0.1288							$269.71	$572.13	$972.05	$785.04	$734.68	$538.77	$3,872		$3,872
12																	
13	**Revised Base Rates**																
14	Off-Peak																
15	Cust. Chg	$213.00	$213.00	$213.00	$213.00	$213.00	$213.00	$213.00							$1,278	$1,278	
16	First 999999 therms @	$0.0657	$725.46	$664.88	$602.60	$546.62	$640.25	$739.91							$3,920	$3,920	
17	Excess 999999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00							$0	$0	
18																	
19	Peak																
20	Cust. Chg	$213.00							$213.00	$213.00	$213.00	$213.00	$213.00	$213.00	$1,278		$1,278
21	First 999999 therms @	$0.1682							$2,034.21	$2,429.14	$2,951.41	$2,707.18	$2,641.41	$2,385.58	$15,149		$15,149
22	Excess 999999 therms @								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
23																	
24	Test Year Total Base Rate Amount		$852.06	$799.60	$745.66	$697.18	$778.26	$864.58	$2,017.08	$2,319.50	$2,719.42	$2,532.41	$2,482.05	$2,286.14	$19,094	$4,737	$14,357
25	Revised Total Base Rate Amount		$938.46	$877.88	$815.60	$759.62	$853.25	$952.91	$2,247.21	$2,642.14	$3,164.41	$2,920.18	$2,854.41	$2,598.58	$21,625	$5,198	$16,427
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.8981	$0.8981	$0.8981	$0.8981	$0.8981	$0.8981	$0.8675	$0.8675	$0.8675	$0.8675	$0.8675	$0.8675			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.8932	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126	$0.9126			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$10,994.14	$10,094.82	$9,170.14	$8,339.10	$9,729.04	$11,208.73	$12,652.54	$15,019.79	$18,150.26	$16,686.35	$16,292.14	$14,758.67	$153,096	$59,536	$93,560
36	**Revised**		$11,152.31	$10,238.88	$9,299.70	$8,455.62	$9,867.37	$11,370.26	$13,565.99	$16,158.41	$19,586.64	$17,983.49	$17,551.79	$15,872.45	$161,103	$60,384	$100,719
37	**Difference**		$158.17	$144.07	$129.56	$116.53	$138.33	$161.54	$913.45	$1,138.62	$1,436.39	$1,297.14	$1,259.64	$1,113.78	$8,007	$848	$7,159
38																	
39	% Chg		1.44%	1.43%	1.41%	1.40%	1.42%	1.44%	7.22%	7.58%	7.91%	7.77%	7.73%	7.55%	5.23%	1.42%	7.65%
40																	
41	Average monthly impact														$ 667.27	$ 141.37	$ 1,193.17

BAY STATE GAS COMPANY
Typical C&I High Annual/High Winter (G-42)

Typical Usage In Therms

Line No.	C&I High Annual/High Winter (G-42)		May (1)	Jun (2)	Jul (3)	Aug (4)	Sep (5)	Oct (6)	Nov (7)	Dec (8)	Jan (9)	Feb (10)	Mar (11)	Apr (12)	Total May - Apr (13)	Total Off-Peak (14)	Total Peak (15)
1			4,642	2,353	2,618	1,332	2,227	2,937	7,027	12,107	13,541	13,233	12,504	8,364	82,885	16,109	66,776
2	**Current Base Rates**																
3	Off-Peak														$656	$656	
4	Cust. Chg	$109.37	$109.37	$109.37	$109.37	$109.37	$109.37	$109.37							$847	$847	
5	First 2200 therms @	$0.0687	$151.14	$151.14	$151.14	$91.51	$151.14	$151.14							$216	$216	
6	Excess 2200 therms @	$0.0573	$139.93	$8.77	$23.95	$0.00	$1.55	$42.23									
7																	
8	Peak								$109.37	$109.37	$109.37	$109.37	$109.37	$109.37	$656		$656
9	Cust. Chg	$109.37							$1,165.08	$1,492.20	$1,492.20	$1,492.20	$1,492.20	$1,386.75	$8,521		$8,521
10	First 9000 therms @	$0.1658							$0.00	$409.19	$598.05	$557.49	$461.48	$0.00	$2,026		$2,026
11	Excess 9000 therms @	$0.1317															
12																	
13	**Revised Base Rates**																
14	Off-Peak														$1,278	$1,278	
15	Cust. Chg	$213.00	$213.00	$213.00	$213.00	$213.00	$213.00	$213.00							$1,253	$1,253	
16	First 999999 therms @	$0.0778	$361.15	$183.06	$203.68	$103.63	$173.26	$228.50							$0	$0	
17	Excess 999999 therms @		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00									
18																	
19	Peak								$213.00	$213.00	$213.00	$213.00	$213.00	$213.00	$1,278		$1,278
20	Cust. Chg	$213.00							$1,260.64	$2,172.00	$2,429.26	$2,374.00	$2,243.22	$1,500.50	$11,980		$11,980
21	First 999999 therms @	$0.1794							$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0		$0
22	Excess 999999 therms @																
23																	
24	Test Year Total Base Rate Amount		$400.44	$269.28	$284.46	$200.88	$262.06	$302.74	$1,274.45	$2,010.76	$2,199.62	$2,159.06	$2,063.05	$1,496.12	$12,923	$1,720	$11,203
25	Revised Total Base Rate Amount		$574.15	$396.06	$416.68	$316.63	$386.26	$441.50	$1,473.64	$2,385.00	$2,642.26	$2,587.00	$2,456.22	$1,713.50	$15,789	$2,531	$13,258
26																	
27	**Test Year**																
28	CGA Rates - (Seasonal)		$0.9669	$0.9669	$0.9669	$0.9669	$0.9669	$0.9669	$0.8654	$0.8654	$0.8654	$0.8654	$0.8654	$0.8654			
29	LDAF		$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0204	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119	$0.0119			
30																	
31	**Revised**																
32	CGA Rates - (Seasonal)		$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9057	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454	$0.9454			
33	LDAF		$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0318	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233	$0.0233			
34																	
35	**Test Year**		$4,983.48	$2,592.39	$2,869.21	$1,515.96	$2,460.77	$3,202.44	$7,439.23	$12,632.23	$14,079.14	$13,768.37	$13,032.81	$8,833.86	$87,410	$17,624	$69,786
36	**Revised**		$4,926.02	$2,602.00	$2,871.06	$1,565.38	$2,474.07	$3,194.94	$8,280.70	$14,113.05	$15,759.42	$15,405.81	$14,568.84	$9,815.71	$95,577	$17,633	$77,944
37	**Difference**		($57.46)	$9.61	$1.84	$49.42	$13.30	($7.50)	$841.46	$1,480.81	$1,680.28	$1,637.44	$1,536.04	$981.85	$8,167	$9	$8,158
38																	
39	% Chg		-1.15%	0.37%	0.06%	3.26%	0.54%	-0.23%	11.31%	11.72%	11.93%	11.89%	11.79%	11.11%	9.34%	0.05%	11.69%
40																	
41	Average monthly impact														$ 680.59	$ 1.53	$ 1,359.65

ANNUAL BASE RATE ADJUSTMENT MECHANISM

Section

1.0 Purpose
2.0 Effective Date
3.0 Applicability
4.0 Definitions
5.0 Annual Base Rate Adjustment Formula
6.0 Determination of Initial Base Rates
7.0 Calculation of PBR Annual Rate Adjustment
8.0 Calculation of Energy Efficiency Adjustment Factor
9.0 Calculation of SIR Base Rate Adjustment
10.0 Reporting Requirements
11.0 Currently Effective Rate Adjustment Table

1.0 Purpose

The purpose of the Annual Base Rate Adjustment Mechanism ("ABRAM") is to establish procedures that allow Bay State Gas Company ("Bay State" or the "Company") subject to the jurisdiction of the Department of Telecommunications and Energy ("Department") to adjust, on an annual basis, its base rates for firm gas sales and firm transportation service pursuant to the Company's Performance Based Rate ("PBR") and Steel Infrastructure Replacement ("SIR") programs and to reflect the annualized impact of energy efficiency savings ("EES"). The PBR program encompasses a price cap rate indexing mechanism, as well as earnings sharing above and below established thresholds and recovery of exogenous costs. The SIR program provides for base rate adjustments that allow Bay State to recover the costs associated with accelerated replacement of bare and unprotected coated steel distribution mains and other Eligible Facilities. EES are the therm savings attributable to the installation of demand-side management ("DSM") measures pursuant to the Company's DSM programs as approved by the Department from time-to-time.

ANNUAL BASE RATE ADJUSTMENT MECHANISM

2.0 Effective Date

The ABRAM shall be effective June 1, 2005 and shall continue subject to the terms of the PBR and SIR mechanisms set forth below. The initial rates established in accordance with Section 6.0 shall remain in effect until October 31, 2006. Subsequent base rate adjustments shall occur so long as either the PBR or SIR mechanisms remain effective or EES continue to be realized. In the event that both the PBR and SIR mechanisms are terminated and EES are no longer realized, the Company's base rates, as adjusted pursuant to the ABRAM, shall remain in effect until modified by the Department pursuant to a subsequent base rate proceeding.

2.1 Term of PBR Base Rate Adjustment Mechanism

The PBR Base Rate Adjustment mechanism shall continue for a term of five years through October 31, 2010. No further adjustment to the PBR component of the ABRAM shall occur after the completion of the five-year term ending October 31, 2010.

2.2 Term of SIR Base Rate Adjustment Mechanism

The SIR Base Rate Adjustment mechanism shall remain in effect until the Company's base rates are modified by the Department pursuant to a subsequent base rate proceeding.

3.0 Applicability

This mechanism shall apply an adjustment to the base rates of each of the Company's firm sales and firm transportation Rate Schedules, subject to the jurisdiction of the Department, as determined in accordance with the provisions of this mechanism. Such ABRAM shall be determined annually by the Company as defined below, subject to review and approval by the Department as provided for in this mechanism.

ANNUAL BASE RATE ADJUSTMENT MECHANISM

4.0 Definitions

The following definitions shall apply throughout the provisions of the ABRAM tariff.

(1) **Base Rate Element** is any customer, volumetric or demand charge reflected in the Company's Rate Schedules that recovers a portion of the Company's base revenue requirement as established by the Department in its most recent base rate case.

(2) **Base Rates** are the compilation of Base Rate Elements for all of the Company's Rate Schedules

(3) **Calendar Year** is the annual period beginning on January 1st and ending on December 31st.

(4) **Customer Class** is the group of customers all taking service pursuant to the same Rate Schedule.

(5) **Energy Efficiency Savings** shall be the annualized therm savings attributable to energy efficiency measures installed during the Calendar Year.

(6) **Off-peak Period** is the continuous period from May 1st through October 31st.

(7) **PBR Adjusted Base Rate** is the base rate in effect for the Prior Year plus the rate change calculated through the application of the PBR Price Cap Formula to the base rates in effect for the Prior Year.

(8) **PBR Price Cap Formula** is the mathematical expression set forth in Section 7.3 used to calculate the percentage change in Base Rates for the Rate Year.

(9) **Peak Period** is the continuous period from November 1st through April 30th.

(10) **Prior Year** is the annual period ending immediately prior to the Rate Year.

(11) **Rate Year** is the annual period that the adjusted base rates shall be effective beginning on November 1st.

(12) **SIR Revenue Requirements** are the revenue requirements for the Company's SIR program for the Rate Year.

ANNUAL BASE RATE ADJUSTMENT MECHANISM

(13) **SIR Base Rate** is the total component of the Company's Base Rates that recovers the aggregate SIR Revenue Requirements for investments made over the duration of the SIR Program.

5.0 Annual Base Rate Adjustment Formula

The annual base rate adjustment formula shall be applied for each Base Rate Element of each Rate Schedule and shall be calculated in accordance with the following formula:

$$BR_T^{n,e} = (BR_{T-1}^{n,e} - BR_SIR_{T-1}^{n,e}) \times (1 + PBR_CAP_T^{n,e}) \times (1 + EE_ADJ_T^{n,e}) + BR_SIR_T^{n,e}$$

Where:

$BR_T^{n,e}$	The Base Rate Element *e* applicable to Rate Schedule *n* for the Rate Year
$BR_{T-1}^{n,e}$	The Base Rate Element *e* applicable to Rate Schedule *n* for the Prior Year
$BR_SIR_{T-1}^{n,e}$	The SIR Base Rate for Base Rate Element *e* applicable to Rate Schedule *n* for the Prior Year
$PBR_CAP_T^{n,e}$	The percentage change for Base Rate Element *e* applicable to Rate Schedule *n* for the Rate Year calculated pursuant to the Company's PBR Program.
$EE_ADJ_T^{n,e}$	The Energy Efficiency Adjustment Percentage for Base Rate Element *e* applicable to Rate Schedule *n* for the Rate Year
$BR_SIR_T^{n,e}$	The SIR Base Rate for Base Rate Element *e* applicable to Rate Schedule *n* for the Rate Year

ANNUAL BASE RATE ADJUSTMENT MECHANISM

6.0 Determination of Initial Base Rates

The initial base rates shall be those established by the Department in Docket No. D.T.E. 05-27. The initial base rates shall be set forth in Column (I) of the Currently Effective Rate Adjustment Table contained in Section 11.0 to be effective through October 31, 2006. The first ABRAM change to the initial base rates shall be effective November 1, 2006.

7.0 Calculation of PBR Annual Rate Adjustment

7.1 Description of PBR Program

The Company's PBR program replaces traditional cost of service ratemaking with an incentive-based mechanism. The PBR program includes price cap, earnings sharing and exogenous components. The price cap component limits the change in base rates to the rate of input price inflation representative of the gas distribution industry less offsets for productivity and a consumer dividend. The earnings sharing component provides for sharing of earnings that are outside symmetrical bands above and below Bay State's authorized Return on Equity. The exogenous cost component allows the Company to reflect costs or credits in the PBR mechanism that derive from unanticipated events that are beyond Bay State's direct control.

7.2 Definitions

(1) **Average Unit Price** shall be the price per therm calculated by dividing the total base revenues for the Customer Class for the Prior Year by the normalized annual throughput for the class for the Prior Year.

(2) **Basis Point** shall be one one-hundredth of a percentage point.

(3) **Consumer Dividend** is the benefit to consumers of future productivity gains attributable to performance-based ratemaking for Bay State's services as established by the Department in D.T.E. 05-27.

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(4) **Earnings Sharing Bandwidth** is the percentage range equal to 400 Basis Points below the percentage Return on Equity authorized by the Department to 400 Basis Points above the percentage Return on Equity authorized by the Department.

(5) **Exogenous Events** are occurrences that have a material and disproportionate impact on Bay State that are beyond the Company's control and are not otherwise reflected in the PBR formula.

(6) **Input Price Trend** is the measure of change in the prices for all inputs used to provide regulated gas distribution services.

(7) **Productivity Trend** is the measure of change in productivity associated with providing regulated gas distribution services.

(8) **Return on Equity** is the allowed rate of return on equity as established in D.T.E. 05-27.

(9) **X Factor** is the productivity growth index as established by the Department in D.T.E. 05-27.

(10) **Z Factor** is the sum of the cost impacts of material Exogenous Events.

7.3 PBR Price Cap Adjustment Formula

$$PBR_CAP_T = (GDPPI_{T-1} - X) + \frac{(Z_{REV} + ESM_{REV})}{(BASE_REV_{T-1} - SIR_REV_{T-1})}$$

and:

$$BASE_REV_{T-1} = \sum_{n=1}^{n=i} \sum_{e=1}^{e=j} BR_{T-1}^{n,e} \times BD^{n,e}$$

ANNUAL BASE RATE ADJUSTMENT MECHANISM

and:

$$SIR_REV_{T-1} = \sum_{n=1}^{n=i} \sum_{e=1}^{e=j} BR_SIR_{T-1}^{n,e} \times BD^{n,e}$$

and:

$$X = TFPT_{GDI-US} + IPT_{GDI-US} + CD$$

Where:

PBR_CAP_T	The percentage change in the Average Unit Price for all Rate Schedules pursuant to Bay State's PBR Program.
$GDPPI_{T-1}$	The average annual percentage change in the United States Gross Domestic Product Price Inflation for the four most recent quarterly reporting periods as of the second quarter of the Calendar Year as published by the United States Department of Commerce.
X	The productivity or X Factor, which shall be the sum of the Productivity Trend differential, Input Price Trend differential, and the Consumer Dividend, as established by the Department in D.T.E. 05-27.
Z_{REV}	The sum of cost impacts of all Exogenous Events, positive or negative, as provided for in Section 7.5.
ESM_{REV}	The earnings to be shared with customers under the mechanism specified in Section 7.7.
$BASE_REV_{T-1}$	The base revenues calculated by multiplying each Base Rate Element shown in Column (B) of the Currently Effective Rate Adjustment Table in Section 11 for each Company Rate Schedule, by the corresponding weather-normalized billing determinants for the most recent Calendar Year.

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SIR_REV_{T-1}	The SIR Revenues calculated by multiplying each SIR Base Rate shown in Column (C) of the Currently Effective Rate Adjustment Table in Section 11 for each Company Rate Schedule by the corresponding weather-normalized billing determinants for the most recent Calendar Year.
I	The total number of firm Rate Schedules to which the ABRAM is applicable.
J	The total number of Base Rate Elements for Rate Schedule *n*.
$BR^{n,e}_{T-1}$	The Base Rate Element *e* shown in Column (B) of the Currently Effective Rate Adjustment Table for Rate Schedule *n*.
$BD^{n,e}$	The most recent Calendar Year weather-normalized billing determinants corresponding to Base Rate Element *e* applicable to Rate Schedule *n*.
$BR_SIR^{n,e}_{T-1}$	The SIR Base Rate *e* shown in Column (C) of the Currently Effective Rate Adjustment Table for Rate Schedule *n*.
TPT_{GDI-US}	The total Productivity Trend differential between the gas distribution industry in the Northeast and the overall United States economy as approved by the Department in D.T.E. 05-27.
IPT_{GDI-US}	The total Input Price Trend differential between the gas distribution industry in the Northeast and the overall United States economy, as approved by the Department in D.T.E. 05-27.
CD	The Consumer Dividend, as approved by the Department in D.T.E. 05-27.

7.4 PBR Annual Rate Adjustment

The Company may apply a non-uniform percentage change to each Base Rate Element of each firm Rate Schedule so long as the change in the Average Unit Price for the Customer Class is equal to the PBR Price Cap Adjustment. For purposes of calculating the Average Unit Price, the Company shall employ the weather-normalized billing

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determinants for the previous Calendar Year. The maximum percentage change to any individual Base Rate Element pursuant to the PBR mechanism shall be sum of the PBR Price Cap Adjustment and the X Factor.

7.5 Exogenous Events

The costs and/or cost reductions associated with unforeseen Exogenous Events that are beyond Bay State's control that occurred during the most recent Calendar Year and that are not reflected in the elements of the PBR price cap formula may be included in the PBR mechanism through the Z Factor. Examples of Exogenous Events are changes in tax laws that uniquely affect the local gas distribution industry, changes in accounting rules that uniquely affect the local gas distribution industry, and regulatory, legislative or judicial actions that uniquely affect the local gas distribution industry. Only material Exogenous Events, i.e. with cost impacts in excess of $600,000 positive or negative, shall be reflected in the Z Factor. The eligibility of the cost impacts of Exogenous Events for inclusion in the Z Factor shall be reviewed by the Department.

7.6 Revenue Exclusions

Base Rate revenue requirement items that are recovered through separate tracking mechanisms shall be excluded from the price indexing formula. The Company's SIR program costs described in Section 9 and Pension and Benefit Costs recovered through the Local Distribution Adjustment Clause shall be excluded from the PBR program.

7.7 Earnings Sharing

An Earnings Sharing component of the PBR program provides the Company and its Customers with protections in the event that the productivities achieved under the proposed program deviate materially from those anticipated and reflected in the PBR Price Cap Formula. In the event that the Company's actual Return on Equity for any annual period beginning January 1st of the years 2006 through the term of the PBR program is outside of the Earnings Sharing Bandwidth, the difference between actual earnings and earnings calculated at the authorized Return on Equity shall be shared 75%

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to the Company and 25% to Customers. There shall be no earnings sharing when the Company's actual Return on Equity falls within the Earnings Sharing Bandwidth. The Company's net income and year-ending common equity balances as reported in its annual report to the Department shall be used to calculate the level of earnings sharing.

7.8 Information to be Filed with the Department

On or before June 1st of each year, the Company shall file information and supporting schedules with the Department necessary for the Department to review and approve the PBR Base Rate Adjustment to be included in the ABRAM for the subsequent Rate Year. Such information shall include the results of the calculation of the PBR Price Cap Adjustment Formula, descriptions and accounting of any Exogenous Events, and an earnings sharing calculation.

8.0 Calculation of Energy Efficiency Adjustment Factor

8.1 Applicability

The volumetric rates for firm Customer Classes that participate in the Company's energy efficiency programs shall be further adjusted to reflect the annualized impact of energy efficiency programs on the therm gas use of firm Customer Classes for the previous Calendar Year. The adjustment shall be calculated on a percentage basis for each Base Rate Element.

8.2 Determination of Energy Efficiency Savings

The Company shall calculate the therm gas use impact of the energy efficiency measures installed during the previous Calendar Year. The therm savings shall be annualized to reflect a full year's impact. The annualized therm savings shall be broken down by Customer Class and further disaggregated by Peak Period and Off-peak Period and by head and tail block, where applicable.

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8.3 Energy Efficiency Adjustment Factor Formula

$$EE_ADJ_T^{n,e} = \frac{BD^{n,e}}{BD^{n,e} - EE^{n,e}} - 1$$

Where:

$EE_ADJ_T^{n,e}$	The Energy Efficiency Adjustment Percentage for Base Rate Element *e* applicable to Rate Schedule *n* for the Rate Year
$BD^{n,e}$	The most recent Calendar Year weather-normalized billing determinants corresponding to Base Rate Element *e* applicable to Rate Schedule *n*.
$EE^{n,e}$	The annualized Energy Efficiency savings for the most recent Calendar Year associated with Base Rate Element *e* applicable to Rate Schedule *n*.

8.4 Information to be Filed with the Department

On or before June 1st of each year, the Company shall file information and supporting schedules with the Department necessary for the Department to review and approve the Energy Efficiency Adjustment to be included in the ABRAM for the subsequent Rate Year. Such information shall include a description of the energy efficiency measures installed and associated therm savings by Rate Schedule.

9.0 Calculation of SIR Base Rate Adjustment

9.1 Description of SIR Program

The Company's SIR program provides for the accelerated replacement of aging steel infrastructure in order to maintain safe and reliable service. The costs associated with the

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program less any operations and maintenance ("O&M") expense savings are recovered through the ABRAM.

9.2 Definitions

(1) **Accelerated Gross Plant Investments** are the capitalized cost of SIR plant investments including applicable overhead recorded on the Company's books that exceed the Non-Accelerated Investment Threshold.

(2) **Accumulated Deferred Income Taxes** is the net reduction in Federal income and State franchise taxes associated with the use of accelerated depreciation allowed for income tax purposes.

(3) **Accumulated Reserve for Depreciation** is the net credit balance arising from the provision for Depreciation.

(4) **Carrying Costs** are the costs incurred by the Company to finance investments in Eligible Facilities prior to inclusion in the SIR Base Rate Adjustment mechanism

(5) **Depreciation Expense** is the return of the Company's investment in Rate Base at established annual rates as approved by the Department in D.T.E. 05-27.

(6) **Eligible Facilities** are those facilities in connection with the projects undertaken by the Company to replace bare and unprotected coated steel distribution mains on an accelerated basis.

(7) **Non-Accelerated Investment Threshold** is the typical annual level of steel infrastructure replacement investment as established by the Department in D.T.E. 05-27.

(8) **Rate Base** is the investment value upon which Bay State is permitted to earn its authorized rate of return.

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(9) **Property Tax Rate** is the composite property tax rate paid by the Company calculated in its most recent base rate proceeding as the ratio of total annual property taxes paid to total net plant in service.

(10) **SIR Savings** are the O&M expense savings realized by the Company attributable to the facilities installed under the SIR Program.

9.3 SIR Investments

SIR Investments are the costs of Eligible Facilities and shall include the costs of main replacement projects including any connected facilities such as services, meters or regulators that must be installed or replaced to enable the main replacement to become operational. SIR Investments may include investments in one or more of the following plant accounts:

(1) Account No. 367, Transmission Mains
(2) Account No. 376, Distribution Mains
(3) Account No. 380, Distribution Services
(4) Account No. 381, Meters
(5) Account No. 382, Meter Installations
(6) Account No. 383, House Regulators
(7) Account No. 385, Industrial Measuring and Regulating Equipment

9.4 Eligible SIR Revenue Requirements

Eligible SIR Revenue Requirements shall include depreciation, property taxes, return and associated income taxes associated with total SIR Investments made since the initiation of the SIR program. Carrying Costs on SIR Investments from the time each investment is placed into service until recovery begins shall also be considered Eligible SIR Revenue Requirements.

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9.5 Eligible SIR Savings

Eligible SIR Savings shall be the lower O&M expense associated with reduced leak repair activity and shall be reflected as an offset to SIR Revenues. Eligible SIR Savings shall be calculated based on the reduction in the number of leak repairs and the associated avoided cost of leak repairs.

9.6 SIR Revenue Requirements Formula

$SIR_REV_T = (RB_{SIR} \times PTRR) + DEPR_{SIR} + PTMS_{SIR} + CC_{SIR} - SAV_{SIR}$

and:

$RB_{SIR} = AGP_{SIR} - ARD_{SIR} - ADIT_{SIR}$

Where:

SIR_REV_T	The SIR Revenue Requirements for the Rate Year.
RB_{SIR}	The Rate Base associated with the SIR Program as of the end of the Calendar Year preceding the Rate Year.
PTRR	The pre-tax rate of return as established by the Department in D.T.E. 05-27.
$DEPR_{SIR}$	The depreciation expense associated with the plant investment in the SIR Program.
$PTMS_{SIR}$	The property taxes calculated based on the net plant investment in mains and services associated with the SIR Program multiplied by the Property Tax Rate.

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CC_{SIR}	Carrying Costs calculated monthly as the product of the Company's pre-tax rate of return multiplied by the Accelerated Gross Plant Investments associated with SIR Program plant placed in service, but not yet recovered through rates.
SAV_{SIR}	The total Eligible SIR Savings associated with reduced leak repair activity
AGP_{SIR}	The Accelerated Gross Plant Investments associated with the SIR Program as of the end of the Calendar Year preceding the Rate Year.
ARD_{SIR}	The Accumulated Reserve for Depreciation associated with the SIR Investments as of the end of the Calendar Year preceding the Rate Year.
$ADIT_{SIR}$	The Accumulated Deferred Income Taxes associated with the SIR Investments as of the end of the Calendar Year preceding the Rate Year.

9.7 SIR Base Rate Adjustment

The SIR Revenue Requirements shall be recovered from Customers through each Base Rate Element of the Company's firm Rate Schedules by applying a SIR Base Rate Adjustment to each existing Base Rate Element excluding the SIR Base Rate for the Prior Year. The SIR Base Rate Adjustments shall be derived by allocating the overall SIR Revenue Requirements to each Base Rate Element by the percentage of Prior Year total base revenues associated with each Base Rate Element. The resulting revenues by each Base Rate Element are then divided by the corresponding weather-normalized billing determinants for the Prior Year to derive the SIR Base Rate Adjustment.

9.8 Annual SIR Budget

In conjunction with its annual ABRAM filing each year, the Company shall provide the Department with a description of the SIR projects that it expects to complete during the

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current construction cycle and to include in the SIR Base Rate Adjustment for the following year. In addition, the Company will estimate the gross plant investment associated with each project. The list of projects and associated cost estimates shall be based on information available to the Company at the time it prepares the Annual SIR Budget and shall be provided for informational purposes. The specific projects undertaken during the current construction cycle and the associated cost of each project may vary due to circumstances and information that are not known by the Company at the time that the Annual SIR Budget was prepared.

9.9 Information to be Filed with the Department

On or before June 1st of each year, the Company shall file information and supporting schedules with the Department necessary for the Department to review and approve the SIR Revenue Requirements and the SIR Base Rates to be included in the ABRAM for the subsequent Rate Period. Such information shall include descriptions of all SIR Investments and the results of the calculation of the SIR Revenue Requirements Formula for the Rate Year. The Company shall also describe any factors that affected changes to the list of projects undertaken from those identified to the Department in the Company's Annual SIR Budget filed the previous year as well as any material variances in the project costs.

10.0 Information Required to be Filed with the Department

Information pertaining to all of the components of the Annual Base Rate Adjustment Mechanism is to be filed with the Department as specified in Sections 7, 8 and 9. In addition, the Company shall file revised tariff sheets reflecting the impact of applying the base rate changes provided for herein.

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11.0 Currently Effective Rate Adjustment Table

Customer Class And Charge	Previously Effective Rates			Currently Effective Rates				
	Base Rate	SIR Base Rate	Base Rate w/o SIR Base Rate	PBR ADJ %	PBR Adjusted Base Rate	Energy Eff. %	SIR Base Rate	TOTAL Base Rate
	Note 1/	Note 2/	(B) – (C)	Note 3/	(1+E) * (D)	Note 4/	Note 5/	(F) x (1 + G) + (H)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
R-1								
Customer Charge	$11.60	TBD	$11.60	TBD	TBD	TBD	$0.00	$11.60
Peak 0-12 therms	0.2393	TBD	0.2393	TBD	TBD	TBD	0.0000	0.2393
Peak 12+ therms	0.1928	TBD	0.1928	TBD	TBD	TBD	0.0000	0.1928
Off-Peak 0-10 therms	0.2393	TBD	0.2393	TBD	TBD	TBD	0.0000	0.2393
Off-Peak 10+ therms	0.1928	TBD	0.1928	TBD	TBD	TBD	0.0000	0.1928
R-2								
Customer Charge	$6.25	TBD	$6.25	TBD	TBD	TBD	$0.00	$6.25
Peak	0.1158	TBD	0.1158	TBD	TBD	TBD	0.0000	0.1158
Off-Peak	0.1158	TBD	0.1158	TBD	TBD	TBD	0.0000	0.1158
R-3								
Customer Charge	$12.10	TBD	$12.10	TBD	TBD	TBD	$0.00	$12.10
Peak 0-125 therms	0.3183	TBD	0.3183	TBD	TBD	TBD	0.0000	0.3183
Peak 90+ therms	0.2224	TBD	0.2224	TBD	TBD	TBD	0.0000	0.2224
Off-Peak 0-125 therms	0.3183	TBD	0.3183	TBD	TBD	TBD	0.0000	0.3183
Off-Peak 30+ therms	0.2224	TBD	0.2224	TBD	TBD	TBD	0.0000	0.2224
R-4								
Customer Charge	$6.25	TBD	$6.25	TBD	TBD	TBD	$0.00	$6.25
Peak	0.0708	TBD	0.0708	TBD	TBD	TBD	0.0000	0.0708
Off-Peak	0.0708	TBD	0.0708	TBD	TBD	TBD	0.0000	0.0708
OL								
Per Light per Month	$2.58	TBD	$2.58	TBD	TBD	TBD	$0.00	$2.58
G-40								
Customer Charge	$19.00	TBD	$19.00	TBD	TBD	TBD	$0.00	$19.00
Peak	0.3090	TBD	0.3090	TBD	TBD	TBD	0.0000	0.3090
Off-Peak	0.3090	TBD	0.3090	TBD	TBD	TBD	0.0000	0.3090

ANNUAL BASE RATE ADJUSTMENT MECHANISM

Customer Class And Charge	Previously Effective Rates			Currently Effective Rates				
	Base Rate	SIR Base Rate	Base Rate w/o SIR Base Rate	PBR ADJ %	PBR Adjusted Base Rate	Energy Eff. %	SIR Base Rate	TOTAL Base Rate
	Note 1/	Note 2/	(B) – (C)	Note 3/	(1+E) * (D)	Note 4/	Note 5/	(F) x (1 + G) + (H)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
G-50								
Customer Charge	$19.00	TBD	$19.00	TBD	TBD	TBD	$0.00	$19.00
Peak	0.2818	TBD	0.2818	TBD	TBD	TBD	0.0000	0.2818
Off-Peak	0.2818	TBD	0.2818	TBD	TBD	TBD	0.0000	0.2818
G-41								
Customer Charge	$65.00	TBD	$65.00	TBD	TBD	TBD	$0.00	$65.00
Peak	0.1920	TBD	0.1920	TBD	TBD	TBD	0.0000	0.1920
Off-Peak	0.1216	TBD	0.1216	TBD	TBD	TBD	0.0000	0.1216
G-51								
Customer Charge	$65.00	TBD	$65.00	TBD	TBD	TBD	$0.00	$65.00
Peak	0.1774	TBD	0.1774	TBD	TBD	TBD	0.0000	0.1774
Off-Peak	0.0826	TBD	0.0826	TBD	TBD	TBD	0.0000	0.0826
G-42								
Customer Charge	$213.00	TBD	$213.00	TBD	TBD	TBD	$0.00	$213.00
Peak	0.1794	TBD	0.1794	TBD	TBD	TBD	0.0000	0.1794
Off-Peak	0.0778	TBD	0.0778	TBD	TBD	TBD	0.0000	0.0778
G-52								
Customer Charge	$213.00	TBD	$213.00	TBD	TBD	TBD	$0.00	$213.00
Peak	0.1682	TBD	0.1682	TBD	TBD	TBD	0.0000	0.1682
Off-Peak	0.0657	TBD	0.0657	TBD	TBD	TBD	0.0000	0.0657
G-43								
Customer Charge	$781.00	TBD	$781.00	TBD	TBD	TBD	$0.00	$781.00
Peak	0.0507	TBD	0.0507	TBD	TBD	TBD	0.0000	0.0507
Off-Peak	0.0193	TBD	0.0193	TBD	TBD	TBD	0.0000	0.0193
Peak Demand	2.1586	TBD	2.1586	TBD	TBD	TBD	0.0000	2.1586
Off-Peak Demand	0.6713	TBD	0.6713	TBD	TBD	TBD	0.0000	0.6713

ANNUAL BASE RATE ADJUSTMENT MECHANISM

Customer Class And Charge	Previously Effective Rates			Currently Effective Rates				
	Base Rate	SIR Base Rate	Base Rate w/o SIR Base Rate	PBR ADJ %	PBR Adjusted Base Rate	Energy Eff. %	SIR Base Rate	TOTAL Base Rate
	Note 1/	Note 2/	(B) – (C)	Note 3/	(1+E) * (D)	Note 4/	Note 5/	(F) x (1 + G) + (H)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
G-53								
Customer Charge	$781.00	TBD		TBD	TBD	TBD	$0.00	$781.00
Peak	0.0507	TBD		TBD	TBD	TBD	0.0000	0.0507
Off-Peak	0.0193	TBD		TBD	TBD	TBD	0.0000	0.0193
Peak Demand	2.1586	TBD	2.1586	TBD	TBD	TBD	0.0000	2.1586
Off-Peak Demand	0.6713	TBD	0.6713	TBD	TBD	TBD	0.0000	0.6713

Notes: 1/ From Column (I) of the previous year's Annual Base Rate Adjustment Filing Rate Table.
2/ From Column (H) of the previous year's Annual Base Rate Adjustment Filing.
3/ Calculated in accordance with Section 7.4.
4/ Calculated in accordance with Section 8.3.
5/ Calculated in accordance with Section 9.7.
TBD – To be determined initially in the Company's first Annual Base Adjustment Mechanism filing.

Issued by: Stephen H. Bryant
President

Issued On: April 27, 2005
Effective: June 1, 2005

Bay State Gas Company
Annual Base Rate Adjustment Mechanism

Illustrative Calculation

		Previous Year				Current Year				
Line	Description	Base Rate	SIR Base Rate	Base Rate w/o SIR Rate (B) - (C)	PBR Adj. % 1/	PBR Adj. Base Rate (1 + E) x (D)	Energy Eff. Adj % 2/	SIR Base Rate	Total Base Rate (F) x (1+G) + (H)	Billing Determinats
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	R-1									
2	Bills	$ 12.05	$ 0.45	$ 11.60	2.10%	$ 11.84	0.00%	$ 0.70	$ 12.55	380,501
3	Winter Period Head Block	0.2486	0.0092	0.2393	0.32%	0.2401	0.31%	0.0145	0.2553	1,604,466
4	Winter Period Tail Block	0.2003	0.0074	0.1928	0.32%	0.1935	0.93%	0.0117	0.2070	1,857,106
5	Summer Period Head Block	0.2486	0.0092	0.2393	0.32%	0.2401	0.22%	0.0145	0.2551	1,389,418
6	Summer Period Tail Block	0.2003	0.0074	0.1928	0.32%	0.1935	0.86%	0.0117	0.2068	1,079,447
7	**Total R-1**				**1.70%**					
8										
9	R-2									
10	Bills	$ 6.49	$ 0.24	$ 6.25	2.10%	$ 6.38	0.00%	$ 0.38	$ 6.76	20,014
11	Winter Period	0.1203	0.0045	0.1158	0.77%	0.1167	0.60%	0.0070	0.1244	280,669
12	Summer Period	0.1203	0.0045	0.1158	0.77%	0.1167	0.51%	0.0070	0.1243	185,060
13	**Total R-2**				**1.70%**					
14										
15	R-3									
16	Bills	$ 12.57	$ 0.47	$ 12.10	2.10%	$ 12.35	0.00%	$ 0.73	$ 13.09	2,450,273
17	Winter Period Head Block	0.3306	0.0123	0.3183	1.51%	0.3231	0.43%	0.0193	0.3437	98,515,583
18	Winter Period Tail Block	0.2309	0.0086	0.2224	1.51%	0.2257	1.10%	0.0135	0.2417	86,449,543
19	Summer Period Head Block	0.3306	0.0123	0.3183	1.51%	0.3231	0.32%	0.0193	0.3434	27,905,036
20	Summer Period Tail Block	0.2309	0.0086	0.2224	1.51%	0.2257	0.54%	0.0135	0.2404	13,769,925
21	**Total R-3**				**1.70%**					
22										
23	R-4									
24	Bills	$ 6.49	$ 0.24	$ 6.25	2.10%	$ 6.38	0.00%	$ 0.38	$ 6.76	216,221
25	Winter Period Head Block	0.0736	0.0027	0.0708	1.34%	0.0718	0.71%	0.0043	0.0766	16,977,998
26	Summer Period Head Block	0.0736	0.0027	0.0708	1.34%	0.0718	0.39%	0.0043	0.0763	4,165,204
27	**Total R-4**				**1.70%**					
28										
29	OL									
30	Bills	$ 2.68	$ 0.10	$ 2.58	1.70%	$ 2.62	0.00%	$ 0.16	$ 2.78	144
31	**Total OL**				**1.70%**					
32										
33	G-40									
34	Bills	$ 19.73	$ 0.73	$ 19.00	2.10%	$ 19.40	0.00%	$ 1.15	$ 20.55	200,206
35	Winter Period	0.3210	0.0119	0.3090	1.50%	0.3137	0.77%	0.0187	0.3348	22,497,947
36	Summer Period	0.3210	0.0119	0.3090	1.50%	0.3137	0.51%	0.0187	0.3340	2,713,289
37	**Total G-40**				**1.70%**					
38										
39	G-50									
40	Bills	$ 19.73	$ 0.73	$ 19.00	2.10%	$ 19.40	0.00%	$ 1.15	$ 20.55	39,908
41	Winter Period	0.2926	0.0109	0.2818	1.49%	0.2860	0.41%	0.0171	0.3042	3,109,876
42	Summer Period	0.2926	0.0109	0.2818	1.49%	0.2860	0.23%	0.0171	0.3037	2,134,110
43	**Total G-50**				**1.70%**					

NOTES: 1/ For illustrative purposes, using PBR % adjustment of 1.7%, consisting of (1) inflation adjustment of 2.1% & (2) productivity and consumer dividend offset of 0.4%.
2/ Percentages used for illustrative purposes. EE Adj.% = (prior YR Billing Determinants ("BD") / [BD - EE Therms]) - 1.

Bay State Gas Company
Annual Base Rate Adjustment Mechanism

Illustrative Calculation

		Previous Year			Current Year					
line	Description	Base Rate	SIR Base Rate	Base Rate w/o SIR Rate (B) - (C)	PBR Adj. % 1/	PBR Adj. Base Rate (1 + E) x (D)	Energy Eff. Adj % 2/	SIR Base Rate	Total Base Rate (F) x (1+G) + (H)	Billing Determinats
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
44										
45	G-41									
46	Bills	$ 67.51	$ 2.51	$ 65.00	2.10%	$ 66.37	0.00%	$ 3.94	$ 70.30	56,195
47	Winter Period	0.1994	0.0074	0.1920	1.55%	0.1949	1.12%	0.0116	0.2088	46,519,987
48	Summer Period	0.1263	0.0047	0.1216	1.55%	0.1235	1.24%	0.0074	0.1324	7,640,605
49	**Total G-41**				**1.70%**					
50										
51	G-51									
52	Bills	$ 67.51	$ 2.51	$ 65.00	2.10%	$ 66.37	0.00%	$ 3.94	$ 70.30	21,073
53	Winter Period	0.1843	0.0069	0.1774	1.52%	0.1801	0.98%	0.0107	0.1926	12,740,904
54	Summer Period	0.0858	0.0032	0.0826	1.52%	0.0838	0.72%	0.0050	0.0894	8,628,479
55	**Total G-51**				**1.70%**					
56										
57	G-42									
58	Bills	$ 221.22	$ 8.22	$ 213.00	2.10%	$ 217.47	0.00%	$ 12.90	$ 230.37	7,432
59	Winter Period	0.1863	0.0069	0.1794	1.61%	0.1823	0.00%	0.0109	0.1931	36,806,379
60	Summer Period	0.0808	0.0030	0.0778	1.61%	0.0791	0.00%	0.0047	0.0838	7,329,027
61	**Total G-42**				**1.70%**					
62										
63	G-52									
64	Bills	$ 221.22	$ 8.22	$ 213.00	2.10%	$ 217.47	0.00%	$ 12.90	$ 230.37	2,989
65	Winter Period	0.1747	0.0065	0.1682	1.62%	0.1710	0.00%	0.0102	0.1811	14,756,628
66	Summer Period	0.0682	0.0025	0.0657	1.62%	0.0667	0.00%	0.0040	0.0707	10,748,640
67	**Total G-52**				**1.70%**					
68										
69	G-43									
70	Bills	$ 811.15	$ 30.15	$ 781.00	2.10%	$ 797.40	0.00%	$ 47.30	$ 844.70	181
71	Winter Period	0.0526	0.0020	0.0507	1.65%	0.0515	0.00%	0.0031	0.0546	7,211,204
72	Summer Period	0.0201	0.0007	0.0193	1.65%	0.0196	0.00%	0.0012	0.0208	2,256,827
73	Peak Demand	2.1593	0.0007	2.1586	1.65%	2.1943	0.00%	0.0012	2.1954	342,526
74	Offpeak Demand	0.6721	0.0007	0.6713	1.65%	0.6824	0.00%	0.0012	0.6836	103,257
75	**Total G-43**				**1.70%**					
76										
77	G-53									
78	Bills	$ 811.15	$ 30.15	$ 781.00	2.10%	$ 797.40	0.00%	$ 47.30	$ 844.70	799
79	Winter Period	0.0526	0.0020	0.0507	1.66%	0.0515	0.00%	0.0031	0.0546	28,655,953
80	Summer Period	0.0201	0.0007	0.0193	1.66%	0.0196	0.00%	0.0012	0.0208	25,566,274
81	Peak Demand	2.1593	0.0007	2.1586	1.66%	2.1943	0.00%	0.0012	2.1955	1,388,815
82	Offpeak Demand	0.6721	0.0007	0.6713	1.66%	0.6825	0.00%	0.0012	0.6836	1,184,822
83	**Total G-53**				**1.70%**					

NOTES: 1/ For illustrative purposes, using PBR % adjustment of 1.7%, consisting of (1) inflation adjustment of 2.1% & (2) productivity and consumer dividend offset of 0.4%.
2/ Percentages used for illustrative purposes. EE Adj.% = (prior YR Billing Determinants ("BD") / [BD - EE Therms]) - 1.

Bay State Gas Company
Steel Infrastructure Replacement Step Adjustment
Sample Calculation

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter
1	**Rates Approved in DTE-05-27**										
2											
3	Monthly Customer Charge	NA	$12.10	$6.25	NA	$11.60	$6.25	$2.58	$19.00	$19.00	$65.00
4	Winter Volumetric Rates										
5	First Block Rate	NA	$0.3183	$0.0708	NA	$0.2393	$0.1158		$0.3090	$0.2818	$0.1920
6	Second Block Rate	NA	$0.2224	$0.0000	NA	$0.1928	$0.0000				
7	Summer Volumetric Rates										
8	First Block Rate	NA	$0.3183	$0.0708	NA	$0.2393	$0.1158		$0.3090	$0.2818	$0.1216
9	Second Block Rate	NA	$0.2224	$0.0000	NA	$0.1928	$0.0000				
10	Demand Rate										
11	Winter	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Summer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13											
14	**Billing Determinants**										
15											
16	**Number of Bills**										
17	Total - Annual		2,450,273	216,221		380,501	20,014	144	200,206	39,908	56,195
18	Total - Winter		1,227,802	113,631		184,442	10,311	72	101,314	20,171	27,961
19	Total - Summer		1,222,471	102,590		196,059	9,703	72	98,892	19,737	28,234
20											
21	**First Block Therms**										
22	Total First Block - Winter		125,056,889	11,479,005		1,561,278	126,591	1,395	22,497,947	3,109,876	46,519,987
23	Total First Block- Summer		27,905,036	2,411,584		1,389,418	75,655	1,333	2,713,289	2,134,110	7,640,605
24											
25	**Second Block Therms**										
26	Total Second Block - Winter		59,908,237	5,498,993		1,900,294	154,078	0	0	0	0
27	Total Second Block- Summer		13,769,925	1,753,620		1,079,447	109,405	0	0	0	0
28											
29	**Total Therms**										
30	Total Therms - Annual		226,640,087	21,143,202		5,930,437	465,729	2,728	25,211,236	5,243,986	54,160,592
31	Total Therms - Winter		184,965,126	16,977,998		3,461,572	280,669	1,395	22,497,947	3,109,876	46,519,987
32	Total Therms - Summer		41,674,961	4,165,204		2,468,865	185,060	1,333	2,713,289	2,134,110	7,640,605
33											
34	**Peak Day Therms**										
35	Total Peak Therms - Winter										
36	Total Peak Therms - Summer										
37											
38	**Revenue Generated**										
39	Monthly Customer Charge		$29,648,303	$1,351,381		$4,413,812	$125,088	$371	$3,803,914	$758,252	$3,652,675
40	Winter Volumetric Rates										
41	First Block Rate		$39,802,475	$812,907		$373,664	$14,662		$6,952,816	$876,231	$8,930,431
42	Second Block Rate		$13,320,681	$0		$366,468	$0				
43	Summer Volumetric Rates										
44	First Block Rate		$8,881,474	$170,781		$332,532	$8,762		$838,521	$601,301	$929,450
45	Second Block Rate		$3,061,762	$0		$208,169	$0				
46	Demand Rate										

Bay State Gas Company
Steel Infrastructure Replacement Step Adjustment
Sample Calculation

line	Description	C&I (51) Med. Annual Low Winter	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Company Total
1	**Rates Approved in DTE-05-27**						
2							
3	Monthly Customer Charge	$65.00	$213.00	$213.00	$781.00	$781.00	
4	Winter Volumetric Rates						
5	First Block Rate	$0.1774	$0.1794	$0.1682	$0.0507	$0.0507	
6	Second Block Rate						
7	Summer Volumetric Rates						
8	First Block Rate	$0.0826	$0.0778	$0.0657	$0.0193	$0.0193	
9	Second Block Rate						
10	Demand Rate						
11	Winter	NA	NA	NA	$2.16	$2.16	
12	Summer	NA	NA	NA	$0.67	$0.67	
13							
14	**Billing Determinants**						
15							
16	**Number of Bills**						
17	Total - Annual	21,073	7,432	2,989	181	799	3,395,936
18	Total - Winter	10,718	3,662	1,530	92	410	1,702,116
19	Total - Summer	10,355	3,770	1,459	89	389	1,693,820
20							
21	**First Block Therms**						
22	Total First Block - Winter	12,740,904	36,806,379	14,756,628	7,211,204	28,655,953	
23	Total First Block- Summer	8,628,479	7,329,027	10,748,640	2,256,827	25,566,274	
24							
25	**Second Block Therms**						
26	Total Second Block - Winter	0	0	0	0	0	
27	Total Second Block- Summer	0	0	0	0	0	
28							
29	**Total Therms**						
30	Total Therms - Annual	21,369,383	44,135,406	25,505,268	9,468,031	54,222,227	493,498,312
31	Total Therms - Winter	12,740,904	36,806,379	14,756,628	7,211,204	28,655,953	
32	Total Therms - Summer	8,628,479	7,329,027	10,748,640	2,256,827	25,566,274	
33							
34	**Peak Day Therms**						
35	Total Peak Therms - Winter				342,526	1,388,815	
36	Total Peak Therms - Summer				103,257	1,184,822	
37							
38	**Revenue Generated**						
39	Monthly Customer Charge	$1,369,745	$1,583,016	$636,657	$141,361	$624,019	
40	Winter Volumetric Rates						
41	First Block Rate	$2,260,849	$6,601,674	$2,482,472	$365,300	$1,451,633	
42	Second Block Rate						
43	Summer Volumetric Rates						
44	First Block Rate	$712,414	$570,256	$705,791	$43,606	$493,985	
45	Second Block Rate						
46	Demand Rate						

Bay State Gas Company
Steel Infrastructure Replacement Step Adjustment
Sample Calculation

line	Description	Residential Heating Total	Residential Heating R&T-3	Residential Heating (4) Low-Income	Residential Non-Heating Total	Residential Non-Heating R&T-1	Residential Non-Heat (2) Low-Income	Outdoor Lighting	C&I (40) Low Annual High Winter	C&I (50) Low Annual Low Winter	C&I (41) Med. Annual High Winter
47	Winter										
48	Summer										
49	TOTAL		$94,714,695	$2,335,069		$5,694,645	$148,511	$371	$11,595,251	$2,235,784	$13,512,556
50											
51	**Allocation Percentages**										
52											
53	Monthly Customer Charge		19.14%	0.87%		2.85%	0.08%	0.00%	2.46%	0.49%	2.36%
54	Winter Volumetric Rates										
55	First Block Rate		25.70%	0.52%		0.24%	0.01%	0.00%	4.49%	0.57%	5.77%
56	Second Block Rate		8.60%	0.00%		0.24%	0.00%	0.00%	0.00%	0.00%	0.00%
57	Summer Volumetric Rates										
58	First Block Rate		5.73%	0.11%		0.21%	0.01%	0.00%	0.54%	0.39%	0.60%
59	Second Block Rate		1.98%	0.00%		0.13%	0.00%	0.00%	0.00%	0.00%	0.00%
60	Demand Rate										
61	Winter										
62	Summer										
63	TOTAL		61.15%	1.51%		3.68%	0.10%	0.00%	7.49%	1.44%	8.72%
64											
65	**Revenue Increment**										
66	(Exh. BSG/JES-1; Sch. JES-17; page 1)										
67	Year One										
68	Year Two										
69	Total										
70											
71	**Allocated Revenue Increment**										
72											
73	Monthly Customer Charge		$1,795,604	$81,844		$267,316	$7,576	$22	$230,378	$45,922	$221,219
74	Winter Volumetric Rates										
75	First Block Rate		$2,410,575	$49,232		$22,630	$888		$421,087	$53,068	$540,858
76	Second Block Rate		$806,746	$0		$22,195	$0				
77	Summer Volumetric Rates										
78	First Block Rate		$537,893	$10,343		$20,139	$531		$50,784	$36,417	$56,291
79	Second Block Rate		$185,431	$0		$12,607	$0				
80	Demand Rate										
81	Winter										
82	Summer										
83	TOTAL		$5,736,249	$141,420		$344,887	$8,994	$22	$702,248	$135,407	$818,367
84											
85	**Incremental Charge**										
86											
87	Monthly Customer Charge		$0.73	$0.38		$0.70	$0.38	$0.16	$1.15	$1.15	$3.94
88	Winter Volumetric Rates										
89	First Block Rate		$0.0193	$0.0043		$0.0145	$0.0070		$0.0187	$0.0171	$0.0116
90	Second Block Rate		$0.0135			$0.0117					
91	Summer Volumetric Rates										
92	First Block Rate		$0.0193	$0.0043		$0.0145	$0.0070		$0.0187	$0.0171	$0.0074
93	Second Block Rate		$0.0135			$0.0117					
94	Demand Rate										
95	Winter										
96	Summer										

Bay State Gas Company
Steel Infrastructure Replacement Step Adjustment
Sample Calculation

line	Description	C&I (51) Med. Annual Low Winter	C&I (42) High Annual High Winter	C&I (52) High Annual Low Winter	C&I (43) Ex. High Ann. High Winter	C&I (53) Ex. High Ann. Low Winter	Company Total
47	Winter				$739,364	$2,997,844	
48	Summer				$69,320	$795,411	
49	TOTAL	$4,343,008	$8,754,946	$3,824,920	$1,358,950	$6,362,892	$154,881,599
50							
51	**Allocation Percentages**						
52							
53	Monthly Customer Charge	0.88%	1.02%	0.41%	0.09%	0.40%	
54	Winter Volumetric Rates						
55	First Block Rate	1.46%	4.26%	1.60%	0.24%	0.94%	
56	Second Block Rate	0.00%	0.00%	0.00%	0.00%	0.00%	
57	Summer Volumetric Rates						
58	First Block Rate	0.46%	0.37%	0.46%	0.03%	0.32%	
59	Second Block Rate	0.00%	0.00%	0.00%	0.00%	0.00%	
60	Demand Rate						
61	Winter				0.48%	1.94%	
62	Summer				0.04%	0.51%	
63	TOTAL	2.80%	5.65%	2.47%	0.88%	4.11%	100.00%
64							
65	**Revenue Increment**						
66	(Exh. BSG/JES-1; Sch. JES-17; page 1)						
67	Year One						$5,979,860
68	Year Two						$3,400,305
69	Total						$9,380,165
70							
71	**Allocated Revenue Increment**						
72							
73	Monthly Customer Charge	$82,956	$95,873	$38,558	$8,561	$37,793	
74	Winter Volumetric Rates						
75	First Block Rate	$136,925	$399,820	$150,347	$22,124	$87,916	
76	Second Block Rate						
77	Summer Volumetric Rates						
78	First Block Rate	$43,146	$34,537	$42,745	$2,641	$29,917	
79	Second Block Rate						
80	Demand Rate						
81	Winter				$44,778	$181,560	
82	Summer				$4,198	$48,173	
83	TOTAL	$263,028	$530,230	$231,650	$82,303	$385,359	$9,380,165
84							
85	**Incremental Charge**						
86							
87	Monthly Customer Charge	$3.94	$12.90	$12.90	$47.30	$47.30	
88	Winter Volumetric Rates						
89	First Block Rate	$0.0107	$0.0109	$0.0102	$0.0031	$0.0031	
90	Second Block Rate						
91	Summer Volumetric Rates						
92	First Block Rate	$0.0050	$0.0047	$0.0040	$0.0012	$0.0012	
93	Second Block Rate						
94	Demand Rate						
95	Winter				$0.13	$0.13	
96	Summer				$0.04	$0.04	