# COMMONWEALTH OF KENTUCKY

# BEFORE THE PUBLIC SERVICE COMMISSION

# In the Matter of:

AN ADJUSTMENT OF THE RATES OF DELTA ) CASE NO. 99-176 NATURAL GAS COMPANY, INC. )

# **INDEX**

	<u>PAGE</u>
COMMENTARY	1
PROCEDURE	2
TEST PERIOD	3
VALUATION	3
Utility Plant In Service	3
Accumulated Depreciation	5
Cash Working Capital	6
Prepayments	6
Materials and Supplies	7
Gas In Storage	7
Unamortized Debt Issuance Costs	7
Accumulated Deferred Income Taxes ( ADIT )	8
Advances for Construction	8
Customer Deposits	8
Summary	10
CAPITALIZATION	10

<u> </u>	PAGE
REVENUES AND EXPENSES	. 12
Year End Customer Growth Adjustment	. 13
Revenue	. 13
Expenses	. 13
Temperature Normalization Adjustment	. 14
Wages and Salaries	. 14
Disallowed Accounts	. 15
Canada Mountain	. 17
Customer Deposits	. 17
Medical Expense Adjustment	. 18
Rate Case Expense	. 18
Public Service Commission Assessment	. 21
Pension Expense	. 22
401(k) Expense	. 22
Bad Debt Expense	. 23
Miscellaneous	. 24
Depreciation Expense	. 25
Payroll Taxes	. 25
Property Taxes	. 26
Income Tax Expense	. 26
Interest Synchronization	. 27
Summary	. 27

	<u>PAGE</u>
RATE OF RETURN	28
Cost of Debt	28
Return on Equity	28
Rate of Return Summary	34
REVENUE REQUIREMENTS	34
COST-OF-SERVICE STUDY	34
REVENUE ALLOCATION	36
RATE DESIGN	38
General Service	38
Gas Cost Adjustment	39
WNA Tariff	40
EXPERIMENTAL ARP	41
SUMMARY	48

#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF THE RATES OF DELTA ) CASE NO. 99-176 NATURAL GAS COMPANY, INC. )

#### ORDER

Delta Natural Gas Company, Inc. (Delta) has applied for authority to adjust its rates for gas service to produce additional annual revenues of \$2,551,797, an increase of 6.76 percent, and to establish a weather normalization adjustment (WNA) clause and an Experimental Alternative Regulation Plan (ARP). By this Order, the Commission establishes rates for Delta that will produce additional annual operating revenues of \$419,702<sup>1</sup> and approves the establishment of a WNA. We deny Delta's request to implement its proposed Experimental ARP.

#### COMMENTARY

Delta is a Kentucky corporation whose principal offices and place of business are located in Winchester, Kentucky. Delta purchases, sells, stores, transports and distributes natural gas to approximately 38,000 customers in 23 counties in central and eastern Kentucky.

<sup>&</sup>lt;sup>1</sup> The base rates that the Commission establishes in this Order will generate additional revenues of \$2,957,796. The inclusion of Delta's investment in the Canada Mountain gas storage facilities into rate base and its corresponding removal from Delta's gas cost recovery mechanism will reduce Delta's annual revenues from its gas cost recovery mechanism by approximately \$2,538,094.

### PROCEDURE

On July 1, 1999, Delta filed its application for a rate adjustment. Delta's application includes proposals to establish a WNA clause and an ARP. To determine the reasonableness of the proposed rates, the Commission suspended the proposed rates until December 31, 1999, and initiated this proceeding.<sup>2</sup> Because Delta's proposal for an ARP was the subject of Case No. 99-046,<sup>3</sup> the Commission directed that the record of that proceeding be incorporated into the record of this case.<sup>4</sup> The Commission also established a procedural schedule for discovery and the submission of written testimony.

On July 7, 1999, Delta moved for consolidation of this proceeding, Case No. 99-176, with Case No. 99-046. After reviewing Delta's application and comparing the ARP proposed in Case No. 99-046 with the rate increase proposed in this proceeding, we found that several modifications in the ARP proposed in this proceeding render Delta's earlier proposal moot. We therefore directed that the proceedings in Case No. 99-046 be closed.<sup>5</sup>

The Commission has permitted the Attorney General (AG) to intervene in this proceeding. No other person sought to intervene.

<sup>&</sup>lt;sup>2</sup> Order of July 30, 1999 at 2.

<sup>&</sup>lt;sup>3</sup> Case No. 99-046, Delta Natural Gas Company, Inc. s Application to Implement an Experimental Alternative Regulation Plan.

<sup>&</sup>lt;sup>4</sup> Unless otherwise stated, all references in this Order refer to documents in Case No. 99-176.

<sup>&</sup>lt;sup>5</sup> Order of August 5, 1999 at 3 4.

On October 29 and 30, 1999, the Commission held a public hearing on Delta's application. Following the parties submission of written briefs on November 29, 1999, this case stood submitted for decision.

### **TEST PERIOD**

Delta proposes and the Commission accepts the 12-month period ended December 31, 1998 as the test period for determining the reasonableness of the proposed rates.

#### VALUATION

Delta proposes a net investment rate base of \$76,088,138.<sup>6</sup> Based upon the discussion below, the Commission finds that Delta's net investment rate base is \$91,997,648.

### Utility Plant In Service

Delta reports its proposed test-period level of utility plant in service (UPIS) as \$114,965,626. It reaches this level by removing its investment of \$14,323,170 in the Canada Mountain gas storage facilities (Canada Mountain) from UPIS. Delta currently recovers this investment through its Gas Cost Recovery (GCR) mechanism.<sup>7</sup>

Canada Mountain consists of a gas storage field and related facilities located in Bell County, Kentucky. Delta purchased the facilities in 1995 to ensure a firm and

<sup>&</sup>lt;sup>6</sup> Delta s Application, Vol. 1 at Tab 25.

<sup>&</sup>lt;sup>7</sup> The AG uses Delta's proposed UPIS balance to calculate its proposed net investment rate base. <u>See</u> Direct Testimony of Robert J. Henkes at Schedule RJH-3.

more reasonably priced supply of gas to its southern system. <sup>8</sup> After its purchase of the facilities and the issuance of evidences of indebtedness to finance the purchase, Delta executed a lease agreement with Deltran, Inc. (Deltran), a wholly owned subsidary of Delta, under which Delta leased Canada Mountain to Deltran. Deltran in turn provides gas storage services to Delta. Deltran's rate for storage service is based on the cost incurred to provide the service. The rate is adjusted quarterly to reflect changes in its cost of service allowed for immediate rate recovery of capital improvements to the storage field as these improvements are made. Delta in turn recovers the cost associated with its payments to Deltran through its GCR.

When the Commission approved this arrangement, we did so as a temporary expedient to allow Delta to begin immediate recovery of its investment. The storage facility was intended to assist Delta in managing its gas supply, thereby lowering the cost of gas to Delta's customers. Allowing the recovery through Delta's GCR negated the need for frequent rate adjustment cases while the facility was being constructed and brought up to its required capacity. Delta's president has acknowledged that this rate-making treatment was never considered a permanent measure.<sup>9</sup>

The Commission finds that, because the construction of the Canada Mountain storage facilities is now completed, <sup>10</sup> the recovery of Delta's investment in these

<sup>&</sup>lt;sup>8</sup> Case No. 95-098, The Application of Delta Natural Gas Company, Inc. for an Order Authorizing the Purchase and Financing of the Canada Mountain Gas Storage Field, Order (September 7, 1995) at 2.

<sup>&</sup>lt;sup>9</sup> Transcript, Vol. I at 78.

<sup>&</sup>lt;sup>10</sup> Construction of the facilities was completed in October 1997. <u>See</u> Delta's Response to the Commission's Order of September 14, 1999, Item 6a.

facilities should be through Delta's base rates and not through Delta's GCR. The transfer from the GCR to base rates will not have a significant impact on the overall rate charged to Delta's ratepayers. The Canada Mountain assets should be rolled into rate base at current levels since that is the amount that is currently being reviewed through the GCR. According to Delta's most recent GCR filling, 11 Delta's Canada Mountain investment is currently \$16,834,563.12 The Commission, therefore, has increased Delta's UPIS balance by this amount.

## <u>Accumulated Depreciation</u>

Delta proposes to reduce rate base by test-period-end accumulated depreciation of \$35,230,946.<sup>13</sup> It further proposes to increase accumulated depreciation by \$20,212 to normalize the test-period level of depreciation expense by the test-period-end level of UPIS investment.<sup>14</sup> As Delta's investment in Canada Mountain will henceforth be reflected in Delta's rates as a component of Delta's rate base, the Commission finds that Delta's pro forma accumulated depreciation should further be increased by \$1,009,700 to reflect Canada Mountain's accumulated depreciation as of July 31, 1999,

<sup>&</sup>lt;sup>11</sup> Case No. 97-066-H, Purchased Gas Adjustment of Delta Natural Gas Company (November 1, 1999). Test Period July 31, 1999.

<sup>12</sup>Gross UPIS\$ 17,278,017Unamortized Debt Issuance Cost- 443,454Canada Mountain Investment\$ 16,834,563

<sup>&</sup>lt;sup>13</sup> Delta s Application, Vol. 1 at Tab 25.

<sup>&</sup>lt;sup>14</sup> Direct Testimony of John F. Hall at 4.

which was used in the most recent GCR filing. Delta's pro forma accumulated depreciation, therefore, is \$36,260,858.

## Cash Working Capital

Delta proposes to include in its rate base an allowance for cash working capital of \$1,097,255 to reflect 1/8th of its pro forma operation and maintenance expenses, excluding the purchased gas cost. Based upon its lower recommended pro forma operation and maintenance expenses and using the 1/8th formula, the AG proposes a cash working capital level of \$1,050,255. The Commission finds that, in the absence of any lead-lag study, the 1/8th formula should be used to determine Delta's level of cash working capital. After applying the 1/8th formula to the level of operating and maintenance expenses found reasonable herein, the Commission finds that an appropriate level of cash working capital is \$1,087,080.

# **Prepayments**

Delta proposes to include in its rate base the test-period-end level of prepayments in the amount of \$106,884. Citing the Commission's use of a 13-month average balance to establish the appropriate level of prepayments in Delta's last general rate adjustment case, <sup>17</sup> the AG argues that a 13-month average balance of prepayments should be used and that Delta's proposed prepayments should be

<sup>&</sup>lt;sup>15</sup> <u>Id.</u> at 5.

<sup>&</sup>lt;sup>16</sup> Posthearing Brief of the AG at 4.

<sup>&</sup>lt;sup>17</sup> <u>See</u> Case No. 97-066, An Adjustment of General Rates of Delta Natural Gas Company, Inc. (Dec. 8, 1997) at 4.

increased by \$100,451 to \$207,335.<sup>18</sup> As the AGs proposal is consistent with past Commission practice and as Delta has not disputed the use of this methodology, the Commission accepts the proposed adjustment.

### Materials and Supplies

Delta proposes to include in rate base the test-period-end level of materials and supplies totaling \$451,812. The AG proposes to increase materials and supplies by \$121,751 to reflect the 13-month average material and supplies balance. Finding that use of a 13-month average is more consistent with past Commission practices, we accept the AG s proposed adjustment and include in rate base the 13-month average balance of materials and supplies of \$573,563.

# Gas In Storage

Delta proposes the test-period-end level of gas in storage totaling \$265,579. Using the 13-month average balance to establish the level of gas in storage, the Commission finds that gas in storage should be valued at \$263,856.

#### <u>Unamortized Debt Issuance Costs</u>

Delta proposes to decrease its test-period-end level of unamortized debt issuance cost of \$3,650,173 by \$541,248, or 14.83 percent. This proposal is based upon the percentage of test-period-end long-term debt balance attributable to Canada Mountain and is consistent with the Commission's decision in Delta's last general rate

<sup>&</sup>lt;sup>18</sup> AG s Brief at 4.

<sup>&</sup>lt;sup>19</sup> <u>Id.</u>

case.<sup>20</sup> Insofar as we have determined that the Canada Mountain investment should now be recovered through Delta's base rates, we find that Delta's proposal should be denied.

# <u>Accumulated Deferred Income Taxes ( ADIT )</u>

Delta originally proposed to reduce rate base by \$8,436,725 to reflect the total test-period-end balance of all ADIT accounts. It subsequently acknowledged that rate base should be reduced by \$9,103,630 to reflect the removal of ADIT components not allowed in Case No. 97-066.<sup>21</sup> Accordingly, we reduce rate base by the ADIT balance of \$9,103,630.

#### Advances for Construction

Delta proposes, and the Commission accepts, a reduction to rate base by the test-period-end level of advances for construction in the amount of \$220,060.

# **Customer Deposits**

The AG proposes to reduce rate base by the test-period-end level of customer deposits of \$594,863. He contends that customer deposits, like customer advances, are received at a rate greater than the amount refunded and that Delta has the use of this customer supplied capital. If interest on customer deposits is recognized as an expense, he contends, the principal (the customer deposit balance) must be recognized as a rate base reduction. In support of his position, he points to past Commission proceedings in which the Commission treated customer deposit balances as rate base

<sup>&</sup>lt;sup>20</sup> Case No. 97-066, Order of December 8, 1997 at 5.

<sup>&</sup>lt;sup>21</sup> <u>See</u> Delta's Response to the Commission's Order of September 14, 1999, Item 27.

reductions when treating the associated interest expense as a pro forma operating expense.<sup>22</sup>

Delta advances two arguments in response. It notes that its proposed treatment of customer deposits conforms to the Commission's decision in Case No. 97-066.<sup>23</sup> It further notes a difference between customer advances and customer deposits. Customer advances, Delta argues, directly relate to plant investment and are deducted from rate base because the utility does not have to supply the capital to support that amount of plant investment. Customer deposits, on the other hand, do not relate to UPIS or any other rate base item.<sup>24</sup>

In Case No. 97-066, the Commission included the interest on customer deposits in Delta's pro forma operating expenses, but did not reduce rate base by the customer deposit balance. We concede that our action was not consistent. The customer deposit balance and interest must both be included or excluded in determining the revenue requirement. Since customer deposits represent a liability to be repaid to the customer with interest, 25 the Commission generally has not recognized the deposits as readily available cost free capital. For this reason, the Commission finds that the AG's proposed adjustment should be denied. We further find that all interest associated with the customer deposits should be excluded from Delta's proforma operating expenses.

<sup>&</sup>lt;sup>22</sup> AG s Brief at 5 - 6.

<sup>&</sup>lt;sup>23</sup> Case No. 97-066, Order of December 8, 1997 at 6.

<sup>&</sup>lt;sup>24</sup> Delta s Brief at 22 - 23.

<sup>&</sup>lt;sup>25</sup> <u>See</u> KRS 278.460(1).

# **Summary**

The Commission finds Delta s net investment rate base to be as follows:

Utility Plant In Service Accumulated Depreciation	\$131,800,189 ( 36,260,858)
Net Utility Plant In Service	\$ 95,539,331
Add:  Working Capital Allowance Prepayments Materials and Supplies Gas In Storage Unamortized Debt Issuance Cost Deduct: Accumulated Deferred Income Taxes	1,087,080 207,335 573,563 263,856 3,650,173 (9,103,630)
Advances for Construction	(220,060)
Net Investment Rate Base	<u>\$ 91,997,648</u>

# <u>CAPITALIZATION</u>

Delta proposes to use a hypothetical capital structure consisting of 43.50 percent common equity, 48.43 percent long-term debt, and 8.07 percent short-term debt. This structure is based upon the test-period total capital balance adjusted to remove Canada Mountain and Delta's investment in subsidiaries. Delta argues that this hypothetical capital structure is supported by published research, is consistent with applicable law, and will help reverse the decline in the equity component of its capital structure.<sup>26</sup>

The AG opposes the use of a hypothetical capital structure. He argues that its use would represent a radical departure from past Commission rate-making practices. He notes that Delta's common equity problem stems in large measure from decisions of

<sup>&</sup>lt;sup>26</sup> Delta s Brief at 6.

Delta's management. Before resorting to the drastic remedy of an imputed capital structure, he argues, the Commission should first employ remedies such as a weather normalization clause that will address matters outside of management's control. Such remedies may, he argues, obviate the need for more drastic remedies. He notes that Delta's equity problems did not occur suddenly and that any remedy must work in a gradual manner to correct those problems.

Instead of a hypothetical capital structure, the AG proposes a capital structure based on Delta's actual test-period-end structure adjusted to eliminate the equity associated with non-regulated subsidiaries and the capital associated with Canada Mountain. It consists of 29.80 percent equity, 60.17 percent long-term debt, and 10.02 percent short-term debt.<sup>27</sup>

The Commission agrees that Delta's equity problem occurred gradually. Between 1988 and 1998, Delta's equity ratio decreased from 45.8 percent to 31 percent of total capital. One factor contributing to Delta's financial condition was Delta's inability in recent years due to warmer than usual weather conditions to earn its allowed return. Delta's rates are premised on the assumption that normal weather conditions will occur. Weather is certainly a factor outside of management's control. To reduce the effects of weather, the Commission will approve the use of a WNA.

<sup>&</sup>lt;sup>27</sup> Direct Testimony of Robert J. Henkes at 4.

<sup>&</sup>lt;sup>28</sup> Delta's Response to the Commission's July 15, 1999 Order, Item 2.

<sup>&</sup>lt;sup>29</sup> Transcript, Vol. I at 30.

The Commission finds that management must bear some responsibility for Delta's current condition. Delta's president concedes that the decline in Delta's equity component is, in part, dependent upon the actions of management.<sup>30</sup>

The Commission finds that, before the drastic remedy of a hypothetical capital structure is used, other remedies must be given an opportunity to work. The rate stability that should arise from a weather normalization clause should also improve the relationship of equity to the other capital components. If these remedies prove unsuccessful, the Commission will consider the use of more drastic remedies. Until such time, however, the Commission finds that Delta's proposed hypothetical capital structure should be denied.

The Canada Mountain investment has been transferred from the GCR to Delta's base rates. To recognize the recovery of Canada Mountain in the base rates, the capital structure has been adjusted to reflect the July 31, 1999 investment, which is shown in Appendix A.

The Commission finds Delta s total capital structure to be as follows:

	<u>Amount</u>	<u>Percent</u>
Long-Term Debt	\$ 55,798,398	60.00
Short-Term Debt	9,294,956	10.00
Common Equity	<u>27,903,425</u>	30.00
Totals	\$ 92,996,779	100.00

#### REVENUES AND EXPENSES

Delta reported actual net operating income of \$6,214,670 for the test period.

Delta proposed several pro forma adjustments to revenues and expenses to arrive at its

<sup>&</sup>lt;sup>30</sup> Id. at 29.

pro forma net operating income of \$5,564,849. The Commission finds that the proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications:

### Year End Customer Growth Adjustment

Revenue. In its application, Delta proposed an adjustment to increase revenue by \$304,119 to recognize additional revenue that would have been generated if it had served the year-end number of customers for the entire test period. It subsequently increased this proposed adjustment to \$423,668 to correct certain mathematical errors.<sup>31</sup> The Commission accepts Delta's revised adjustment.

<u>Expenses.</u> Delta proposes to increase operating expenses by \$75,906 to reflect additional operating expenses associated with serving the test-year-end number of customers and supplying the related volumes. It calculates this adjustment by applying an operating ratio of 17.92 percent to the revenue adjustment. It arrived at this by dividing operation and maintenance expense (exclusive of gas supply costs and wages and salaries) by its normalized base rate revenues.

While generally accepting Delta's methodology, the AG argues that additional expenses not related to customer levels should be subtracted from operating and maintenance expense to determine the proper operating ratio. He proposed the removal of employee pensions and benefits, miscellaneous general expenses, regulatory Commission expense, property insurance and outside services employed, which results in an operating ratio of 3.62 percent.

<sup>&</sup>lt;sup>31</sup> <u>See</u> Transcript, Vol. II at 87; Delta's Response to the AG's Information Request of August 11, 1999, Item 73.

The Commission finds that employee pensions and benefits and regulatory Commission expense do not vary with incremental customer sales, are unrelated to end of test year customer levels, and should be subtracted from operating and maintenance expense when computing the operating ratio. Removal of these expenses results in a 10.63 percent expense to revenue ratio and an expense adjustment of \$45,036.

### Temperature Normalization Adjustment

Delta proposes to increase revenue by \$1,693,458 to reflect warmer than normal temperatures experienced during the test period. Delta's method of computing this adjustment is consistent with the methodology that it has used, and the Commission has accepted, in Delta's prior rate adjustment proceedings. The AG does not object to the proposed adjustment. The Commission accepts the proposed temperature normalization adjustment.

# Wages and Salaries

Delta proposes to increase test-period-end wages and salaries by \$116,199 to normalize its payroll to reflect the July 1, 1998 employee wage increases.<sup>32</sup> To reflect its current level of employees, Delta annualized the pay period ending December 31, 1998.<sup>33</sup>

The AG argues that Delta's proposed adjustment is a gross payroll adjustment and does not reflect amounts allocated to construction and subsidiaries. He proposes

<sup>&</sup>lt;sup>32</sup> Direct Testimony of John F. Hall at 4.

<sup>&</sup>lt;sup>33</sup> Delta's Response to the Commission's Order of September 14, 1999, Item 21(a).

to increase test-period wages and salaries by \$85,964 to reflect only the portion of the payroll increase that will be charged to operation and maintenance expense.<sup>34</sup>

In response to a Commission request, Delta determined that, based on its employees actual regular and overtime hours in 1998 and the July 1, 1998 wage rates, its pro forma gross salaries and wages are \$6,213,582.<sup>35</sup> The Commission finds that, if capitalized wages of \$1,595,398<sup>36</sup> and the subsidiary allocation of \$6,000 are removed, Delta would have expensed only \$4,612,184 of its \$6,213,582 in gross pro forma salaries and wages. During the test period Delta's salaries and wages expense was \$4,531,719,<sup>37</sup> or \$80,465 less than the Commission's pro forma salaries and wages expense. Delta's controller has acknowledged that the appropriate level of payroll adjustment is \$80,465.<sup>38</sup> Accordingly, we find that test-period wages should be increased by this amount.

# **Disallowed Accounts**

In its application, Delta proposed to reduce test-period operating expenses by \$142,711, to remove expenses that the Commission disallowed in its previous rate adjustment proceeding.<sup>39</sup> These expenses were advertising expenses of \$10,755;

<sup>&</sup>lt;sup>34</sup> Direct Testimony of Robert J. Henkes at 24.

<sup>&</sup>lt;sup>35</sup> Delta s Response to the Commission s Order of September 14, 1999, Item 23.

<sup>&</sup>lt;sup>36</sup> <u>Id.</u>

<sup>&</sup>lt;sup>37</sup> Delta's Application, Tab 30 (FERC Form No.2) at 355.

<sup>&</sup>lt;sup>38</sup> Transcript, Vol. I at 199.

<sup>&</sup>lt;sup>39</sup> Case No. 97-066, Order of December 8, 1997 at 12-15.

public and community relations expenses of \$16,886; conservation program expenses of \$48,913; lobbying expenditures of \$4,279; marketing costs of \$37,869; and administrative payroll expenses of \$24,000 related to the forgiveness of a note owed by Delta's president.<sup>40</sup>

Stating that it erroneously removed the expenses related to the forgiven loan, Delta now asserts that the \$24,000 should be included in allowable expenses. To support the inclusion of this expense, Delta refers to a survey of total cash compensation for the chief executive officers of ten small gas utilities and asserts that its presidents total compensation, including the loan forgiveness, is uncompetitively lower than CEO compensation for other companies in the small gas company sector and should therefore not be reduced. As

While Delta provides the results, it fails to provide any information to make a meaningful comparison of Delta and the 10 companies surveyed. Delta also fails to show the survey is representative of the gas industry. We have previously found that, given Delta's size and complexity, the base compensation paid to Delta's president is adequate.<sup>43</sup> Delta fails to present any evidence in the current proceeding to dispute our

<sup>&</sup>lt;sup>40</sup> Delta's Application, Tab 25 at Schedule 4; Delta's Response to the Commission's Order of August 11, 1999, Item 30(c); Delta's Response to the Commission's Order of September 14, 1999, Item 25.

<sup>&</sup>lt;sup>41</sup> Delta s Response to the Commission s Order of September 14, 1999, Item 25.

<sup>&</sup>lt;sup>42</sup> Delta s Brief at 25.

<sup>&</sup>lt;sup>43</sup> Case No. 97-066, Order of December 8, 1997 at 12.

earlier findings. We, therefore, accept the adjustments as originally proposed and decrease Delta's operating expenses by \$142,711.

#### Canada Mountain

Delta proposes to reduce test-period expenses by \$121,120 for costs related to Canada Mountain.<sup>44</sup> The AG proposes that an additional \$35,918 in related Canada Mountain expenses be disallowed.<sup>45</sup> As we have included the Canada Mountain investment in Delta's base rates,<sup>46</sup> the Commission finds that both parties adjustments should be denied.

### **Customer Deposits**

Delta proposes to increase test-period expenses by \$35,692 to include the interest on customer deposits in operating expenses.<sup>47</sup> As previously discussed,<sup>48</sup> the Commission has determined that it is inconsistent not to deduct the customer deposit balance from rate base while allowing the corresponding interest expense to be included in Delta's operating expenses. For this reason, Delta's proposed adjustment to move interest on customer deposits above-the-line should be denied.

<sup>&</sup>lt;sup>44</sup> Delta s Brief at 25.

<sup>&</sup>lt;sup>45</sup> Direct Testimony of Robert J. Henkes at 32.

<sup>&</sup>lt;sup>46</sup> <u>See supra pp. 4</u> 5.

<sup>&</sup>lt;sup>47</sup> Direct Testimony of John F. Hall at 4.

<sup>&</sup>lt;sup>48</sup> See supra pp. 8 9.

# Medical Expense Adjustment

In its application, Delta proposed to increase test-period expenses by \$77,561 to reflect the recovery of funds from Delta's stop-loss insurance coverage that was applicable to 1997.<sup>49</sup> Delta's controller testified at the hearing, however, that this adjustment had not been reduced to reflect the amounts allocated to construction and subsidiaries and should be reduced to \$57,380 to reflect such allocation.<sup>50</sup> The Commission accepts the revised medical expense adjustment of \$57,380.

#### Rate Case Expense

Delta proposes to increase test-period expenses by \$48,333 to reflect amortizing its estimated rate case expense of \$145,000 over a 3-year period.<sup>51</sup> The AG proposes a reduction of \$19,920 in operating expenses to eliminate \$24,960 of rate case expense amortization for Case No. 97-066; to reduce rate case expense amortization for the current case to \$29,000; and to remove Delta's cost to participate in the Department of Transportation's (DOT) Pipeline Safety training program in 1999 in the amount of \$23,960.<sup>52</sup>

The AG argues that Delta's rate case expense should be normalized rather than amortized. He argues that the timing of a rate case is a matter entirely within the

<sup>&</sup>lt;sup>49</sup> Direct Testimony of John F. Hall at 4.

<sup>&</sup>lt;sup>50</sup> This allocation is made by multiplying the gross adjustment of \$77,561 by the operation and maintenance ratio of 73.98 percent. <u>See</u> Transcript, Vol. I at 185.

<sup>&</sup>lt;sup>51</sup> Direct Testimony of John F. Hall at 4.

<sup>&</sup>lt;sup>52</sup> AG s Brief at 9 - 13.

discretion of the utility. Ratepayers, he asserts, should not therefore have to bear the cost of two rate cases merely because Delta chose to seek rate relief before the amortization period for Delta's prior rate case expenses had completely run.<sup>53</sup>

Delta argues in response that the AG s normalization methodology would deny it the recovery of expenses already authorized by the Commission. It notes that the proposal is inconsistent with the AG s recommendations in Case No. 99-046, ignores the conceptual differences between amortization and normalization, and violates the Commission s Order in Case No. 97-066.<sup>54</sup>

Finding that the AGs proposal to exclude Delta's allowed rate case expense from Case No. 97-066 is unlawful and unreasonable, we reject the proposal. Implicit in the AGs proposal is the concept that utilities should be discouraged from seeking rate adjustments by preventing carte blanche dollar-for-dollar recovery of multiple rate case expense each time it comes in. <sup>55</sup> Such an argument fails to take into account KRS 278.180, which permits a utility to apply for rate adjustments without limitation or restriction. <sup>56</sup> Moreover, it conflicts with the longstanding principle that rate case expenses are appropriately included in utility rates. <u>See West Ohio Gas Co. v. Public</u>

<sup>&</sup>lt;sup>53</sup> <u>Id.</u> at 10.

<sup>&</sup>lt;sup>54</sup> Delta s Brief at 21.

<sup>&</sup>lt;sup>55</sup> AG s Brief at 10 - 11.

See Case No. 95-554, Application of Kentucky-American Water Company to Increase Its Rates (Sept. 11, 1996) at 41 (There is nothing in KRS Chapter 278 that authorizes the Commission to adopt a disincentive to, in effect, penalize a utility for exercise its right to seek rate relief).

<u>Utilities Comm n</u>, 294 U.S. 63, 74 (1935) (holding that rate case expenses must be included among the costs of operation in the computation of a fair return and that [t]he charges of engineers and counsel, incurred in defense of its security and perhaps its very life, were as appropriate and even necessary as expenses could well be ).

The AGs policy, moreover, would have the unintended consequence of discouraging utilities from seeking rate relief. For example, the record in this case demonstrates that Delta's reluctance to seek rate relief in a timely manner has had a negative effect on its financial condition and contributed to the erosion of the equity component of its capital structure.

The AG also contends that the Commission should exclude from rate recovery any expenses associated with Case No. 99-046 and with Delta's Experimental ARP.<sup>57</sup> The AG argues that Delta has not requested recovery of these expenses, that he has not had adequate opportunity to review these expenses, and that the proposed Experimental ARP was for the primary benefit of shareholders.

The Commission finds no merit in these arguments. We note that Delta's application in this proceeding included a revised version of its Experimental ARP and that much of the evidence regarding this plan was originally submitted in Case No. 99-046. While Delta certainly intended for its proposal to benefit its shareholders, the Commission fails to discern how Delta's motive in Case No. 99-046 differs in any fashion from its motives in a general rate adjustment proceeding. In each instance, the

<sup>&</sup>lt;sup>57</sup> Id. at 11 13.

utility s paramount interest is to protect the interests of its shareholders. Moreover, the AG presents no legal authority to suggest that Delta's presentation of its Experimental ARP falls outside the holding of <u>West Ohio Gas Co.</u>

The Commission finds that, based upon Delta's most recent cost filings,<sup>58</sup> Delta incurred expenses of \$35,518 to prosecute Case No. 99-046 and expenses of \$183,235 to prosecute this proceeding. We further find that these costs should be amortized over a 3-year period to reflect the normal interval between Delta's general rate adjustment applications. Accordingly, rate case expense should be increased by \$72,918.

The AG asserts that Delta recorded the 1998 and 1999 DOT Pipeline Safety program costs in its test-period operating expenses. The AG recommends that Delta's test-period operating expenses be reduced by \$23,960 to remove the out-of-period expense item and to avoid a doubling of the expense for the same program. The Commission finds that the AG's adjustment is reasonable and, therefore, reduces operating expenses by \$23,960.

#### Public Service Commission Assessment

The Commission has increased Delta's Public Service Commission assessment by \$3,449 to reflect the impact of the Commission-approved revenue increase on this expense.

<sup>&</sup>lt;sup>58</sup> Delta s Response to Staff Hearing Data Request to John F. Hall, Item 6.

# Pension Expense

Delta incurred \$292,818 in pension expense during the test period. The AG proposes to decrease this expense by \$82,599 to reflect the findings of the actuary report of April 1, 1999 and the use of the operation and maintenance ratio of 73.98 percent.<sup>59</sup> The Commission finds that Delta must invest \$267,238 in its employee pension fund for the 12-month period ending April 1, 2000.<sup>60</sup> This amount combined with the test-period fees paid to Hand and Associates, Delta's actuary, the American Industry Trust Company, Delta's trustee, and the Pension Benefit Guaranty Corporation of \$46,354<sup>61</sup> results in a pro forma pension expense of \$307,592, or \$14,773 above Delta's test-period level. The Commission has applied the 73.98 percent operation and maintenance ratio to the gross pension adjustment of \$14,773 to arrive at our pension expense adjustment of \$10,929.

# 401(k) Expense

The AG argues that Delta's 1998 401(k) expense includes a reclassification of the pension expense due to an account distribution correction made for a trustee for the year 1997. Applying the operation and maintenance ratio of 73.98 percent to the \$18,736 reclassification, the AG proposes to reduce 401(k) expense by \$13,861. The Commission accepts the proposed adjustment.

<sup>&</sup>lt;sup>59</sup> Direct Testimony of Robert J. Henkes at 25.

<sup>&</sup>lt;sup>60</sup> Delta s Response to Staff Hearing Data Request to John Brown, Item 1.

<sup>&</sup>lt;sup>61</sup> Rebuttal Testimony of John B. Brown at 7.

### Bad Debt Expense

Contending that Delta's test-period bad debt expense is abnormally high, the AG recommends that bad debt expense be adjusted to reflect a bad debt-to-revenue ratio of 0.67 percent, Delta's average bad debt ratio for the 4-year period ending 1998. Using the 0.67 percent debt-to-revenue ratio and its recommended base revenues and GCR revenues, the AG recommends a reduction of \$95,204 in test-period bad debt expense for a total bad debt expense of \$250,666.<sup>62</sup>

Delta argues that the AG s proposed adjustment is a post test year adjustment that should be rejected. It futher contends that the AG chose an expense item that might decrease because of management s effort to control bad debt expense and then projects a post test year decrease in this expense. Delta argues that the historical data for the past 4 years shows that the AG s proposed bad debt expense is unreasonable on a going forward basis.<sup>63</sup>

Delta's bad debt expense for the 12-month periods ending October 31, 1998 and October 31, 1999 was \$353,870 and \$213,385, respectively.<sup>64</sup> This reduction in bad debt expense strongly suggests that the implementation of a more aggressive collection program has significantly affected collections and supports the AG's arguments underlying the proposed bad debt adjustment.

<sup>&</sup>lt;sup>62</sup> AG s Brief at 14.

<sup>&</sup>lt;sup>63</sup> Delta s Brief at 22.

<sup>&</sup>lt;sup>64</sup> Delta's Response to Staff Hearing Data Request to Steve Seelye, Item 1.

The Commission finds that the AGs proposed debt-to-revenue ratio of 0.67 percent is reasonable. Using this ratio and the pro forma base revenues and GCR revenues found reasonable herein, the Commission has calculated an adjustment to reduce bad debt expense by \$90,810.

#### Miscellaneous

The AG proposes to reduce Delta's test-period operating expenses by \$30,114 to remove spousal travel expenses of \$404, meals and entertainment expenses of \$805 for golf outings, employee membership dues of \$1,274, and an abnormal booking of \$27,631 that is related to a settlement of a sales tax audit.<sup>65</sup>

The Commission finds that the employee-related expenses totaling \$2,483 are not appropriate for rate recovery and should be excluded for rate-making purposes. While employee-related expenses may benefit employer/employee relations, Delta's ratepayers should not bear these costs. We have, therefore, reduced Delta's test-period expenses by \$2,483 to eliminate these expenses.

As to the sales tax audit expense, Delta argues that this expense is typical of many expenses that Delta incurs on an ongoing basis. Delta further argues that various regulatory agencies constantly audit or review its records and that payments of settlement amounts should not, therefore, be considered unusual.<sup>66</sup> In response the AG

<sup>&</sup>lt;sup>65</sup> AG s Brief at 15.

<sup>&</sup>lt;sup>66</sup> Rebuttal Testimony of John B. Brown at 8.

points to Delta's admission that [t]he only abnormal booking for the test year, 1998, was Delta's settlement of \$27,631 in a sales tax audit. <sup>67</sup>

The Commission finds that the AG s proposed adjustment to eliminate \$27,631 in sales tax audit costs should be accepted. While Delta may have audits or review on a frequent basis, it fails to present any evidence to demonstrate that the sales tax audit will be an annual recurring expense.

## **Depreciation Expense**

Delta proposes to decrease test-period depreciation expense by \$20,212 to reflect the test-period level of UPIS investment. Based upon our review of Delta's depreciation schedule, we find that this adjustment should be accepted. As previously discussed, Delta's investment in Canada Mountain is being included in the base rates. To accomplish this objective, the Commission has increased depreciation expense by \$454,935, the July 31, 1999 level of annual Canada Mountain depreciation expense. The amount reflects the amount of depreciation currently being recovered through Delta's GCR and is based upon the most recent cost information submitted to the Commission.

#### Payroll Taxes

Delta proposes to increase payroll taxes by \$8,937 to reflect the effect of its proposed payroll adjustment on payroll taxes. The AG proposes to adjust Delta's

Delta's Response to the AG's Information Request of August 11, 1999, Item 26.

<sup>68</sup> Direct Testimony of John F. Hall at 4.

payroll increase by the operation and maintenance ratio of 73.98 percent, which results in a decreased payroll tax adjustment of \$6,611.<sup>69</sup> The Commission finds that payroll taxes should be increased by \$6,188 to reflect the payroll adjustment determined to be reasonable herein.

#### **Property Taxes**

Delta proposes to remove \$47,147 in property taxes that are associated with Canada Mountain. The AG proposes a property tax adjustment of \$113,904 to reflect the removal of Canada Mountain from rate base. The Commission finds that, as the Canada Mountain investment has not been removed from Delta's test-period operations, both adjustments should be denied.

#### Income Tax Expense

Delta's proposed income tax expense is based upon a 39.445 percent blended federal and state income tax rate applied to adjusted after tax equity return based on Delta's proposed expenses. The AG proposes to adjust Delta's income tax methodology to reflect the investment tax credit amortization of \$71,000 and the \$21,000 in amortization of deferred income taxes resulting from the change in the federal statutory tax rate. Accepting the AG's proposed adjustments and applying the composite tax rate to revenues and expenses found reasonable herein, the Commission finds that Delta's adjusted income tax expense is \$768,068.

<sup>&</sup>lt;sup>69</sup> AG s Brief at 16.

<sup>&</sup>lt;sup>70</sup> Direct Testimony of John F. Hall at 5.

<sup>&</sup>lt;sup>71</sup> AG s Brief at 17.

# Interest Synchronization

Delta proposes a reduction of \$1,395,455 in test-period interest expense to reflect the hypothetical debt levels and the actual interest rates. Applying Delta's recommended weighted cost of debt to its proposed rate base, the AG proposes a reduction of \$727,730. Delta's proposed interest synchronization methodology is based on the assumption that the revenue requirement determination is based on the capital structure.

In Case No. 97-066, the Commission applied Delta's weighted cost of debt to the net investment rate base to achieve the correct level of interest expense for rate-making purposes. Delta has not presented any evidence to persuade the Commission to abandon this approach. Accordingly, Delta's weighted cost of debt should be applied to the net investment rate base to achieve the correct level of interest expense for rate-making purposes. Therefore, the Commission has increased test-period interest expense by \$159,959.

<u>Summary</u>
The Commission finds Delta s adjusted operations are as follows:

	Reported <u>Test-period</u>	Pro Forma <u>Adjustments</u>	Adjusted <u>Test-period</u>
Operating Revenues Operating Expenses Net Operating Income Interest Expense	\$ 34,857,742	\$(14,063,077) (13,943,252) \$( 119,825) 159,959	\$ 20,794,665
Net Income	<u>\$ 1,705,196</u>	<u>\$( 279,784)</u>	<u>\$ 1,425,412</u>

<sup>&</sup>lt;sup>72</sup> Case No. 97-066, Order of December 8, 1997 at 18.

### RATE OF RETURN

## Cost of Debt

Delta proposes a 7.4786 percent cost of long-term debt based on its embedded cost of long-term debt as of the end of December 1998. It originally proposed a short-term debt cost rate of 5.41 percent, its cost of short-term debt capital as of June 21, 1999. The AG s updated testimony accepted Delta's debt costs as proposed. Delta subsequently revised its short-term debt cost to reflect its current short-term debt cost rate of 5.89 percent. The Commission finds that Delta's cost of long-term debt should be 7.4786 percent and its cost of short-term debt should be 5.89 percent.

### Return on Equity

Delta proposed a return on equity (ROE) of 11.9 percent based on its proposed use of a hypothetical capital structure consisting of 43.50 percent common equity, 48.43 percent long-term debt, and 8.07 percent short-term debt. In the alternative, Delta proposed an ROE of 13.9 percent if its test year capital structure consisting of 29.80 percent common equity, 60.18 percent long-term debt, and 10.02 percent short-term debt is used.

Delta contends that its actual level of equity capital is so low, its revenue requirements should be based on a hypothetical equity level that is more representative of the average equity level for natural gas local distribution companies (LDCs). Delta used information reported for 29 LDCs in an Edward Jones report entitled Natural Gas Industry Summary Monthly Financial & Common Stock Information as the basis for its proposed 43.50 percent hypothetical common equity level. The mean equity level of those firms is 43.2 percent. The median is 43.9 percent. Delta asserts that use of the

hypothetical capital structure will compensate for the relatively low equity level and the related risk that investors associate with investing in Delta stock. In the alternative, Delta proposes that the Commission compensate for the additional risk by granting Delta a higher return.

Delta performed a Discounted Cash Flow (DCF) analysis to estimate its required ROE. The constant growth DCF model using Delta's annual dividend, current stock price, as well as its 52 week high and low prices, and Delta's growth rates obtained from analysts reports, yielded a range of results from 8 percent to 9.93 percent. Substituting an expected industry growth rate obtained from Cost of Capital Quarterly by Ibbotson Associates in the calculations of the constant growth DCF model produced ROE estimates in a range of 11.7 percent to 12.41 percent. Using the two-stage form of the DCF model, which incorporates analysts growth rates for Delta for the first five years and the industry average growth rate thereafter, produced results ranging from 10.20 percent to 12.05 percent.

Delta performed a risk premium analysis to estimate the required ROE. The risk premium analysis, which was performed for both short and long horizons, produced ROEs of 13.91 percent and 14.08 percent. Delta also used the Capital Asset Pricing Model (CAPM) to adjust the risk premiums for the market as a whole to estimate Delta's ROE. The CAPM calculated by Delta produced an ROE of 10.48 percent, which Delta adjusted upward by adding a size premium of 260 basis points which produced an ROE of 13.08 percent. Using different beta coefficients, Delta calculated size-adjusted ROEs in a range of 11.88 percent to 15.08 percent.

Citing the rural nature of its service territory, Delta proposes that the Commission establish an ROE of 11.9 percent, which is near the top of the range produced by its DCF analysis. It further proposes that the Commission add a 2 percent leverage adjustment if a hypothetical capital structure is not used, resulting in a 13.9 percent ROE based on its test-year-end capital structure.

The AG recommends an ROE of 8 to 9 percent if Delta's proposed Experimental ARP is approved, an ROE of 10 to 11 percent if the Experimental ARP is rejected and the proposed WNA is adopted, and an ROE of 10.25 percent to 11.25 percent if both are rejected. The AG opposes the use of a hypothetical capital structure, arguing that a hypothetical capital structure is a fiction that simply does not exist, and that the capital structure is a management choice which should not receive a bonus return.<sup>73</sup>

The AG also performed DCF, CAPM, and Bond Yield Risk Premium analyses. In performing these analyses, the AG used information that is specific to Delta, as well as data from five comparable gas distribution companies. The five companies are among the 23 investor-owned distribution companies that are listed in <a href="Value Line">Value Line</a>. They are listed on the New York Stock Exchange, had total assets in 1998 valued at less than \$1 billion, and have net sales to total assets ratios more nearly similar to Delta than the other 18 companies listed in <a href="Value Line">Value Line</a>. Other measures used in the selection process for the five comparable companies related to financial leverage, namely the common equity ratio and ratio of total liabilities to total assets.

 $<sup>^{73}\,</sup>$  Testimony of Carl G. K. Weaver at 8.

The AG stated that the comparison companies are larger than Delta and therefore less risky to the extent that size affects risk and that Delta is more risky because of its greater amount of long-term debt. On a relative basis, however, the AG points out that the comparable companies have more current liabilities than Delta, a factor that mitigates the financial risk difference. In performing a cash flow analysis of Delta and the five companies, the AG concluded that Delta's cash flow coverage of interest was very similar, though somewhat lower. The AG made the same characterization of Delta's cash flow of dividend coverage, although Delta's coverage ratio was slightly higher than that of the other companies. Delta was determined to be more likely to require external equity financing than the other companies, but also to have a very high quality of earnings due to its cash flow coverage of net income. The AG considered Delta to be of nearly the same risk as the five-company group from a cash flow perspective.

The AG also compared published risk measures for Delta and the five companies. As reported by Standard and Poor s, Delta s Beta is .02 while the average Beta for the five companies is .31, indicating that Delta has less systematic risk. Delta was ranked as having a financial strength of 32 as opposed to an average ranking for the five companies of 68. The AG concludes that the published market measures show that the five companies are less risky than an average company and that because Delta is similar to the five companies, it is also less risky than an average company. If Delta s proposed Experimental ARP is not approved, the AG concludes, Delta s cost of equity will be higher than the cost rate for the five companies.

The AG presented equity cost estimates for the five companies.<sup>74</sup> The DCF analysis performed on behalf of the AG produced a range of ROEs of 7.4 percent to 10.7 percent. The CAPM analysis produced a range of 9 percent to 11.1 percent. The AG s Bond Yield Risk Premium analysis produced a range of 9.9 to 10.9 percent. The AG concludes that the cost of equity for the five companies averages 9.75 percent to 10.75 percent, and raises the range by 50 basis points to account for Delta's greater risk. The resulting range is 10.25 to 11.25 percent, which the AG recommends if the hypothetical capital structure is rejected and neither the Experimental ARP nor the WNA are approved.

After reviewing the record and the analyses performed by both parties, the Commission finds that a hypothetical capital structure is not appropriate in this case for rate-making purposes. Delta's equity ratio in its capital structure has been below the industry average of 43.2 percent quoted by Delta since 1994. Although the approved equity ratio of 30 percent is somewhat below the 36.25 percent approved in Delta's last rate case, it is not sufficiently low to justify the use of a hypothetical capital structure or an ROE of 13.9 percent. Delta's proposed ROE is based on a DCF analysis which uses market price data, and the data specific to Delta should already reflect investors expectations regarding its capital structure.

<sup>&</sup>lt;sup>74</sup> Testimony of Carl G. K. Weaver at 1 5.

 $<sup>^{75}</sup>$  Delta's Response to the Commission's Order of July 15, 1999, Item 2, Schedule 1.

The Commission acknowledges that Delta's service area is largely rural. We have always taken this factor into account when considering the appropriate ROE for Delta. This factor, as was Delta's then lower-than-average equity component in its capital structure, was reflected in the 11.6 percent ROE that we approved for Delta in Case No. 97-066.

The Commission acknowledges that weather is an element that significantly affects an LDC s earnings. Weather s effect on earnings is specifically discussed in the Hilliard Lyons and Edward Jones reports. The WNA approved in this Order will mitigate the effect of weather on Delta's earnings. Ordinarily, the stabilizing effect of a WNA would be sufficient cause to award a lower return to a utility. We find, however, that Delta's returns over recent years have eroded its financial condition to the point that it would not be reasonable to lower Delta's ROE at this time. Furthermore, we are not persuaded that the ROE range that the AG proposes is adequate to preserve Delta's financial integrity and to enable it to attract capital.

The Commission, having considered all the evidence, including current economic conditions, finds that an ROE in the range of 11.1 to 12.1 continues to be fair, just, and reasonable for Delta. This range will allow Delta to attract capital at a reasonable cost and to maintain its financial integrity, ensuring continued service. It will provide for necessary expansion to meet future requirements, and result in the lowest possible cost to ratepayers. A return of 11.6 percent will best meet the above objectives.

<sup>&</sup>lt;sup>76</sup> Delta s Response to the Commission s Order of August 11, 1999, Item 53.

### Rate of Return Summary

Applying the rates of 7.4786 percent for long-term debt, 5.89 percent for short-term debt, and 11.6 percent for common equity to the capital structure approved produces an overall cost of capital of 8.556 percent. The Commission finds this overall cost of capital to be fair, just, and reasonable.

### REVENUE REQUIREMENTS

Based upon the Commission's findings and determinations herein, Delta requires an increase in revenues of \$2,957,796, determined as follows:

Net Investment Rate Base	\$ 91,997,648
Rate of Return	x 8.5556%
Required Operating Income	\$ 7,870,951
Adjusted Operating Income	<u>- 6,094,845</u>
Revenue Deficiency	\$ 1,766,106
Gross-up Factor <sup>77</sup>	x1.66532608
Required Increase, Inclusive of Income	
Taxes, PSC Assessment and Uncollectibles	\$ 2,957,796

### COST-OF-SERVICE STUDY

Delta presented a fully allocated class cost-of-service study based on its embedded costs for the test period. The objective of a cost-of-service study is to determine class rates of return on rate base at present and proposed rates. A cost-of-service study may also be used to guide the Commission in allocating the revenue requirements among rate classes. Generally, Delta's cost-of-service study indicates that, at present rates, the residential class has a rate of return substantially less than the

 $<sup>^{77}\,</sup>$  The Commission's gross-up factor includes allowances for uncollectibles and the PSC Assessment.

overall system average rate of return. Other rate classes are either near or above the system average. Delta used the results to design rates to reflect movement toward a better balance between service class rates of return while according recognition to the marketplace, customer acceptance and the theme of gradualism.<sup>78</sup>

Instead of a minimum system method, Delta uses the zero-intercept methodology to classify distribution mains into customer and demand components. The Commission has historically found that the zero-intercept methodology is an acceptable way to divide distribution main costs into demand-related and customer-related components and is statistically and theoretically more sound and less subjective than the minimum system method, in which a minimum size main must arbitrarily be chosen in order to determine the customer-related component.

The AG counters Delta's cost-of-service study on two fronts. First, he argues that Delta improperly used the weighted least squares in applying the zero intercept methodology. Second, he contends that no distribution mains costs should be assigned as customer-related costs. As a conservative approach, he argues that distribution mains should be allocated 50 percent on the basis of average demand and 50 percent on peak demand. In his cost-of-service study, the AG applied this same allocation to transmission mains along with other minor changes not previously specified. The Commission is concerned with the AG's approach, wherein assumptions are asserted without adequate support. However, since the AG chose not to use his findings in his

<sup>&</sup>lt;sup>78</sup> Delta s Brief at 33.

proposed revenue allocation, no undue consequences result from this overly conservative approach.

The Commission agrees that the results of a cost-of-service study are best used as a guide for revenue allocation and rate design. As Delta's study is consistent with prior studies accepted by the Commission, we will use it as a guide for revenue allocation and rate design. However, Delta is hereby put on notice that, in the future, better support must be filed including but not limited to a user-friendly study model (preferably in electronic form) accompanied by an instruction manual, the assumptions of the model, the inputs (variables and data), and the results. Such supporting documentation is necessary to facilitate complete analysis of all facets of the model.

### REVENUE ALLOCATION

Delta proposes to shift revenue from its general service and interruptible customers to its residential customers, but to a lesser degree than suggested by its cost-of-service study. Its proposed rates, Delta asserts, establish a reasonable balance between its cost-of-service study and the realities of the current marketplace. Delta further asserts it must make its general service rates more competitive or risk even more large volume customers switching to interruptible service. Delta stresses the importance of the revenue contribution from these large volume customers because of the high load factors and revenue stability that they create.

The AG opposes Delta's revenue allocations. He presents an alternative cost-ofservice study<sup>79</sup> and argues that Delta's proposed concessions to the large commercial

<sup>&</sup>lt;sup>79</sup> Direct Testimony of Richard A. Galligan, Exhibit RAG-1.

and interruptible class are unnecessary because interruptions in service to interruptible customers have been infrequent in recent years.<sup>80</sup> Although the results of his cost-of-service study support varying percentage rate increases among Delta's customer classes, the AG proposes an equal percentage increase for all customer classes.

In making our evaluation, the Commission recognizes that the natural gas industry has undergone major changes in recent years. As a result of these changes, large volume end-users, mainly industrial customers, have sought out their own gas supplies at prices less than the LDCs price for its system supply gas. These circumstances represent a significant departure from the time when all customers were essentially captive and few reasons existed to consider costs as a major factor in allocating revenues and designing rates. Regulation in this earlier era resulted in services that were often priced at less than the cost of service to residential customers and priced at more than the cost of service to commercial and industrial customers. Conventional wisdom held that, because commercial and industrial customers could pass along price increases to their customers, it was the better policy to price services to those customers above cost while pricing services to residential customers below cost. Today's competitive environment no longer supports such thinking and requires a restructuring of Delta's rates.

Delta's rate restructuring involves the allocation of non-gas, or base rate revenues. The Commission finds that the firm customer classes, at present rates, are not making an adequate contribution to Delta's overall rate of return and that, to

<sup>&</sup>lt;sup>80</sup> <u>Id.</u> at 24-25.

increase that contribution, the full amount of the increase granted herein should be allocated to those customer classes.

The Commission also finds that rates to the interruptible classes should be reduced. The Commission concurs with the AG that Delta's interruptible customers, with their non-captive status, impose a greater level of risk to Delta than firm, essentially captive customers. This risk translates into required higher rates of return from those classes that Delta reflected in its cost-of-service study. The Commission finds that reducing the base rate revenue contribution for the interruptible rate classes recognizes the greater risks attendant with serving these classes and is consistent with the moderate, gradual approach to rate restructuring the Commission has followed in recent gas rate cases.

## **RATE DESIGN**

## **General Service**

Delta proposes to reduce the customer charge for small commercial customers from \$18.36 to \$17.00, to increase the customer charge for industrial customers from \$25.00 to \$50.00, and to increase the customer charge for interruptible customers from \$200.00 to \$250.00. Although its cost-of-service study shows that the residential customer charge does not fully recover the related customer costs, Delta proposes to maintain its residential customer charge at \$8.00. This latter action, Delta asserts, reflects its sensitivity to the effect of higher rates for its residential customers. It will therefore move toward its full cost of service in this case by increasing commodity charges only.

Delta's cost-of-service study shows that the percentage increase to the small commercial class should be smaller than the residential increase, yet the present monthly customer charge is more than twice the customer charge for the residential class. The proposed rates will result in an increase for the small commercial customer class that is smaller than the increase for the residential class and will move the small commercial customer charge toward the residential customer charge.

Currently Delta's tariff lists all customer classes under one heading entitled General Service. The Commission finds that Delta's general service rate should be restructured into four categories: residential, small non-residential general service, large non-residential general service, and interruptible service. We further find that residential service should be reduced to one usage block and small non-residential general service to three usage blocks. Neither Delta nor the AG opposes such restructuring.

The Commission further finds that the rates set out in Appendix B will produce the additional revenues granted herein and increase Delta's revenues by 8.44 percent. The rate changes, by customer class, produce increases of 12.20 percent and 9.61 percent for residential and small non-residential general service, respectively, while producing a 4.10 percent increase for large non-residential general service.

#### Gas Cost Adjustment

Moving Canada Mountain costs from Delta's Gas Cost Adjustment (GCA) to its base rates requires an adjustment to the GCR factor that the Commission approved in Case No. 97-066-H. This adjustment will reduce the GCR from \$3.9194 per MCF to \$3.2071 per MCF effective January 1, 2000. This decrease in the GCR factor is an offset to the increase in base rates associated with the recovery of Canada Mountain

costs. The GCR decrease is slightly greater than the base rate increase associated with Canada Mountain costs due to the current capital structure being different than that included in Delta's past GCA filings. However, Delta's capital structure, as reflected in this Order, would have been reflected in Delta's next GCA filing, which would have produced the same net decrease in rates, all other things being equal.

### WNA Tariff

Delta proposes a WNA tariff to adjust for the significant effects that weather has on its earnings and return on equity. Delta's proposed WNA requires a base rate adjustment each month from December through April based on normal weather conditions. The WNA is intended to stabilize revenues and customers bills by adjusting the base rate portion of customer bills to the levels that would exist under normal temperature conditions. Delta argues that, although a temperature normalization adjustment is historically allowed in rate cases, without a WNA mechanism it remains subject to drastic fluctuations in earnings and in its return on equity due to temperature variations.

The Commission finds that Delta's proposed WNA should be implemented as a pilot to be effective for the remainder of the current heating season and for the 2000-2001 and 2001-2002 heating seasons. We further find that Delta should be required to file annual reports on the operation of its WNA after each heating season. Delta may, by formal application, seek the Commission's approval to extend the pilot or to implement the WNA on a permanent basis after conclusion of the pilot. Such an application shall be made at the time Delta files its annual WNA report covering the 2001-2002 heating season.

### EXPERIMENTAL ARP

In its application, Delta proposes to implement an ARP on an experimental basis for a period of three years. Delta states that the ARPs purpose is to provide an alternative regulatory process for adjusting gas service rates. Delta's stated goal in establishing this mechanism is to provide an orderly and expeditious process for automatically making rate adjustments to keep Delta's rate of return within the range authorized by the Commission.<sup>81</sup>

Delta's ARP consisted of three components: an Annual Adjustment Component (AAC), an Actual Adjustment Factor (AAF), and a Balancing Adjustment Factor (BAF). The AAC would adjust base rates based on Delta's financial budget for the upcoming fiscal year. The level of the rate adjustment would depend upon the return projected to be earned based on Delta's financial budget. If projected revenues do not cover Delta's budgeted costs and produce a return at the midpoint of its authorized return on equity range, Delta's rates would be adjusted through the AAC to produce the necessary additional revenues.

The proposed ARP contains two limitations on any rate adjustment. First, Delta, with Commission approval, could reduce the annual revenue deficiency amount otherwise charged to customers if Delta determined that the mechanism would increase rates to a noncompetitive level. Second, the AAC could not exceed 5 percent of Delta s total utility revenues.

<sup>&</sup>lt;sup>81</sup> Case No. 99-046, Letter from John F. Hall, Vice President of Finance, Delta Natural Gas Company, to Helen C. Helton (February 5, 1999) at 3.

<sup>82</sup> See Delta's Application. Tab 7 at Sheet 30.

After the AAC has been in effect for a full year, the AAF would be used to perform a true-up calculation based on the actual return earned for the fiscal year. Through the application of the AAF Delta's rates would increase or decrease on a prospective basis, depending upon whether the utility's actual return on equity, for the current year, failed to meet or exceeded the range that the Commission found fair, just and reasonable. After the second year of the ARP's operation, and each year thereafter, the BAF would be used to true-up each year's adjustment to the AAF and to reflect any over- and under-recoveries realized through the application of the AAF and of the BAF for the preceding 12-month period.

Delta's ARP includes certain performance-based controls. The first mechanism compares the company's actual non-gas supply Operations and Maintenance (O&M) expenses per customer to the approved rate-case-level of non-gas supply O&M expenses on a per customer basis, adjusted for changes in the Consumer Price Index for Urban Consumers (CPI-U). If Delta's actual non-gas supply O&M expenses per customer fall within a 1.5 percent band of the indexed level of expenses, then actual O&M expenses are used to compute the earned return on common equity achieved in the most recent fiscal year for purposes of calculating the AAF. If Delta's actual costs are less than the indexed O&M by more than 1.5 percent, Delta would be allowed to increase its actual expenses by 50 percent of the amount by which the actual expenses are below 98.50 percent of the indexed O&M expenses. Conversely, if Delta's expenses exceed the indexed O&M expenses by more than 1.5 percent, Delta would be limited to including only 50 percent of the expenses above 102.5 percent of the indexed O&M expenses.

The second mechanism places a 60 percent cap on the amount of common equity that can be included in Delta's total capitalization for purposes of computing the AAF. Delta's current equity ratio is approximately 30 percent.

Delta's ARP is modeled upon Alabama Gas Company's (Alagasco) Rate Stabilization and Equalization Plan (RSE Plan). There are, however, several differences. Delta's plan does not include quarterly adjustments. Unlike Delta's ARP, the Alagasco plan apparently does not fully reconcile budget to actual results. Annual increases in the Alagasco plan, furthermore, are capped at 4 percent of actual prior year's operating revenues as compared to Delta's cap of 5 percent.

Alagasco's plan allows rate decreases when the actual ROE is above the authorized ROE, but does not allow for rate increases when the actual ROE is below the authorized ROE. Delta's plan includes provisions for rate decreases when the actual ROE is above that authorized and for rate increases when the actual ROE is below that authorized. The Indexed O&M Expenses in Alagasco's plan are based on the company's prior year's actual O&M expenses increased by one year's worth of CPI inflator as compared to Delta's proposal to apply the CPI inflator annually to the amount allowed in its most recent rate proceeding. Alagasco's plan requires the utility to return to ratepayers 75 percent of any actual O&M expenses that are incurred in excess of the Indexed O&M Expenses, plus 1.25 percent. Delta's plan returns 50 percent of such overruns to ratepayers.<sup>84</sup>

<sup>83</sup> Case No. 99-046, Delta's Response to the Commission's Order of June 4, 1999, Item 20.

<sup>&</sup>lt;sup>84</sup> Case No. 99-046, Direct Testimony of Robert J. Henkes at 26.

Delta asserts that the ARP would ensure that Delta's earned rate of return falls within the Commission-authorized range and that the ARP is a more gradual approach to rate-making than is accorded under traditional regulation. Delta further asserts that the ARP would result in a less adversarial rate-making process and that it would be less resource intensive and less costly for all participants in the rate-making process. With the resource savings that the ARP is expected to produce, Delta asserts that it could better focus its attention on improving its operations and preparing for a more competitive marketplace. Delta suggests that the proposed ARP would also benefit the Commission by releasing Commission resources from rate-making proceedings to focus upon other matters.

The AG opposes the proposed ARP. He argues that Delta's proposal represents a movement away from setting rates in a manner that ensures that only costs that are properly recovered from ratepayers are included in revenue requirements. He argues that the proposal is inconsistent with generally accepted rate-making principles. The ARP, he further argues, contains fewer incentives for cost controls and reductions and operational and financial improvements than does traditional regulation. He

The AG rejects Delta's contention that the proposed ARP is similar to the performance-based rate-making measures recently incorporated in several gas supply clauses. He notes that formula rates addressing rate of return as an element of the formula have been used only where the legislature has specifically instructed the

<sup>85</sup> Case No. 99-046, Direct Testimony of Thomas S. Catlin at 6.

<sup>&</sup>lt;sup>86</sup> Case No. 99-046, Direct Testimony of Robert J. Henkes at 11.

Commission to impose a specific type of rate-making. While fuel adjustment clauses and gas supply clauses use a formula rate, fuel cost, unlike Delta's non-gas operating expenses and return, is a highly variable and volatile cost. Moreover, the performance-based mechanisms that the Commission has approved allow utility gains only to the extent that they surpass difficult benchmarks. Delta's proposal, he asserts, would allow the Company added gains without significant improvements in performance.

The AG also asserts that the ARP is open to gaming through under-budgeted income and/or over-budgeted costs. It has the strong potential of allowing Delta to earn in the upper limits of its permitted ROE range. The AG points to evidence that Delta's operating budgets have consistently been more pessimistic than actual results.

The AG further argues that the cost control mechanisms within the ARP are illusory and will not provide any incentive to control costs or improve performance. As Delta's historic O&M costs have increased at a rate less than inflation, he argues, Delta's proposed use of the CPI-U is not an appropriate factor to use in this instance. He notes that, given Delta's current equity ratio, the 60 percent limitation is, for the foreseeable future, of little, if any, value. The AG further notes that Delta's proposal does not include a provision to make common rate-making adjustments. He concludes that, although the ARP is modeled on the Alagasco RSE Plan, it provides few benefits to ratepayers.

Based upon our review of the evidence of record, the Commission finds the proposed ARP is not in the public interest and should not be approved. We are particularly concerned that Delta investigated few ARPs and focused its attention almost exclusively upon the Alagasco RSE Plan. Moreover, Delta's ARP lacks meaningful cost

containment and performance-based incentives to encourage improved utility performance. The plan focuses primarily on guaranteeing that Delta earns its authorized return on common equity.

We find little evidence to suggest that the proposed ARP will reduce Delta's regulatory burdens, free scarce regulatory resources, or reduce the adversarial nature of rate-making proceedings. The ARP's process would merely replace existing rate-making procedures with extensive reporting and auditing requirements and shift existing regulatory burdens from the utility to the Commission.

The Commission further finds the performance-based cost controls incorporated into Delta's plan provide few incentives to improve its operations or to control/reduce its costs. The performance-based cost control that uses the Company's Indexed O&M Expenses as a benchmark is not challenging and represents little improvement over traditional regulation. The Commission believes that, for a performance-based mechanism to have real meaning, it must require the utility to improve its current performance through either improved customer service or decreased costs before shareholders receive greater returns.

We further find that the proposed ARP is subject to possible manipulation. It encourages the utility to under-budget revenues and to over-budget costs. This incentive is inherent in the plan since the Company is only allowed to recover income sufficient to bring earnings back to the low end of the approved ROE range. On the other hand, if the Company over-earns, it is allowed to retain all income up to the upper end of the established ROE range.

We further find that, given the Company's current level of equity capital, the proposed 60 percent cap on equity capital included in the calculation of the AAC is not a meaningful performance-based control. The Commission remains unconvinced that such a measure would be of any value as a true performance-based control during the proposed three-year experimental period.

A sound ARP should focus on elements under a utility s control. The weather is the most significant cause of differences between budgeted earnings of a natural gas utility for a given year and actual achieved earnings.<sup>87</sup> The Commission is unconvinced that, absent the impact of weather, the proposed ARP will result in significant improvements in Delta's financial condition or its operating performance. To the extent that regulatory action is needed to assist Delta in improving its present condition, we have by this Order authorized the use of a WNA clause in this proceeding.

Despite our decision on this proposal, we remain convinced that properly constructed alternative rate mechanisms have substantial merit in today's changing regulatory environment. We encourage Delta to continue to explore alternative regulatory processes and to expand the present scope of its search to make in-depth comparisons of the many alternative mechanisms presently in use. Such analysis will provide the utility with the best opportunity to develop a mechanism uniquely suitable for its particular needs and circumstances.

<sup>&</sup>lt;sup>87</sup> Case No. 99-046, Direct Testimony of Thomas S. Catlin at 16.

### SUMMARY

Having considered the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. The rates in Appendix B are fair, just, and reasonable rates for Delta and will produce gross annual revenues as found reasonable herein.
- 2. Delta's proposed rates would produce revenue in excess of that found reasonable herein and should be denied.
- 3. The rate of return granted herein is fair, just, and reasonable, and will provide for the financial obligations of Delta with a reasonable amount remaining for equity growth.
- 4. Delta's proposed WNA is reasonable and should be approved on a trial basis.
  - 5. Delta s proposed ARP should be denied.

#### IT IS THEREFORE ORDERED that:

- 1. The rates in Appendix B are approved for service rendered by Delta on and after January 1, 2000.
  - 2. Delta's proposed rates are denied.
- 3. Effective January 1, 2000, Delta's proposed WNA is approved for gas service provided for the remainder of the current heating season and for the 2000-2001 and 2001-2002 heating seasons. Heating season shall mean the period from December 1 through April 30.

4. After the end of each heating season, but no later than June 30 of each year, Delta shall file an annual report on the WNA. These reports shall contain the information listed in Appendix C to this Order and shall include both monthly data and totals for the heating season for residential and commercial customers affected by the WNA.

5. If at the conclusion of the 2001-2002 heating season Delta wishes to extend the use of the WNA for a definite period or to permanently implement the WNA, it shall, no later than June 30, 2002, formally apply to the Commission for such extension or authority to permanently implement the WNA.

6. Delta s application to implement an ARP is denied.

7. Within 30 days from the date of this Order, Delta shall file with this Commission revised tariff sheets setting out the rates and charges approved herein.

Done at Frankfort, Kentucky, this 27<sup>th</sup> day of December, 1999.

By the Commission

ATTEST:	
Executive Director	

# APPENDIX A

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 99-176 DATED DECEMBER 27, 1999

	Capitalization Per Books		Adju	Recommended	
Component of Capitalization	Dec 31, 1998	Ratios	Subsidiaries	Canada Mountain	Capital Structure
Common Equity	\$ 28,351,812	30.95526%	\$ (1,280,279)	\$ 831,892	\$ 27,903,425
Long-Term Debt	54,207,845	59.18555%	0	1,590,553	55,798,398
Short-Term Debt	9,030,000	9.85919%	0	264,956	9,294,956
Total Capitalization	\$ 91,589,657	100.00000%	\$ (1,280,279)	\$ 2,687,401	\$ 92,996,779
Canada Mountain Inv Less: Canada Mount	restment 7/31/99 tain Investment 12/31/98			\$ 16,268,317 13,580,916	
Capitalization Adjustn	nent - Canada Mountain			\$ 2,687,401	

### APPENDIX B

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 99-176 DATED DECEMBER 27, 1999

The following rates and charges are prescribed for service rendered on and after January 1, 2000 for the customers in the area served by Delta Natural Gas Company, Inc. These rates and charges include the gas cost adjustment approved in Case No. 97-066-H.

## **RATE SCHEDULES**

### **AVAILABILITY**

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

# **RATES**

		KATES			
	Base Rate	Gas Cost Recovery <u>Rate</u> plus	equals	<u>Total</u>	
	<u> </u>	<u>Residential</u>			
Customer Charge All MCF	\$3.6224	\$3.2071		\$ 8.00 6.8295	Per MCF
	<u>Small</u>	Non-Residential			
	<u>Ge</u>	neral Service			
Customer Charge First 200 MCF Per Month Next 800 MCF Per Month	\$3.6224 2.4000	\$3.2071 3.2071		\$17.00 6.8295 5.6071	
Over 1000 MCF Per Month	h 2.0495	3.2071		5.2566	

# Large Non-Residential

# General Service

Customer Charge			\$50.00
First 200 MCF Per Month	\$3.6224	\$3.2071	\$6.2952
Next 800 MCF Per Month	2.0063	3.2071	5.2134
Next 4000 MCF Per Month	1.3190	3.2071	4.5261
Next 5000 MCF Per Month	0.9190	3.2071	4.1261
Over 10,000 MCF Per Month	0.7190	3.2071	3.9261

Gas Cost Recovery

Base Rate Rate plus equals Total

# Interruptible Service

Customer Charge			\$250.00
First 1000 MCF Per Month	\$1.6000	\$3.2071	\$4.8071
Next 4000 MCF Per Month	1.2000	3.2071	4.4071
Next 5000 MCF Per Month	0.8000	3.2071	4.0071
Over 10,000 MCF Per Month	0.6000	3.2071	3.8071

#### APPENDIX C

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 99-176 DATED DECEMBER 27, 1999

Delta Natural Gas Company, Inc. shall include the following financial and statistical data in its Annual Report to the Commission on the Weather Normalization Adjustment (WNA) pilot program:

- 1. Number Of WNA Customers (By Class)
- 2. Amount Of WNA Revenue (By Class)
- 3. Mcf Volume Adjustment Resulting From WNA (By Class)
- 4. Average WNA Revenue Per Customer (By Class)
- 5. Amount Of WNA Revenue (Total Company)
- 6. Mcf Volume Adjustment Resulting From WNA (Total Company)
- 7. WNA Impact On Earnings For Reporting Period
- 8. Actual Number Of Heating Degree Days
- 9. Normal Number Of Heating Degree Days
- 10. Variation Of Actual Temperatures From Normal Temperatures (%)
- 11. Number Of Customer Inquiries About WNA Program
- 12. Number Of Customer Complaints About WNA Program