## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF DELTA NATURAL GAS COMPANY, ) CASE NO. INC. FOR AN ADJUSTMENT OF RATES ) 2010-00116

# ORDER

Delta Natural Gas Company, Inc. ("Delta") is a Kentucky corporation that purchases, sells, stores, and transports natural gas to approximately 37,000 consumers in 23 counties in Kentucky. Delta has three wholly-owned unregulated subsidiaries that are engaged in the purchase and sale of natural gas. <sup>2</sup>

## **BACKGROUND**

On March 16, 2010, Delta filed notice of its intent to apply for an increase in its base rates for gas service. On April 23, 2010, Delta filed its application, which included new rates to produce additional annual revenues of \$5,315,428, an increase of 11.54 percent, to be effective May 23, 2010. Finding that additional proceedings were necessary to determine the reasonableness of the request, the Commission, pursuant

<sup>&</sup>lt;sup>1</sup> Delta serves the following counties: Bath, Bell, Bourbon, Clark, Clay, Estill, Fayette, Fleming, Garrard, Jackson, Jessamine, Knox, Laurel, Lee, Leslie, Madison, Mason, Menifee, Montgomery, Powell, Robertson, Rowan, and Whitley.

<sup>&</sup>lt;sup>2</sup> The three subsidiaries are Delta Resources, Inc. ("Delta Resources"), Delgasco, Inc. ("Delgasco"), and Enpro, Inc. ("Enpro"). Delta Resources buys gas and resells it to industrial or other large-use customers on Delta's system. Delgasco buys gas and resells it to Delta Resources and to customers not on Delta's system. Enpro owns and operates production properties and undeveloped acreage that produce a small amount of natural gas and oil that is sold on the unregulated market.

to KRS 278.190(2), suspended the proposed rates for five months, up to and including October 22, 2010.

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"), requested and was granted full intervention in this proceeding. The AG issued information requests but did not file testimony or a written brief.

On May 7, 2010, the Commission issued a procedural schedule that provided for discovery, intervenor testimony, and rebuttal testimony by Delta. On August 24, 2010, based on its responses to various information requests and corrections to some items in its application, Delta filed an update to its application. The update resulted in increasing the amount of Delta's previously stated revenue deficiency to \$5,357,875.

A public hearing was held on August 31, 2010 and September 1, 2010. The hearing was continued on September 30, 2010 to allow for public comment after one newspaper failed to publish public notice of the original hearing. There were no public comments at the September 30 continuation hearing. On October 8, 2010, Delta filed its post-hearing brief. All information requested at the public hearing has been filed and the case now stands submitted for a decision.

#### TEST PERIOD

Delta proposed the 12-month period ending December 31, 2009 as the test period for determining the reasonableness of its proposed gas rates. The Commission finds that the use of the 12-month period ending December 31, 2009 as the test period in this proceeding is reasonable. In utilizing a historic test period, the Commission has given full consideration to appropriate known and measurable changes.

## RATE BASE

Delta proposed a rate base of \$110,358,397³ based on the approach the Commission has generally used to determine the rate base in previous Delta rate cases. The Commission has determined Delta's rate base following the same approach. The cash working capital allowance has been adjusted to reflect the accepted pro forma adjustments to operation and maintenance expenses as discussed later in this Order.

Accordingly, we find Delta's rate base for rate-making purposes as of December 31, 2009 to be as follows:

| Total Utility Plant in Service   | \$194,819,356   |
|--|---|
| Add:   |   |
| Materials & Supplies   | 596,121   |
| Prepayments  | 1,631,110   |
| Gas in Storage   | 7,985,970   |
| Unamortized Debt Expense   | 4,542,382   |
| Cash Working Capital Allowance   | <u> 1,599,417</u>   |
| Subtotal   | \$ 16,355,000   |
| Deduct:     Accumulated Depreciation     Customer Advances for Construction     Accumulated Deferred Income Taxes Subtotal | 71,887,911<br>54,605<br><u>29,427,209</u><br>\$ 101,369,725 |
| Rate Base  | <u>\$109,804,631</u>  |

<sup>&</sup>lt;sup>3</sup> Application, Tab 27, Schedule 6. Delta recalculated the rate base to recognize the correction or revision of some items. The revised rate base amount was \$109,855,579 (August 24, 2010, Revised Tab 27, Schedule 6). Delta calculated a revised revenue increase based on its revised rate base.

## CAPITALIZATION

In its application, Delta proposed an adjusted capitalization of \$126,967,066.<sup>4</sup> Included in Delta's capitalization was an adjustment to remove its equity investment in subsidiaries and to remove the impact of net unbilled revenues. Subsequent to Case No. 2004-00067,<sup>5</sup> Delta began recording unbilled revenues for Generally Accepted Accounting Principles financial reporting. Delta eliminated the impact of recording unbilled revenues on common equity in order to be consistent with previous rate cases.

The Commission agrees with Delta's test-year-end capitalization. Components of Delta's capitalization are as follows:

| Long-Term Debt  | \$ 58,459,000       |
|-----------------|---------------------|
| Short-Term Debt | 12,015,728          |
| Common Equity   | <u>56,492,338</u>   |
| . ,             | •                   |
|                 | <b>#400 007 000</b> |

Total Capitalization

<u>\$126,967,066</u>

The capitalization reflects the removal of the equity investment in Delta's subsidiaries and the impact of the unbilled revenues adjustment, as proposed by Delta.

# REVENUES AND EXPENSES

For the test year, Delta reported actual net operating income of \$6,968,511.<sup>6</sup> Delta proposed a series of adjustments to revenues and expenses to reflect more current and anticipated operating conditions, resulting in an adjusted net operating

<sup>&</sup>lt;sup>4</sup> Application, Tab 27, Schedule 8.

<sup>&</sup>lt;sup>5</sup> Case No. 2004-00067, Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates (Ky. PSC Dec. 21, 2004).

<sup>&</sup>lt;sup>6</sup> Application, Tab 42, Schedule 2.

income of \$6,212,536.<sup>7</sup> On August 24, 2010 and following discovery, Delta revised certain adjustments reported in its application. The Commission finds that all but three of the adjustments proposed in Delta's application and subsequently revised on August 24, 2010 are reasonable and should be accepted. The revised adjustments and the three disputed adjustments are discussed in more detail in this section.

## Revenue Normalization

Delta proposes to normalize base rate revenues for the test year to reflect current rates and normal weather conditions (temperatures). Delta proposed to use actual customer levels and volumes during the test year as opposed to making a year-end customer adjustment.

# Gas Cost Adjustment ("GCA") - Adjustment for Current Factor

In its application, Delta used its then-current GCA of \$6.0360 per Mcf. On June 24, 2010, Delta filed Case No. 2010-00254,<sup>8</sup> which revised its GCA to \$7.4664 per Mcf, effective July 26, 2010. The Commission has reflected the GCA amount approved in Case No. 2010-00254 in both the gas cost revenues and expenses.

# Year-End Customer Adjustment

Delta requested that no year-end customer adjustment be made to normalize annual revenues, since it has been consistently losing customers. Delta states that a level of revenues associated with the year-end number of customers would overstate the going-forward level of revenues and that the number of customers in December

<sup>&</sup>lt;sup>7</sup> <u>ld.</u>

<sup>&</sup>lt;sup>8</sup> Case No. 2010-00254, Purchased Gas Adjustment Filing of Delta Natural Gas Company, Inc. (Ky. PSC July 14, 2010).

2009 will almost certainly be higher than the average number of customers during the first full year that revised rates will be in effect.

The Commission finds that a year-end customer adjustment would be inappropriate given Delta's history of customer loss. The record supports Delta's position that it is unlikely that revenues normalized to reflect a heating season level of customers would be representative of the actual number of customers billed over the course of 12 months.

## Pension Expense

In its application, Delta did not propose an adjustment to its test-year pension expense of \$824,000. In responses to information requests, Delta indicated that its actuary had determined the net periodic pension expense for the 2010 fiscal year would be \$1,040,000.<sup>9</sup> Delta subsequently submitted a more current analysis from its actuary that showed that the net periodic pension expense for the 2010-2011 fiscal year would be \$1,128,632.<sup>10</sup>

The Commission has previously recognized the results of current actuarial studies in determining the reasonable level of pension expense for rate-making purposes.<sup>11</sup> Delta has provided two actuarial reports that both indicate its pension

<sup>&</sup>lt;sup>9</sup> Response to AG's Initial Requests for Information dated June 8, 2010, Item
61. Delta's fiscal year runs from July 1 through June 30 of the following year.

<sup>&</sup>lt;sup>10</sup> Updated Response to the AG's Initial Requests for Information dated June 8, 2010, Item 60, filed August 19, 2010.

<sup>&</sup>lt;sup>11</sup> <u>See</u> Case No. 2000-00373, Adjustment of Rates of Jackson Energy Cooperative Corporation (Ky. PSC May 21, 2001) at 13-14; and Case No. 2001-00244, Adjustment of Rates of Fleming-Mason Energy Cooperative Corporation (Ky. PSC Aug. 7, 2002) at 15-16.

expense should be increased. The Commission finds that Delta's pension expense should be increased by \$304,632. The pension expense recorded by a utility is based upon the results of its actuarial studies. The pension expense identified in the actuarial report for the 2010-2011 fiscal year reflects a reasonable, ongoing level of expense that is known and measurable.

## <u>Consultant Expense – Accounting Services</u>

Delta incurred outside accounting expenses for consultation related to a tax method change and its Securities and Exchange Commission ("SEC") reporting for a Storage Gas Loss in the amounts of \$132,589 and \$4,750, respectively. In the process of discovery, Delta stated that the tax services provided by its accounting firm were an ongoing expense and have provided benefit to the ratepayer by reducing its rate base in the current test year by \$3,200,000. Delta additionally stated that it has sought a method change in each of its three most recent tax years. The Commission does not disagree with Delta's position that accounting tax services are a recurring expense, but it does disagree with the amount. The Commission has adjusted the tax-related accounting services expense incurred by Delta based on the average expense for the last three years (2007-2009), resulting in an amount of \$49,357 allowed for rate-making purposes. The commission is accounting to the average expense for the last three years (2007-2009), resulting in an amount of \$49,357 allowed for rate-making purposes.

Delta also utilized outside accounting services related to the SEC accounting treatment for its Storage Gas Loss. As discussed later in this Order, the Commission is

<sup>&</sup>lt;sup>12</sup> Delta Post-Hearing Brief, Section N.-Accounting Expense for Tax Method Change, at 22.

<sup>&</sup>lt;sup>13</sup> Item 8.a. of September 14, 2010 response to hearing data request.

disallowing the Storage Gas Loss expense. Consequently, it is not reasonable to include the expense for the outside consultant, as this represents a nonrecurring expense for Delta. Accordingly, the Commission is disallowing this expense and reducing Delta's operating expenses by \$4,750.

# Legal Expense

Delta proposed including \$157,475 in legal expenses in its test-year operating expenses.<sup>14</sup> Through discovery, Delta indicated that \$69,889 in legal expenses were directly related to one of its subsidiary companies and should not have been charged to Delta.<sup>15</sup> In the August 24, 2010 revised Tab 27, Schedule 3, Delta decreased its operating expenses by the amount of the legal expenses not attributable to Delta. The Commission agrees with this adjustment and finds that Delta's test-year operating expenses should be decreased by \$69,889.

# Insurance Expense

During the course of discovery, Delta determined that certain insurance expenses should not have been included in its test-year expenses. In its review, Delta determined that an out-of-period insurance adjustment in the amount of \$7,634 had been included.<sup>16</sup> In the August 24, 2010 update to its application, revised Tab 27, Schedule 3, Delta decreased its operating expenses by this amount to remove the

<sup>&</sup>lt;sup>14</sup> Delta's Response to Commission Staff's First Data Request dated March 31, 2010, filed May 7, 2010, Item 28.

<sup>&</sup>lt;sup>15</sup> Delta's Response to Commission Staff's Second Data Request dated May 24, 2010, filed June 8, 2010, Item 52.

<sup>&</sup>lt;sup>16</sup> Delta's Response to AG's Initial Requests for Information dated May 24, 2010, filed June 8, 2010, Item 4.

insurance expense not attributable to the test year. The Commission agrees with Delta and finds that operating expenses should be decreased \$7,634.

## Storage Gas Losses

During the test year, specifically, in April 2009, Delta recorded an expense of \$867,900 for a Storage Gas Loss. The entries made at that time were actually for the purpose of reclassifying the expense to a different account than the one where it was initially recorded in December of 2008.<sup>17</sup> In response to information requests concerning the expense, Delta stated that, in hindsight, it should have proposed treating the loss as a regulatory asset and amortizing it over three years rather than including the full amount in the determination of its revenue requirement.<sup>18</sup>

The nature and timing of this expense leads the Commission to disallow recovery of any portion of Delta's Gas Storage Loss. First, both the physical loss and Delta's initial accounting for the loss occurred prior to the test year. While there can be circumstances under which adjustments are permitted for known and measurable post-test-year events or costs, there is neither justification nor precedent for including a pre-test-year expense in the test year for the purpose of determining a utility's revenue requirement.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Delta estimates that the actual physical loss of gas from its Canada Mountain gas storage field occurred during late 2006 and 2007.

<sup>&</sup>lt;sup>18</sup> Delta reflected a three-year amortization of the expense in the August 24, 2010 update of its application.

<sup>&</sup>lt;sup>19</sup> The exception to this statement occurs when a utility has received Commission approval to create a regulatory asset and defer an expense to a future period.

While creating a regulatory asset may permit a pre-test-year cost to be deferred and included, partially or fully, in the determination of a utility's revenue requirement, the time has passed for considering the creation of a regulatory asset for this particular expense item. As confirmed at the hearing, the expense was recorded in December 2008 and reclassified in April 2009. It was reflected in Delta's earnings in calendar year 2008. The time to have sought to defer the expense as a regulatory asset would have been when Delta could still remove the expense from its books of account, not 18 months after its books were closed for calendar year 2008.

If the Commission were to now allow Delta to increase its revenues to recover this cost on an amortized basis, as Delta suggested both in data responses and in its August 24, 2010 update to its application, there would be no expense on its books of account to match against, or offset, the additional revenue. Such a result is contrary to the basic reason for creating a regulatory asset, which is to defer a cost until a future point in time when it can be expensed and reflected in rates. To allow Delta to include this cost in rates at this time, when there will be no expense to amortize, would produce an unreasonable result. Furthermore, Delta's proposal to reflect the cost in rates after the fact constitutes retroactive rate-making, which is contrary to the basic rate-making tenet that rates are only to be set prospectively. Accordingly, we have reduced test-vear operating expenses by \$867,900 for rate-making purposes.

## **Depreciation Expense**

In conjunction with its rate application, Delta had a depreciation study performed on its utility plant in service as of December 31, 2009, the end of its test year. Delta proposed to normalize depreciation expense by applying the new proposed depreciation

rates to its test-year-end utility plant in service. In its application, Delta proposed to increase depreciation expense by \$1,311,714<sup>20</sup> and recognized a similar increase to its accumulated depreciation balance in its proposed rate base.

In response to information requests and in its August 24, 2010 update to its application, Delta acknowledged that errors contained in certain schedules of its depreciation study caused the proposed depreciation expense included in its application to be understated by \$458,363. Correction of those errors results in an increase in depreciation expense of \$1,770,077 and an equal increase to the accumulated depreciation balance.

Delta's depreciation study was performed using the same methodology approved by the Commission in Case No. 2004-00067.<sup>21</sup> The Commission finds that Delta has provided sufficient evidence of how its depreciation rates were developed and further finds that Delta's depreciation study and the resulting depreciation rates are reasonable and should be approved.

With this latest study, Delta has undertaken three depreciation studies over the past seven years. While the Commission generally directs utilities to perform depreciation studies at the earlier of five years from their current rate case or when they file their next base rate case, given the recent frequency of Delta's depreciation studies, the Commission concludes that, unless Delta's next base rate case does not occur

<sup>&</sup>lt;sup>20</sup> Application, Tab 27, Schedule 4.

<sup>&</sup>lt;sup>21</sup> Case No. 2004-00067, Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates (Ky. PSC Nov. 10, 2004).

within the next five years, the timing of its next depreciation study should be left to Delta's discretion.<sup>22</sup>

## Rate Case Expense

Delta proposed rate case expenses of \$316,355, which includes an estimated total cost of the current rate case of \$304,178 and \$12,177 remaining to be amortized of the amount permitted in Case No. 2007-00089.<sup>23</sup> Delta proposed that its estimated rate case expense be amortized over a three-year period, consistent with the Commission's treatment in recent rate cases.<sup>24</sup> Using its estimated total rate case expense, Delta proposed a decrease of \$10,948 for rate case expense, as the test-year rate case expense of \$116,400 was more than the proposed expense of \$105,452.

While the Commission agrees that Delta's test-year rate case expense should be decreased, we find that a greater decrease of \$30,298 should be reflected in Delta's adjusted operating expenses. The additional decrease reflects the Commission's longstanding practice of allowing actual rate case expenses based on the most recent data filed by the utility. The Commission has typically based the amount allowed for rate case expense on the actual rate case expenses incurred by the utility and reported in the case record through periodic updates. Delta's latest rate case expense amount,

<sup>&</sup>lt;sup>22</sup> Should Delta wait five years or more before filing its next general rate case, however, we anticipate that rate application would include a new depreciation study.

<sup>&</sup>lt;sup>23</sup> 2007-00089, Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates (Ky PSC Oct. 19, 2007)

<sup>&</sup>lt;sup>24</sup> Delta Post-Hearing Brief, Section G.-Rate Case Expenses, at 16.

through August 31, 2010, is \$213,283.<sup>25</sup> Additionally, while exceptions exist, the Commission generally has permitted amortization of a utility's actual rate case expenses over a three-year period. Accordingly, the Commission finds that Delta's updated actual rate case expenses should be amortized over a three-year period for rate-making purposes. We further find that the three-year amortization of this level of rate case expenses results in an annual expense of \$75,153 and that Delta's test-year operating expenses should be decreased by a total of \$41,247 to reflect this amount of expense.

## Income Tax Expense

Delta proposed to increase its income tax expense by \$1,009,395 to reflect the impact of its proposed adjustments on its taxable income and income tax expense. Delta included in this proposed adjustment the normalization of its long-term and short-term debt interest expense, since interest expense is an income tax deduction. The Commission finds that Delta's proposed approach is reasonable. The Commission has calculated an income tax expense adjustment reflecting the adjustments to revenues and expenses discussed in this Order and using the rate base and capital structure found reasonable herein. Therefore, the Commission finds that Delta's income tax expense for rate-making purposes should be increased by an additional \$154,601, for a total increase of \$1,163,996.

<sup>&</sup>lt;sup>25</sup> Updated response to Staff's First Data Request, Item 52c, dated March 31, 2010, filed September 28, 2010.

<sup>&</sup>lt;sup>26</sup> August 24, 2010 Revised Tab 27, Schedule 7.

# Pro Forma Net Operating Income Summary

After consideration of all pro forma adjustments and applicable income taxes, the adjusted net operating income for Delta is as follows:

Operating Revenues \$ 50,352,194 Operating Expenses \$ 43,596,770

Adjusted Net Operating Income \$ 6,755,424

# RATE OF RETURN

# Capital Structure

Delta proposed an adjusted test-year-end capital structure containing 46.04 percent long-term debt, 9.46 percent short-term debt, and 44.49 percent common equity.<sup>27</sup> As discussed previously in this Order, Delta's proposed capital structure reflects the removal of its equity investment in subsidiaries and the impact of unbilled revenues. Based on its review of all the relevant evidence, the Commission finds that Delta's capital structure is appropriate as proposed.

# Cost of Debt

In its application, Delta proposed a cost of long-term debt of 6.83 percent and short-term debt of 2.04 percent.<sup>28</sup> In its August 24, 2010 revised Schedule 8, Delta indicated that, while the cost of its long-term debt is fixed, the cost of its short-term debt is variable and the current cost of short-term debt was 2.096 percent.<sup>29</sup>

<sup>&</sup>lt;sup>27</sup> Application, Tab 27, Schedule 8.

<sup>&</sup>lt;sup>28</sup> Application, Tab 27, Schedule 8. Delta's cost of short-term debt reflects a weighted average calculation that recognizes the stated cost of short-term debt and a 0.125 percent cost associated with Delta's unused line of credit balance.

<sup>&</sup>lt;sup>29</sup> Revised Tab 27, Schedule 8, August 24, 2010.

The Commission finds it appropriate to recognize the most current cost rates for debt when determining the overall cost of capital for Delta. Revisions to Delta's debt-cost rates constitute known and measurable adjustments. Using these updates, rather than the test-year-end cost rates, is more representative of the period during which the rates established in this Order will be in effect. These cost rates will be applied to the capital structure determined herein. Therefore, the Commission finds the cost of long-term debt to be 6.83 percent and the cost of short-term debt to be 2.096 percent.<sup>30</sup>

# Return on Equity

Delta estimated its required return on equity ("ROE") using the discounted cash flow method ("DCF"), the capital asset pricing model ("CAPM"), a risk premium analysis, and an analysis of companies with corresponding risk to Delta. Based on the results of these analyses, Delta determined a reasonable ROE range to be 11.28 to 15.08 percent and proposed an ROE of 12 percent, "which is the average return on equity for the 201 companies in the Value Line Survey that have the same risk as Delta as measured by a beta of .65."

As part of the analysis supporting its proposed ROE, Delta compared its own results to a group of publicly traded, investor-owned natural gas distribution companies chosen from a December 31, 2009 report issued by Edward Jones Company ("Edward Jones").<sup>32</sup> The comparison indicated that Delta had the third-lowest capitalization and

<sup>&</sup>lt;sup>30</sup> Delta calculated this cost of short-term debt following the same approach as outlined in Tab 27, Schedule 8, of the Application.

<sup>&</sup>lt;sup>31</sup> Blake Direct Testimony at 30.

<sup>&</sup>lt;sup>32</sup> Blake Direct Testimony at 6.

the second-lowest equity percentage.<sup>33</sup> Delta also demonstrated that, on a consolidated basis, it had earned its allowed ROE only once during the 15-year period from 1995 to 2009 and that its regulated business operations never earned the allowed ROE during that period.<sup>34</sup> Delta asserted that its rates did not provide an opportunity to earn an adequate return and stated that its relatively low equity ratio, rural service area, customer conservation in response to higher gas prices, and appliance efficiency gains all contribute to its inability to earn its awarded ROE. According to Delta, these issues make it a riskier investment than that of other gas distribution companies and indicate that a higher ROE is necessary. Delta cited additional factors to support its ROE request, such as its small size, competition with local electric utilities, and the carrying costs for under-recoveries incurred through its Gas Cost Recovery ("GCR") mechanism.

Delta's ROE determination included two DCF analyses using a proxy group of 11 companies drawn from the Edward Jones panel of natural gas distribution utilities.<sup>35</sup> Delta's high and low stock prices and most recent annual dividends were taken from the Value Line Investment Survey – Small and Mid-Cap Edition, March 12, 2010. Two growth rates were used in the calculation: a historical five-year average dividend growth rate for the proxy group; and a forecasted average dividend growth rate for the eight large companies covered in the Value Line Investment Survey ("Value Line") that are also covered by Edward Jones.

<sup>&</sup>lt;sup>33</sup> <u>Id.</u>

<sup>&</sup>lt;sup>34</sup> Blake Direct Testimony, Exhibit MJB-10, Historical Comparison of Allowed and Actual ROE, Delta Natural Gas Company, and Exhibit MJB-11, Historical Earned Returns on Equity for the Consolidated Company and the Regulated Entity.

<sup>&</sup>lt;sup>35</sup> <u>Id.</u>, Exhibit MJB-9.

The calculated ROE using the historical dividend growth rate for the Edward Jones natural gas companies based on Delta's 2009 high stock price was 9 percent; the ROE based on Delta's 2009 low stock price was 11.63 percent. These results were then multiplied by market capitalization to obtain what Delta characterized as the actual dollars that shareholders expect to receive annually from their investment.<sup>36</sup> The resulting ROE results were 15.08 percent and 12.08 percent, respectively.

The calculated ROE using the forecasted dividend growth rate based on the Edward Jones natural gas companies reported in Value Line and Delta's 2009 high stock price was 8.23 percent; the ROE based on Delta's 2009 low stock price was 10.87 percent. Making the same adjustment of multiplying by market capitalization yielded ROE results of 13.79 percent and 11.28 percent, respectively.

In response to an information request, Delta provided DCF calculations based on the most current data available at the time of the response.<sup>37</sup> This response showed somewhat lower results using updated growth rates, with the ROE using the historical dividend growth rate and Delta's high stock price for 2009 being 8.8 percent and the ROE based on Delta's 2009 low stock price being 11.43 percent; these results adjusted for market capitalization were 14.74 percent and 11.87 percent, respectively. The updated DCF calculation using the forecasted dividend growth rate and high stock price was 8.11 percent and the ROE based on the low stock price was 10.75 percent. The

<sup>&</sup>lt;sup>36</sup> Blake Direct Testimony at 24.

 $<sup>^{\</sup>rm 37}$  Item 8 of Delta's July 2, 2010 Response to Commission Staff's Third Data Request.

market capitalization adjustment applied by Delta yielded ROE results of 13.59 percent and 11.16 percent, respectively.

Delta's CAPM analysis used a risk-free rate of 4.48 percent, which was the 20-year United States Treasury bond rate as of February 1, 2010. The beta used in the CAPM analysis was .65, which was the beta reported in the Value Line Investment Survey – Small and Mid-Cap Edition of March 12, 2010. The risk premium of 6.7 percent was taken from the Ibbotson 2010 SBBI Valuation Yearbook for 2010. Delta included in its CAPM calculation a micro-cap-size premium of 4.91 percent; this size premium was also taken from the Ibbotson 2010 SBBI Valuation Yearbook for 2010. Delta stated that the addition of a size premium is necessary to account for returns in excess of that predicted by CAPM, which increase as one moves from the largest to the smallest companies. Delta's CAPM estimate including the size premium is 13.745 percent.

In the same data response that addressed a more current DCF analysis, Delta provided CAPM calculations based on the most current data available at the time of the response. Delta's response showed that, after its testimony was first filed, Delta's beta as reported by Value Line had dropped from .65 to .60. This lower beta combined with a decrease in the 20-year United States Treasury bond rate and the 4.91 percent size premium produced a CAPM estimate of 12.89 percent.

A risk premium analysis was performed using Ibbotson's 2010 Valuation Yearbook riskless rate of 9.69 percent and the 4.48 percent 20-year United States Treasury bond rate as of February 1, 2010. The resulting risk premium calculation produced an ROE estimate of 14.17 percent. An update included in the above-

referenced data response, based on the most current data available, resulted in an ROE estimate of 13.65 percent.

Delta's final ROE estimate was based on the average ROE for Value Line-reported companies with business risk corresponding to Delta's as measured by beta. The average ROE for companies with beta coefficients of .65, which was Delta's beta as reported in the Value Line Investment Survey – Small and Mid-Cap Edition of March 12, 2010, was 12 percent. Delta concluded that this result should be considered significant, as it is the method most closely conforming to the Supreme Court's belief that utilities should be allowed to earn a return that is commensurate with entities of corresponding risk.<sup>38</sup> Delta stated that beta is an objective and quantifiable measure of risk and that the companies reflected in the calculation of the 12 percent comparable company ROE average all have a beta identical to that of Delta. Delta went on to state that this approach to ROE estimation has the advantage of developing an estimated ROE that is independent of state utility regulatory decisions and that the 12 percent produced using this method falls within the range of its other ROE estimations.

In the same data response previously cited, Delta provided an update which showed the average ROE of companies with a beta of .60, which was Delta's beta as reported by Value Line on June 11, 2010. This update showed that the average ROE for the companies with a .60 beta identical to that of Delta was 6.37 percent.

In its post-hearing brief, Delta referenced a Value Line document introduced at the hearing of this case and made part of the record. Delta cited questions at the hearing concerning the absence of the document from its original ROE testimony, when

<sup>&</sup>lt;sup>38</sup> Blake Direct Testimony at 28-29.

previous versions of the same document had been relied on by Delta in prior rate cases. Delta repeated the explanation of its ROE witness that the document presented composite information for all natural gas utilities and that Delta's operations and financial profile vary significantly from the average natural gas utility so as to render a comparison meaningless. Delta cited such differences as its small size, substantially rural service territory, and low amount of equity. Delta stated that it rejected Value Line's expected 2011 allowed return on shareholder equity of 10 percent as an appropriate return and reiterated its recommended return of 12 percent based on the support provided in its original testimony.

In considering the issue of an appropriate ROE, the Commission takes notice first of the GCR under-recovery issue that Delta raised in this proceeding and has raised in previous proceedings. In Case No. 2004-00067, the Commission suggested that Delta revise its GCR clause to include the carrying costs of any under-recoveries that it experiences.<sup>39</sup> Delta has not, in this proceeding or any other, proposed such a revision to its GCR clause. The possibility of making other revisions to its GCR mechanism to address this problem was explored in Case No. 2010-00127,<sup>40</sup> but Delta indicated its preference for maintaining the current GCR mechanism. Despite the fact that its GCR clause allows it to file applications for interim gas cost adjustments in order to better track gas cost in times of high price volatility, Delta has never availed itself of this opportunity, nor has it proposed a monthly mechanism which might minimize under-

<sup>&</sup>lt;sup>· 39</sup> Case No. 2004-00067, Delta Natural Gas Company, Inc. (Ky. PSC Nov. 10, 2004).

<sup>&</sup>lt;sup>40</sup> Case No. 2010-00127, Purchased Gas Adjustment Filing of Delta Natural Gas Company, Inc. (Ky. PSC June 24, 2010).

recoveries better than its current quarterly mechanism. Delta continues to ask for a higher return on equity to address the problem of financing gas cost under-recoveries, but it is unwilling to take action to revise its GCR clause in ways that might substantially resolve this issue. The Commission suggests once again that Delta look to its GCA mechanism as opposed to its allowed ROE to address its gas cost under-recoveries. The Commission finds that Delta's allowed ROE should not reflect any risk of gas cost under-recovery through its GCR clause.

The Commission also found in Case No. 2004-00067 that Delta's competition from electric companies is not properly addressed through its ROE. Increasing the ROE will increase the price paid by Delta's customers but will do nothing to help its competitive position with other forms of energy. The Commission finds once again that Delta's approved ROE should not reflect additional risk caused by electric competition.

The Commission recognizes that Delta has experienced reduced revenues from decreasing sales volumes, partially due to customer conservation and appliance efficiency gains, which was included in Delta's support for its proposed ROE.<sup>41</sup> Because of this, the Commission will approve in this Order raising Delta's residential customer charge 35 percent, to \$20.70 from \$15.30, and accepting Delta's actual customer and volume numbers in normalizing revenues as opposed to requiring a year-end customer adjustment. This should stabilize Delta's revenue recovery and reduce some of the margin loss caused by declining customer counts and sales volumes. Having addressed Delta's risk of decreasing sales volumes in this manner, the

<sup>&</sup>lt;sup>41</sup> Loss of customers has also contributed to Delta's reduced sales volumes.

Commission finds that the approved ROE should not reflect risks from decreasing sales and appliance efficiency gains.

The June 11, 2010 Value Line document which was introduced at the hearing and referenced in Delta's brief indicated that the projection for return on shareholder equity for 2011 as well as 2013 through 2015 for natural gas utilities is 10 percent. The Regulatory Research Associates ("RRA") document, Major Rate Case Decisions— January-June 2010, which was also referenced at the hearing, indicated that the average allowed ROE for gas utilities was 10.24 percent for the first quarter of 2010 and 9.99 percent for the second quarter, producing a year-to-date average as of June 30, 2010 of 10.1 percent. This Commission does not rely on returns awarded by other state commissions in determining the appropriate ROE for Kentucky jurisdictional utilities, as this would introduce an undue circularity into the decision-making process. However, we believe it is reasonable to expect that investors would take into account information in publications such as Value Line and those of RRA and that they would not expect Delta to be allowed returns commensurate with entities at betas of .65 which are earning an average ROE of 12 percent, or commensurate with entities at betas of .60 which are earning an average ROE of 6.37 percent.

The Commission finds that Delta's proposed ROE overstates its risks as well as investor expectations. We are of the opinion, however, that the risk inherent in Delta's small size, as well as the risk caused by its relatively low equity ratio, should be recognized. Having considered and weighed all the ROE evidence in the record, the Commission finds a range of 9.9 percent to 10.9 percent, with a midpoint of 10.4 percent, to be reasonable.

## Rate of Return Summary

Applying the rates of 6.83 percent for long-term debt, 2.096 percent for short-term debt, and 10.40 percent for common equity to the capital structure produces an overall cost of capital of 7.97 percent. The Commission finds this overall cost of capital to be fair, just, and reasonable.

## REVENUE REQUIREMENTS

The Commission has determined, based upon a rate base of \$109,804,631 and an overall cost of capital of 7.97 percent, that the net operating income found reasonable for Delta's operations is \$8,751,885. Delta's adjusted net operating income for the test period is \$6,755,424. Thus, Delta needs additional annual operating income of \$1,996,461. After provision for the Commission's assessment and state and federal taxes, there is a revenue deficiency of \$3,291,328, which is the amount of additional revenue granted herein. The net operating income found reasonable for Delta's operations will allow it the opportunity to pay its operating expenses and fixed costs and have a reasonable amount for equity growth.

The calculation of the overall revenue deficiency is as follows:

| Net Operating Income Found Reasonable                                    | \$ 8,751,885        |
|--|---------------------|
| Pro Forma Net Operating Income   | <u>6,755,424</u>    |
|  |                     |
| Net Operating Income Deficiency<br>Gross-Up Revenue Factor <sup>42</sup> | 1,996,461           |
| Gross-Up Revenue Factor <sup>42</sup>                                    | <u>.6065821</u>     |
|  |                     |
| Overall Revenue Deficiency   | <u>\$ 3,291,328</u> |

<sup>&</sup>lt;sup>42</sup> The gross-up revenue factor recognizes the impact that the overall revenue deficiency will have on the Commission's assessment, Kentucky income taxes, and federal income taxes.

The \$3,291,328 increase represents an increase of 6.54 percent over the normalized gross operating revenues.<sup>43</sup> The rates and charges in the Appendix to this Order are designed to produce gross operating revenues, based on the adjusted test year, of \$53,643,523. This level of gas operating revenues reflects the GCA adjustment approved in Case No. 2010-00254.

# PRICING AND TARIFF ISSUES

## Cost-of-Service Study

Delta filed an embedded, fully allocated cost-of-service study in order to determine the contribution that each customer class was making toward its overall rate of return and as an indicator of whether its rates reflected the cost to serve each customer class. Within the cost-of-service study, distribution mains costs were classified as customer costs or demand costs using the zero-intercept method. The Commission has accepted Delta's cost-of-service study, consistent with its past acceptance of the zero-intercept method. However, the revenue increase we are granting is approximately 61 percent of Delta's requested increase. With this reduction in the revenue increase, and giving appropriate recognition to Delta's pressing need to collect its revenue requirement despite decreasing sales volumes, the Commission will increase Delta's residential customer charge from \$15.30 to \$20.70.<sup>44</sup> Similarly, we will increase the small non-residential customer charge from \$25.00 to \$31.20 and increase the large non-residential customer charge from \$100.00 to \$131.00.

<sup>&</sup>lt;sup>43</sup> The normalized operating revenues reflect the impact of Delta's most recent GCR adjustment.

<sup>&</sup>lt;sup>44</sup> This amount does not include the \$0.20 portion of Delta's residential customer charge which funds its low-income Energy Assistance Program.

## Revenue Allocation

Delta's cost-of-service study indicates that, of all the customer classes, only the rate of return for the residential class is below its system average rate of return. The rate of return for the interruptible class was considerably higher than that for all other classes. Delta proposed to allocate the revenue increase to all classes except the interruptible class and its special contract customers, so that the class rates of return would move closer to the system average. Delta proposed no increase to special contract customers because these contracts include fixed prices and because these customers represent a bypass threat. The Commission finds that Delta's proposed revenue allocation is reasonable considering the results of the cost-of-service study and that it should be used as a guide in the design of its approved rates, with none of the increase granted herein allocated to interruptible or special contract customers. Without the contribution by special contract customers to its fixed costs, Delta's revenue requirement would have to be re-allocated and recovered from its remaining customers.

## Rate Design

Delta proposed a surcharge mechanism to recover the costs of its proposed Pipe Replacement Program ("PRP"). The proposed PRP would accelerate the recovery of the cost of replacing Delta's bare steel pipe and would include replacement of service lines, curb valves, meter loops, and mandated pipe relocations. Delta believes that, absent such a mechanism, it would be necessary to file rate cases more frequently, its level of incremental capital investment would be reduced, and the time required to replace bare steel pipe would be increased. In support of its proposed PRP, Delta cites KRS 278.509 and the similar mechanisms that have been approved for Columbia Gas

of Kentucky, Inc. ("Columbia") and Atmos Energy Corporation ("Atmos"). Delta proposed to spread the costs of the program proportionately to the monthly customer charges of its rate classes. In response to information requests, Delta stated that it had no objection to identifying PRP costs as a separate item on customers' bills. Delta also stated, in response to a Staff information request concerning the allocation of the PRP adjustment, that it has no preference as to how the adjustment is allocated to customer classes.

Given that mechanisms similar to Delta's proposed PRP have been approved for other gas utilities, and that Delta's reasons for its PRP mirror those of the other utilities, we find that the PRP is reasonable and should be approved as proposed, with the exceptions that (1) PRP charges should be set out separately on the customers' bills and (2) that the PRP fixed-charge adjustment should be allocated based on the proportion of base rate revenue contribution at proposed rates instead of on the proportion of customer charge revenue at proposed rates, as set out in the response to Item 4.b. of Delta's response to Staff's Third Data Request.

Delta also proposed changes to its GCR mechanism. Delta proposed to revise its Expected Gas Cost ("EGC") component to include withdrawals from underground storage at the average unit cost of working gas inclusive of any storage inventory adjustments (emphasis added). The Commission finds that this proposal is reasonable with regard to the inclusion of storage withdrawals in the calculation of the EGC. However, we are not persuaded that the inclusion of storage inventory adjustments, which would allow Delta to pass through losses such as the one experienced at the Canada Mountain storage field in 2006 and 2007, is reasonable. The Commission has

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consistently found that gas losses passed through the GCA mechanism should be limited to five percent. To pass through more significant losses precludes the Commission from determining the reasonableness of the recovery of excessive losses. Delta should be permitted to revise its GCR mechanism to exclude storage injections from purchases and to include storage withdrawals at the average cost of working gas in inventory, but storage inventory adjustments should not be passed through the GCR mechanism.

Delta also proposed to revise its GCR mechanism to remove the portion of uncollectible accounts related to the gas cost commodity portion of rates from its base rates and recover it through the EGC component of its GCR mechanism. The proposed change is designed to ensure that Delta recovers all of its gas cost, including that attributable to bad debt. The uncollectible base rate portion associated with uncollectible accounts will continue to be recovered through base rates and charged to uncollectible expense. Similar revisions authorized by the Commission have been implemented by Columbia, Atmos, and Duke Energy Kentucky, Inc. The Commission finds Delta's proposal to recover the gas cost commodity portion of uncollectible accounts through its GCR to be reasonable.

# <u>SUMMARY</u>

The Commission, after consideration of all matters of record and being otherwise sufficiently advised, finds that:

1. The rates set forth in the Appendix to this Order are the fair, just, and reasonable rates for Delta to charge for service rendered on and after October 22, 2010.

- 2. The rates proposed by Delta would produce revenue in excess of that found reasonable herein and should be denied.
- 3. The depreciation rates contained in Delta's depreciation study filed in this case are reasonable and should be approved for use as of the date of this Order.

#### IT IS THEREFORE ORDERED that:

- 1. The rates in the Appendix to this Order are approved for service rendered by Delta on and after October 22, 2010.
  - 2. The rates proposed by Delta are denied.
- 3. Delta shall, within 20 days of the date of this Order, file its revised tariff sheets setting out the rates approved herein and reflecting that they were approved pursuant to this Order.
- 4. The proposed PRP tariff and related surcharge mechanism are approved as modified herein.
- 5. The proposed GCR revision to include withdrawals from underground storage is approved, as modified herein to remove the reference to storage inventory adjustments.
- 6. The proposed GCR revision to recover uncollectible gas commodity costs through the EGC component is approved.
- 7. The depreciation rates contained in Delta's depreciation study filed in this case, as modified herein, are approved for use as of the date of this Order.

By the Commission

ENTERED EW

OCT 2 1 2010

KENTUCKY PUBLIC SERVICE COMMISSION

Executive Director

## **APPENDIX**

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2010-00116 DATED OCT 2 1 2010

The following rates and charges are prescribed for the customers in the area served by Delta Natural Gas Company, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

# RATE SCHEDULES

Available for general use by residential, commercial, and industrial customers.

# **RATES**

| <u>KATES</u>   | Base Rate +   | Gas Cost Recovery Rate =                          | Total Rate   |
|--|---|---|--|
| Residential<br>Customer Charge<br>All Mcf  | \$ 20.70<br>\$ 4.2672   | \$ 7.4664   | \$ 11.7336   |
| Small Non-Residential<br>Customer Charge<br>All Mcf  | \$ 31.20<br>\$ 4.2672   | \$ 7.4664   | \$ 11.7336   |
| Large Non-Residential Customer Charge First 200 Mcf Next 800 Mcf Next 4,000 Mcf Next 5,000 Mcf Over 10,000 Mcf | \$131.00<br>\$ 4.2672<br>2.6183<br>1.8222<br>1.4222<br>1.2222 | \$ 7.4664<br>7.4664<br>7.4664<br>7.4664<br>7.4664 | \$11.7336<br>10.0847<br>9.2886<br>8.8886<br>8.6886 |
| Unmetered Gas Lights – Reside<br>All Mcf   | ntial and Commerc<br>\$ 4.2672                                | ial<br>\$ 7.4664                                  | \$11.7336  |

| On-System Transpo<br>Customer Ch<br>First 200<br>Next 800<br>Next 4,000<br>Next 5,000<br>Over 10,000 | narge<br>Mcf<br>Mcf<br>Mcf<br>Mcf | \$ 3<br>\$ | Non-Residential<br>31.20<br>4.2672<br>2.6183<br>1.8222<br>1.4222<br>1.2222 |
|--|-----------------------------------|------------|--|
| On-System Transpo<br>Customer Ch<br>First 200<br>Next 800<br>Next 4,000<br>Next 5,000<br>Over 10,000 | narge<br>Mcf<br>Mcf<br>Mcf<br>Mcf | \$1<br>\$  | Non-Residential<br>31.00<br>4.2672<br>2.6183<br>1.8222<br>1.4222<br>1.2222 |
| On-System Transpo<br>Customer Ch<br>All Mcf  |                                   | \$2        | ntial<br>0.70<br>4.2672  |
| Off-System Transpo   | ortation                          | \$         | .2820  |

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