

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF RATES OF)
COLUMBIA GAS OF KENTUCKY, INC.) CASE NO. 10201

O R D E R

IT IS ORDERED that Columbia Gas of Kentucky, Inc. ("Columbia") shall file an original and 10 copies of the following information with the Commission with a copy to all parties of record no later than June 9, 1988. If the information cannot be provided by this date, Columbia should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission. Columbia shall furnish with each response the name of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

1. Provide the data, methodology, and a complete explanation for calculating the \$7,000 Amortization of Series B Discount/Premium on Reacquired Preferred Stock on Schedule 7 of Mr. Vari's testimony.

2. Provide the data, methodology, calculations, and a complete explanation for all items in Schedule 4 of Mr. Vari's testimony.

3. Provide necessary data and complete the attached Schedule A for end-of-test year to show how the capitalization ratios for the Columbia Gas System ("CGS") were determined as shown in Schedule 1 of Mr. Vari's testimony. Footnote and explain any and all adjustments.

4. a. Complete Schedule 14, page 1 of 3, of Mr. Vari's testimony to include CGS 5-year average growth rate in earnings per share.

b. Complete Schedule 14, page 2 of 3, to include CGS market price, indicated dividend, and dividend yield.

c. Complete Schedule 14, page 3 of 3, to include the calculations for CGS estimated cost of equity.

5. a. On pages 15-16 of Mr. Vari's testimony, does the term "inconsistent" results mean:

(1) "different" results.

(2) results are inconsistent with investor's expectations.

(3) "wrong" results.

Give a full and detailed explanation to what is meant by "inconsistent" results.

6. With reference to the testimony of Mr. Payne, page 4, line 11, states that the Cost Allocation Study in this case is the same as that in Case No. 9554, Notice of Adjustment of Rates of Columbia Gas of Kentucky, Inc., with the exception of costs related to services, which are now allocated on the basis of customers. Other than this change, however, you fail to explain the reason that the allocation factors of the following

items were changed from those in Case No. 9554. Provide an explanation for the change for each of these items and explain how these changes affect the overall allocation of costs across all classes.

a. Cost Allocation Study, Schedule No. 3, Sheet 2 of 5, line 17.

b. Schedule No. 3, Sheet 3 of 5, lines 5, 7, 8, 17, 19, 20, and 22.

c. Schedule No. 4, Sheet 1 of 1, lines 1-2, Schedule No. 7, Sheet 6 of 15, lines 1-2, and Schedule No. 7, Sheet 8 of 15, line 1. Furthermore, explain why those expenses were aggregated for this study, whereas, these expenses were detailed and disaggregated in the Cost Allocation Study for Case No. 9554.

d. Schedule No. 7, Sheet 3 of 15, lines 3-14, 16-18, and 23.

e. Schedule No. 7, Sheet 5 of 15, lines 3-5.

f. Schedule No. 7, Sheet 7 of 15, lines 11, 14-16, 19-23, and 28.

g. Schedule No. 7, Sheet 9 of 15, line 1.

h. Schedule No. 7, Sheet 13 of 15, line 11.

i. Schedule No. 7, Sheet 15 of 15, line 3.

7. With reference to the testimony of Mr. Payne, page 1 of Attachment A, describes a design peak day temperature of 3 degrees F used in calculating Factor No. 1.

a. Provide all workpapers underlying the determination of this mean temperature.

b. Explain why a 1 in 10 probability of design day temperature occurrence is preferred.

c. Referring to the 57 years of historical actual temperature data:

(1) Provide the beginning and ending dates of this historical period.

(2) Provide the number of days and actual dates within this 57 year period that the design day temperature of 3 degrees F occurred or was exceeded (i.e., a daily mean temperature less than 3 degrees F).

(3) Provide actual test-year coincident peak demand, each class's contribution to peak, the mean temperature experienced on that day, and the date of occurrence.

(4) Provide actual test-year transportation peak demand.

8. With reference to the testimony of Mr. Payne, provide all calculations performed to determine each component of Factor No. 6.

9. With reference to the testimony of Mr. Payne, provide the location of Sheet A-1 and Sheet A-2 mentioned on page 1 of Attachment A, lines 17 and 23, respectively. Likewise, explain Schedule 6 of the Cost Allocation Study, Sheets 2 through 5, mentioned on page 2 of Attachment A. (This schedule has only 3 sheets.)

10. Provide all other workpapers underlying the Cost Allocation Study.

11. With reference to the \$640,481 wages and salaries adjustment, Item No. 16, Sheet 3 of the Commission's Information Request No. 1, provide the following information:

a. State whether the \$4,851,746 amount shown on Line 13, Column 1, represents the total wages of all union employees annualized to wage levels in effect at December 31, 1987. If not, provide the calculation of this.

b. State whether the \$4,691,144 amount shown on the line below Line 13, Column 3, represents the total wages of all union employees during 1987. If it does not, state this amount.

c. State the percentage of union wages capitalized to plant-in-service accounts during each year for the years 1983-1987.

d. Provide a complete explanation of the rationale for dividing Line 14 by Line 15 to produce the ratio of .0187144, and then applying that ratio to Book Labor exclusive of Administrative and General Salaries to arrive at the \$156,433 adjustment. Also, explain why Columbia believes this to be an appropriate method for normalizing union wages.

e. Define "Base Wages" as used on Line 15 and explain what comprises the \$8,581,625 amount in Column 7.

f. Explain what Columbia believes to be the significance of the Ratio Adjustment Required to Annualize Union Labor/Base Wages for the test period that is derived on Line 16.

g. State whether the \$156,433 adjustment on this sheet represents the same adjustment shown as \$156,430 on Item No. 2, Sheet 10, Column 2, of the Cost Data Exhibit.

12. With reference to Item No. 16, Sheet 1 of the Commission's Information Request No. 1, provide the following information:

a. State whether the \$3,902,506 amount shown on Line 13, Column 1, represents the total wages of all non-union employees annualized to wage levels in effect at December 31, 1987. If not, provide the calculation of this and also state what the amount listed does represent.

b. State whether the \$3,890,481 amount shown on the line below Line 13, Column 3, represents the total wages of all non-union employees during 1987. If not, provide the calculation of this and state what the amount listed does represent.

c. State the percentage of non-union wages capitalized to plant-in-service accounts during each year for the years 1983-1987.

d. Explain Columbia's rationale for using the method as depicted on this sheet for normalizing non-union wages.

e. State whether "progression and merit" wages increases apply to only non-union personnel. Also, define this term as used by Columbia and state the criteria for qualifying for these increases.

13. With reference to Item No. 16, Sheet 4 of the Commission's Information Request No. 1, provide the following information:

a. State and explain what the amounts listed in Column 1 represent. Also, state all subsidiaries of CGS whose wages and

salaries are included therein along with the amount applicable to each company.

b. Provide an explanation of how administrative and general salaries are allocated to Columbia and provide an analysis showing the calculation of the \$1,229,860 in test-year administrative and general salaries expense. Also, provide a narrative explaining the calculation.

c. State and explain what the note shown on Lines 38 and 39 means (include a non-abbreviated typed text of the note). Also, explain the impact that change had on the amounts shown on this sheet.

d. State whether the wages and salaries of any employees included on Sheet 4, Column 1, are also included on Sheets 1 and/or 3, Column 1, of Item No. 16.

e. State the percentage of administrative and general wages and salaries capitalized to plant-in-service accounts during the years 1983-1987.

14. With reference to Item No. 16, Sheet 2 of the Commission's Information Request No. 1, provide the following information:

a. Explain why this sheet is titled, "Development of Projected Labor for the Year 1987." State whether "1987" should be "1988."

b. State whether the \$8,527,121 amount shown on Line 5 is intended to be annualized labor expense at December 31, 1987, as it appears to be. If so, explain the rationale for multiplying

that amount by 1.04 to arrive at "Projected Labor Beginning December 1987." Also, explain the significance of 1.04.

c. If the amount on Line 5 is not annualized labor expense at December 31, 1987, state what it is.

d. State and explain the basis for the 4 percent labor increase projected on Line 6.

e. Explain why Columbia believes it is appropriate to recognize wage adjustments occurring 11 months beyond the end of the test year as this adjustment proposes.

f. Columbia's response to Item No. 33 of the Commission's Information Request No. 1 reflects that Columbia had an average of 311 employees during the test year. Assuming the same number during 1988, at the end of an 11-month period, the cumulative experience of Columbia's employees will have increased by 285 years (311 X 11/12). Explain how Columbia has recognized in its post-test year adjustment the efficiencies that will be achieved through a better trained work force.

15. a. State the overtime wages and salaries/base wages and salaries ratio for the years 1983-1987.

b. State the wages and salaries expensed/total wages and salaries ratio for the years 1983-1987.

16. With reference to the \$15,548 customer installations adjustment, provide the following information:

a. Elaborate on the explanation for this adjustment.

b. State the total expenses charged and total revenues credited to Account No. 879 during the test year.

17. With reference to the \$339,818 adjustment to increase uncollectible accounts expense, provide the following information:

a. Explain the circumstances that resulted in the level of reduction of net charge-offs during the test year relative to the 4 previous years.

b. Explain the circumstances that resulted in the level of reduction to Account No. 904 during the test year relative to the 4 previous years.

c. In the most recent case in which the Commission made a determination regarding Columbia's uncollectible accounts, Case No. 9003, An Adjustment of Rates of Columbia Gas of Kentucky, Inc., this expense was calculated by applying a "charge-off" ratio, equal to net charge-offs/gross billed revenues, to normalized revenues. State Columbia's position regarding using that method in this case. Also, state if and why Columbia believes its proposed method to be preferable to the method used in Case No. 9003.

d. Provide copies of all court judgments received by Columbia related to the Martin Gas Company and Johnson County Gas Company delinquent accounts.

18. With reference to the \$2,476 adjustment to reduce miscellaneous sales expense by \$2,476, provide the following information:

a. A more thorough explanation of the basis for this adjustment.

b. With reference to Item No. 16, Sheet 25, state whether all revenue and expense items listed are related to trans-

actions with Columbia employees. If not, state the amounts that are.

19. With reference to Sheet 29 of Item No. 16 of the Commission's Information Request No. 1, which supports the proposed \$27,627 rate case expense adjustment, provide the following information:

a. State to whom the \$8,335 for management services will be paid and explain the services to be provided.

b. State to whom the \$7,857 for employee expenses and labor will be paid and explain the services that will be obtained for this expenditure.

c. State to whom the \$11,435 for legal services will be paid and explain the services to be provided.

d. Explain why the above services cannot be obtained from Columbia's internal rate staff.

e. State whether any compensation to the persons performing the above services is included in any other expense accounts in Columbia's proposed cost of service. If so, state the accounts and the amounts.

20. With reference to Sheet 28 of the response to Item No. 16 of the Commission's Information Request No. 1, which provides the support for the \$16,379 adjustment to increase injuries and damages expense, provide the following information:

a. Provide a list, along with a brief explanation of the circumstances involved, of each settlement in excess of \$1,000.

b. State whether Columbia believes any of the settlements identified in the aforementioned question are nonrecurring in nature. If so, state which.

21. With reference to the \$221,387 adjustment to recognize deferred expenses related to the DIS System, provide the following information:

a. Explain the function of the DIS System and its advantages over the CIS System.

b. Provide an itemized breakdown of the \$664,101 amount that is proposed to be amortized.

c. State the total cost of the new system.

d. State any amounts related to the CIS System that are included in test year expenses.

e. Mr. Dew states that the DIS System replaces the "outdated and inefficient" CIS System. Explain why Columbia has not proposed an adjustment to recognize the cost savings that will be derived from this more efficient information system.

f. State the expected useful life of the DIS System.

g. Explain why Columbia believes 3 years to be an appropriate amortization period for the DIS System.

22. With reference to Item No. 16 of the Commission's Information Request No. 1, provide the following information:

a. Provide the workpapers showing the calculations supporting the following adjustments.

(1) Purchased Gas	\$<1,446,168>
(2) Cash Records and Collections	249,508
(3) Customer Assistance	16,437

(4) Advertisement Expense - Promotion/Institutions <104,310>

(5) Employee Pension and Benefits 43,677

b. Respond to the portion of Item No. 16 requesting "a complete detailed narrative explanation of each adjustment including the reason why each adjustment is required."

c. Respond to the portion of Item No. 16 requesting that Columbia "explain in detail all components used in each calculation including the methodology employed and all assumptions applied in the derivation of each adjustment."

23. With reference to the proposed \$16,437 adjustment to customer assistance expenses, provide the following information:

a. Explain what the Residential Conservation Service Program is.

b. Explain why Columbia projects this program to increase from \$2,313 to \$18,750, or 711 percent, from 1987 to 1988.

c. Provide an itemized breakdown of the \$18,750 program cost projected for 1988.

24. With reference to Columbia's proposed net investment rate base of \$70,005,256, provide the following information:

a. Explain why Columbia believes it is appropriate to include Gas Plant Held for Future Use as a rate base item.

b. With reference to Sheet 3, Exhibit 5, of the Cost Data Exhibit, explain and provide a reconciliation showing the difference between the \$34,724,483 accumulated depreciation amount

shown on Line 13 and the \$34,645,048 amount shown on page 200, Line 18, of Columbia's 1987 FERC Form 2.

c. With reference to Sheet 3, Exhibit 5, of the Cost Data Exhibit, explain why Columbia believes the \$467,460 adjustment to decrease accumulated depreciation is appropriate.

d. With reference to Item No. 5, Sheet 6, of the Cost Data Exhibit, explain what is meant by "Market Re-Entry" and the significance of January 1, 1987.

e. With reference to Sheet 7, Exhibit 5, of the Cost Data Exhibit, elaborate on Columbia's rationale for excluding the \$140,224 amount associated with a gain on required debt for rate-making purposes.

f. With reference to Sheet 8, Exhibit 5, of the Cost Data Exhibit, provide an explanation for Columbia's rationale for excluding each line item identified as "inappropriate for rate-making purposes."

g. With reference to Sheet 10, Exhibit 5, explain the rationale for the addition of the \$2,804 amount on Line 3. Also, state whether this represents the sum of Lines 2 and 7, Column 2, of Exhibit 2, Sheet 1. If it does not state what it does, represent and provide a copy of this calculation.

h. With reference to Sheet 13, Exhibit 5, provide the workpapers supporting the \$79,527 adjustment to reflect nominated gas annualized at rates effective April 21, 1988. Also, provide a narrative explanation explaining these workpapers.

25. With reference to Sheet 1, Exhibit 4, wherein the derivation of the \$79,150 adjustment to other taxes is shown, provide the following information:

a. Provide the supporting documentation that the 1988 level of property taxes will increase by \$66,042.

b. On Sheet 2, Line 14, state and explain the items that comprise "Total Operation and Maintenance Labor."

c. Explain why Columbia believes it appropriate to apply the 1.02 percent ratio as shown on Line 5 to arrive at "taxable base in labor expense." Also, explain the significance of this ratio.

26. With reference to the response to Item No. 9 of the Commission's Information Request No. 1, state and explain the circumstances which resulted in the level of change in the following account balances between December 31, 1986 and December 31, 1987.

<u>Account</u>	<u>December 1986 Balance</u>	<u>December 1987 Balance</u>
234 A/P to Association Co.	\$17,203,349	\$28,691,881
236 Taxes Accrued	360,228	4,619,775
242 Miscellaneous Current Liabilities	2,409,959	5,901,777

27. With reference to the response to Item No. 10 of the Commission's Information Request No. 1, provide the following information:

a. Provide a stand-alone list of all accounts covering the 12 months of the test year applicable to more than one jurisdiction or utility operation.

b. For each account listed in (a) above, state the basis/bases for any amounts that were allocated and reference the applicable basis/bases provided in response to Item No. 10.

28. With reference to the response to Item No. 10 of the Commission's Information Request No. 1, state and explain the circumstances that resulted in the level of change occurring during the test year relative to the previous year(s) for the following accounts.

- a. Account No. 742 - Production Equipment.
- b. Account No. 870 - Operation Supervision and Engineering.
- c. Account No. 874 - Mains and Services Expenses.
- d. Account No. 887 - Maintenance of Mains.
- e. Account No. 893 - Maintenance of Meters and House Regulators.
- f. Account No. 904 - Uncollectible Accounts.
- g. Account No. 907 - Supervision.
- h. Account No. 909 - Information and Instructional.
- i. Account No. 916 - Miscellaneous Sales Expense.
- j. Account No. 921 - Office Supplies and Expense.
- k. Account No. 923 - Outside Services Employed.
- l. Account No. 925 - Injuries and Damages.
- m. Account No. 930 - General Advertising Expense.
- n. Account No. 930.2 - Miscellaneous General Expense.

29. With reference to the response to Item No. 23 of the Commission's Information Request No. 1, explain the circumstances

that have resulted in the Average Gas Plant in Service per Mcf Sold Ratio increasing by 29 percent from 1983-1987.

30. With reference to the response to Item No. 39 of the Commission's Information Request No. 1 and the note "since the salaries shown consist of direct and allocated charges, percentage annual increases would be meaningless; therefore, they are not shown," provide the percentage annual increases so that there meaningfulness may be evaluated.

31. With reference to Columbia's 1987 Annual Report, page 208, explain the facts and circumstances that resulted in the level of increase in Account No. 376 that occurred during the test year.

32. With reference to the response to Item No. 16 of the Commission's Information Request No. 1, "Cost Data Exhibit 6, Sheets 1-33, provide the following information:

a. Provide a narrative explanation of each page of the support data.

b. Reference and index each calculation contained in the support data back to the page and line number of Exhibit 6 the calculation supports. Also explain each calculation.

c. For any amounts contained in Exhibit 6 that remain unsupported, unexplained, unreferenced, and unindexed upon the creation of the response to Items (a) and (b) above, provide the support and explanations for those amounts and clearly reference and index the response to Exhibit No. 6.

33. In Case No. 9003, the Commission reduced the 12-month average balance of prepaid nominated gas by \$2,399,482 for the

amounts unidentifiable in cost-free accounts payable. Provide a calculation of the average 1987 balance of prepaid nominated gas in the same format shown on Exhibit 5, Sheet 15 that excludes amounts associated with Cost Free Accounts Payable.

34. Provide a breakdown of Account No. 234-1. The breakdown should include the purpose for incurring the liability, the dollar amount of the liability, and the interest rate of the liability. If the liability bears an interest rate, provide a copy of the sales agreement or other documentation which stipulates the interest rate.

35. With reference to Account No. 165-5, Prepaid Nominated Gas Purchases, provide the following information:

- a. Explain why these purchases are necessary.
- b. Provide a complete explanation of all Columbia's policies related to prepaid nominated gas purchases.
- c. Explain all benefits received by Columbia as a result of its prepaid gas transactions.
- d. Explain all benefits received by Columbia's corporate parent as a result of these transactions.
- e. Explain all benefits received by Columbia's rate-payers related to these transactions.
- f. Explain all disadvantages to the parties identified in (c) through (d) above as a result of Columbia's prepaid nominated gas transactions.
- g. Provide copies of all correspondence between Columbia and its corporate parent related to prepaid nominated gas transactions for the period January 1, 1985 to present.

h. Provide all test-year journal entries related to prepaid nominated gas. Also, provide a complete explanation of each entry.

36. With reference to the Theodore Barry and Associates 1986 Management Audit of Columbia, provide the following information:

a. Provide a schedule itemizing the expenses included in the test year associated with the implementation of each recommendation.

b. Provide a schedule itemizing the savings and benefits realized during the test year relating to the implementation of each recommendation.

c. Provide a schedule itemizing the savings and benefits realized and expected to be realized in 1988 relating to the implementation of each recommendation.

d. Provide a schedule itemizing the savings and benefits projected to be realized subsequent to 1988 relating to the implementation of each recommendation.

e. Provide a timetable for the implementation of the recommendations noted in (c) and (d) above.

f. Discuss the costs and benefits associated with any systems implemented or other changes made during the test year as a result of the recommendations of the Management Audit.

g. Explain why Columbia has not made any adjustments related to the savings and benefits to be achieved upon implementation of the recommendations contained in the Management Audit.

37. Burchett testimony, pages 3-5, describes the proposed change in GS Transportation Rates. Provide the following information as support for this testimony:

a. A detailed explanation of why Columbia intends to eventually eliminate the interruptible part of the GS Transportation Rate.

b. Why was the two-part GS Transportation Rate intended to be an interim measure?

c. How was the proposed transitional rate of \$.80 per Mcf derived (provide necessary workpapers)?

d. Other than the projected savings (paying \$.4832 per Mcf for transportation versus \$.80 per Mcf), is there any other reason for Columbia's proposal to transfer the eight qualified customers to either the FI or IS rate schedules?

38. Per Exhibit 8, Schedule 1, of Columbia's cost data filed May 5, 1988 delivery service flex rates at currently effective rates ranged from \$.10 to \$.15 to \$.29 per Mcf. Provide the following information concerning flex rates and test-year actual flex rate revenues:

a. At what date were the flex rates of \$.10, \$.15 and \$.29 per Mcf shown on Exhibit 8, Schedule 1, Sheet 4 of 4, Columbia's current effective flex rates?

b. Per Columbia's 1987 FERC Form No. 2, transportation revenues for the test year were \$1,944,604 derived from serving Ashland Oil and 45 other customers. For each customer which received gas at DS flex rates provide the actual test year Mcf's

received, applicable flex rate for each month of the test year and the total revenue derived from flex rate sales.

c. Describe Columbia's corporate policy regarding the management of its flex rate sales and describe, in Columbia's opinion, the types of regulatory policies or incentives the Commission could employ to assist in this management.

39. Burchett testimony, pages 6-7, describes the proposed changes in billing and collection for Columbia's IUS customers. Provide the following information regarding the proposed tariff changes as set forth in Columbia's Notice, Exhibit 4:

a. What is the criteria for selecting 10 days as the notice period for possible termination?

b. Explain the rationale for shortening, from 30 days to 10 days, the time limit for the furnishing of a surety bond by buyer when part of a bill is in dispute.

40. Provide the following information concerning proposed tariff changes set out in Columbia's Notice, Exhibit 4:

a. Explain, for Rate Schedule DS, the proposed requirement to limit the flex provision to those customers with normal annual volume requirements of 25,000 Mcf or more.

b. Explain, for Rate Schedule GS, Standby Delivery Service, the proposed restrictions in the availability of interruptible service.

c. Explain, for Rate Schedules FI and IS, the proposed requirement to limit the schedules to customers with normal annual volume requirements of 25,000 Mcf or more.

d. Explain, for Rate Schedule AFDS, the proposed requirement to limit the schedule to customers having normal annual usage of not less than 6,000 Mcf.

41. Columbia's Notice, Exhibit 10, summarizes the adjustments to Columbia's test year Mcf sales volume. Item 16 in Volume II of Columbia's response to the Commission's Order of April 11, 1988, in the 8-page section headed "Blocking of Volumes by Rate Schedule and Class" workpapers are provided with some supporting data for Exhibit 10. Provide the following information related to test year sales volumes, both actual and adjusted:

a. In Exhibit 10, Column 1, does the number of bills adjusted reflect the rate schedule transfers summarized in columns 3 and 7 of that exhibit? (If not, explain what adjustments were made to bills.)

b. Exhibit 10, Column 3, summarizes the annualization of test year transfers between rate schedules (from GS to FI). Sheets 5 and 6 in the workpapers provides the detail for these transfers. Is it correct that a total of seven customers - two industrial and five commercial - were involved in these transfers?

c. Per Exhibit 10, Sheet 2, Column 2, the FI Schedule shows the actual test year, per books amount of 108,240 for the firm Mcf volumes from the customer service agreements for all FI customers. Why does Column 3 show no adjustment for firm Mcf volumes for these transfers which occurred (per the worksheets) during the last 3 months of the test year?

d. Provide the amounts, with supporting workpapers, for the adjustments to firm Mcf volumes that should be reflected in Exhibit 10, Sheet 2, Column 3.

e. Exhibit 10, Column 5, summarizes the Mcf increase due to weather normalization. Sheet 1 of 8 in the workpapers shows the numbers that were added to arrive at the weather-related Mcf amounts shown on Exhibit 10. Provide the detailed workpapers supporting the weather normalization adjustment showing normal degree days, test year degree days, the calculation and determination of the 612,724 increase in Mcf sales resulting from weather normalization and any other support for the weather normalization adjustment.

f. Exhibit 10, Column 7, summarizes the proposed rate schedule transfers of customers which could economically switch to another rate schedule if the proposed rates, specifically the GS interruptible transportation rate, were approved. Sheets 7 and 8 in the workpapers provide the detail for the proposed transfers. How many of the 11 customers shown on sheets 7 and 8, based on their 1987 consumptions, could switch economically based solely on the differences between current GS rates and current FI and IS rates? (Identify the customers by account number.)

g. Explain why customers which could already achieve a savings by switching rate schedules would be switched only if the proposed rates are approved?

h. Why would the 3 customers (account numbers 4176, 2200 and 4190) which had no DS consumption during the test year

only switch schedules if the proposed rates, specifically the GS interruptible transportation rate, were approved?

42. In Columbia's cost data, Exhibit 2, Sheet 7, in the explanation for adjustment no. 2, Gas Purchased Expense, it states "Gas Purchased Expense has been adjusted to reflect projected purchases for the 12 months ended December 31, 1987, priced at supplier rates in effect on April 18, 1988." Item 16 in Volume II of Columbia's response to the Commission's Order of April 11, 1988, the 6-page section headed "Semi-annual gas cost adjustment clause" provides the workpaper calculations for the normalized cost of gas. Provide the following information related to test year gas purchases and expense, including actual and normalized purchases:

a. Per Columbia's 1987 FERC Form No. 2, test year gas purchases were 17,944,811 Mcf. Per the worksheets, sheets 3-5, total adjusted purchases (12,492,064 - Columbia Transmission, 6,258,880 - Other Sources and 123,728 - Citizens Energy) are 18,854,672 Mcf, an increase of 909,861 Mcf over test year purchases. The only worksheet explanation is for Columbia Transmission's increase, from 11,804,479 to 12,472,064 for weather normalization. Provide detailed explanations, with supporting workpapers, for a total increase in purchase of 909,861 Mcf when the only Mcf sales adjustment is an increase of 612,724 Mcf for weather normalization.

b. Provide the calculations, with explanations, of the adjustment to increase purchases from Columbia Transmission by 667,585 Mcf (12,472,064 - 11,804,479) for weather normalization

which reflects an incremental line loss of 8.2 percent on the 612,724 Mcf increase in sales for weather normalization.

c. Purchases from other sources, per the workpapers Sheet No. 4, are annualized at 6,258,880 Mcf. This represents an increase of 194,705 over the test year purchases of 6,064,195 Mcf as reported in the 1987 FERC Form No. 2. Provide a full explanation with supporting workpapers for how this adjustment was derived.

d. Sheet 2 of the workpapers provides the demand cost to be recovered from Rate Schedule FI customers. Line 14 includes annual daily firm volumes of 108,240 Mcf which is the actual test year amount. After determining the increase in daily firm volumes due to the annualization of test year rate schedule transfers and adding in the 7,776 increase in firm volumes resulting from the proposed rate schedule transfers, provide a revision to Sheets 1 and 2 which reflects the increase in FI demand cost recoveries.

e. Sheet 1 of the workpapers shows \$65,798,624 as the purchased gas cost to be recovered through gas cost rates. Exhibit 8 of the cost data shows gas cost revenues of \$65,848,177. Explain whether this difference of \$49,553 is related to Exhibit 9 of the cost data, Sheet 1, Footnote 2, regarding the exclusion of demand charge revenues of \$49,190 from the proposed revenues.

f. One approach used in gas company rate cases is to adjust both PGA revenues and purchased gas expense to zero. What consideration did Columbia give to such an approach? Explain the reasons Columbia chose not to use this method.

43. Item 16 in Volume II of Columbia's response to the Commission's Order of April 11, 1988, the last sheet, titled Rate Design to Recover Filing Deficiency in Rate Case 10201, shows the revenue allocation for the proposed increase both between and within rate classes. Provide the following information regarding revenue allocation:

a. The proposed allocation of revenues for company tariff volumes results in an overall increase in commodity charge revenues of 6.2 percent while customer charges and fixed charge revenues increase by 25 percent. What consideration was given to increasing fixed charges by a smaller percentage more in line with the overall increase of 7.7 percent and at the same time increasing commodity charge rates by a larger percentage? What is Columbia's position on this type of allocation?

b. Columbia's proposed allocation maintains the current \$.03 per Mcf spread between the GS rate steps. Explain the reasons for maintaining this rate design and identify other rate designs that Columbia considered in preparing this application.

44. On Page 2 of Mr. Keller's testimony, it is stated that the "judgment of operating personnel" was used for determining the average life of certain accounts.

a. Identify which accounts such judgment was required and which personnel were utilized.

b. Since the experience band chosen for the individual property accounts covers the retirement history for the period

1972 through 1986, why wasn't the complete retirement history available for these specific accounts?

45. On pages 2 and 3 of 37 of Mr. Keller's exhibit, a comparison of accrual rates calculated from the life estimate study with accrual rates in effect for 1987 is presented.

a. For accounts 376 (mains), 380 (services), and 381 (meters), please explain how the related histograms and survivor curves support the proposed changes in each depreciation accrual rate.

b. Please provide information which supports the conclusion that the accrual rate for account 376 is proposed to be reduced since the existing rate resulted in an over-accrual, and that the accrual rate for account 380 is proposed to be increased since its existing rate resulted in an under-accrual.

46. Regarding the life estimate study and accounts 376 and 380, is a distinction made between different types of pipe, such as coated steel and plastic?

a. If so, provide a breakdown of the vintage, dollar amount, and accrual rate for each type of pipe in accounts 376 and 380.

b. If not, why? Aren't the retirement histories of steel and plastic pipe different?

47. In Columbia's previous rate case, Case No. 9554, in response to a data request, it was stated that Columbia's latest depreciation study was conducted in December 1984.

a. Does Mr. Keller's exhibit to the testimony in this case represent the only study conducted since 1984? If not,

provide a copy of any other depreciation studies performed during the period 1985 through 1987.

b. Were the existing accrual rates established based upon the 1984 study?

c. Based upon information supplied by Columbia in Case No. 9554, account 376 was over-accruing while account 380 was under-accruing. Why hasn't any adjustment been proposed prior to this case?

d. Please describe the procedure by which these accounts are monitored to determine whether actual accruals keep pace with calculated accruals.

e. If book depreciation exceeds or fails to meet the calculated depreciation, at what point does Columbia make an adjustment?

48. On page 4 of Mr. Payne's prepared direct testimony and exhibits, it is stated that service-related costs are allocated on the basis of customers since "services essentially require no increase in expenditures as throughput increases" Based upon this conclusion, in schedule 3, page 3 of 5, and schedule 7, page 3 of 15, in the cost allocation study, allocation factor 8 was assigned to meter and regulator expenses, including installation.

a. Why isn't this reasoning also applicable to accounts 871, 874, 875, 886, 887, and 889 of schedule 3, page 3 of 5, and to accounts 376, 378, and 379 of schedule 7, page 3 of 15?

b. In Schedule 8, page 1 of 2, of the cost allocation study, allocation factor 6 assigns 48.97 percent of costs to residential while allocation factor 8 assigns 90.41 percent of costs to residential. To what extent did the difference in these percentage amounts determine which allocation factor was used for these specific accounts?

c. To the extent such a difference was a determining factor, explain why it is appropriate.

49. Please provide Sheets A-1 and A-2 which were not attached to Mr. Payne's testimony as indicated.

50. Regarding Columbia's response to Item No. 38 of the Commission's April 11, 1988 data request, please describe what "other rate alternatives" have been studied.

51. Why will Columbia's Agency Program become more essential as the spot market supply becomes less plentiful?

Done at Frankfort, Kentucky this 26th day of May, 1988.

PUBLIC SERVICE COMMISSION


For The Commission

ATTEST:

Executive Director

