

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

GENERAL RATE APPLICATION
OF



DECEMBER 11, 1995

Prepared Direct Testimony of

Lamar Maxwell Dickey

Cost of Service Study

WUTC <i>UG-950326,</i>		
DOCKET NO. <i>-951415</i>		
EXHIBIT # <i>T-24</i>		
ADMIT	W/D	REJECT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PREPARED TESTIMONY OF LAMAR MAXWELL DICKEY

1
2 Q. Please state your name, business address and occupation.

3 A. My name is Lamar Maxwell Dickey. My business address is 9611 Trail Hill Drive, Dallas,
4 Texas 75238-1441. I am President of Threshold Associates, Inc.

5 Q. Please outline your educational background.

6 A. I attended the University of Tennessee in 1951 and the University of Georgia in 1952. After
7 serving four years in the U. S. Navy, I enrolled at Tennessee Technological University
8 where I received the Degree of Bachelor of Science in Electrical Engineering. I am a
9 member of Tau Beta Pi, an honorary engineering society and Kappa Mu Epsilon, an
10 honorary mathematics society.

11 A. In 1960 I was employed at the Cincinnati Gas & Electric Company and assigned to their
12 Cadet Engineering Program where I spent one year on a rotating training program which
13 covered all departments of the Company. After completing this program I was assigned to
14 the Industrial Division of the Marketing Department where I serviced Industrial, Municipal
15 and Governmental Accounts. In 1964 I was transferred to the Rate and Economic Research
16 Department where I held the positions of Rate Administrator, Rate Analyst, Senior Rate
17 Analyst and Assistant Manager. I joined H. Zinder & Associates in March of 1976 and was
18 elected a Vice President in December of 1977, named Dallas Office Manager in January of
19 1979, elected Senior Vice President in December of 1979, and elected to the Board of
20 Directors in December of 1983. I resigned my position with Zinder in October, 1985 to

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 devote full time to Threshold Associates, Inc.

2 Q. Have you previously appeared before Regulatory Commissions as an expert witness?

3 A. Yes. I have appeared before the Regulatory Commissions in Arkansas, Indiana, Iowa, Idaho,
4 Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Ohio, Oregon, Texas and
5 Washington; the Federal Power Commission; the Federal Energy Regulatory Commission;
6 the Public Utilities Board of The Province of Newfoundland, Canada, as well as numerous
7 city and county commissions presenting rate ordinances, contracts, franchises, cost of service
8 studies, cost allocation studies, load research studies and rate design proposals.

9 Q. What is your assignment in this proceeding?

10 A. I was engaged by Cascade Natural Gas Corporation to perform cost allocation studies and to
11 assist in the design of rate schedules to recover the resulting revenue requirements.

12 Q. What is the purpose of a cost allocation study?

13 A. The purpose of an allocation study is to determine what costs are incurred to serve the
14 various classes of customers of the utility. When these costs are all tabulated, we can
15 determine the return and the rate of return being earned by the utility on each class of service
16 based on the allocation method used. The allocation procedures are necessary because utilities
17 incur costs which are jointly used in serving more than one customer class.

18 Q. Please discuss the principles underlying the preparation and the use of a cost allocation study
19 in the field of public utility operations.

20 A. The only cost which is definitely known for a gas utility is the total cost of doing business. It

1 should be fully understood that the end results of the technical accounting and engineering
2 procedures involved in a cost allocation study establish only one thing -- the costs assignable
3 under certain basic principles recognized as reasonable allocation procedures. In no instance
4 does a cost allocation study, per se, establish either the "value" of service or the levels of
5 "reasonable" rates. Such determinations can only be made after full consideration of all
6 factors, in addition to cost allocations, that bear upon the economics of product pricing and
7 marketing. Those factors include historical rate relationships, relative benefits, competitive
8 fuel costs, promotion of conservation, political factors such as minimum bills and so-called
9 "life line" rates, and, finally, administrative and regulatory factors such as customer
10 understanding, ease of billing, and the ability to make meaningful comparisons with the rates
11 of other utilities regulated by the Commission. These factors relate to rate design and will be
12 discussed in more detail later in my testimony. In actual practice the processes of cost
13 allocation are considerably more complex than would be implied from a discussion of theory
14 and method -- each project involves special problems and no two allocation studies are alike.
15 In fact, in view of the relatively broad area open for the play of individual opinion in the
16 treatment of various cost elements, it is probable that no two analysts, undertaking separately
17 the allocation of the costs of a specific system, would arrive at identical answers, although
18 the magnitude of the difference should be relatively narrow if soundly established procedures
19 are used by both analysts. Gas utility systems are comprised of plant and facilities designed
20 to produce, gather, transmit and distribute gas to customers variously located within the

1 service area of the utility. The utilization characteristics of the customers of a gas utility
2 system vary over a wide range, particularly with respect to time of use, quantities of the
3 commodity taken, the rate of consumption, and the relative location of service. Ideally,
4 every customer should be charged for the total cost of the service he consumes. A major
5 portion of the facilities of a gas utility system is installed for, and is used jointly in the
6 supply of service to all, or major portions of the customers served. Because of this fact, it is
7 apparent that the extent, or size of the various functional elements of a utility system,
8 together with the associated operating expenses and capital charges, are controlled by the
9 combined group characteristics of the utility's customers. Accordingly, reasonable cost
10 allocations to customer classes can be arrived at only through a fairly complex process.

11 Q. Are the "soundly established procedures" you mentioned in the preceding answer generally
12 documented in the cost allocation literature?

13 A. Yes. The American Gas Association publishes a Gas Rate Fundamentals book which has a
14 discussion of cost allocation studies in Chapters 12 and 13. The National Association of
15 Regulatory Utility Commissioners also publishes a Cost Allocation Manual regarding this
16 subject.

17 Q. Please identify and explain the different classifications of costs incurred in supplying gas
18 service.

19 A. They are as follows:

20 1. Functional Classifications

1 Most regulated gas utilities operate with accounting systems prescribed by the
2 Uniform Systems of Accounts of the Federal Energy Regulatory Commission or the
3 State Commission or both. These are precise procedures for reporting income and
4 balance sheet items. The data provides a basic segregation of costs for the purpose of
5 allocations into capital costs and related annual operating and maintenance expenses
6 and other costs. This segregation is called "functional", i.e. production and
7 gathering, transmission, distribution and general, with expenses being further broken
8 down to sales, customer accounting, general and administrative. This functional
9 segregation is the first step in allocation.

10
11 2. Accounting Classification Specifically, the total costs of a utility operation and, as a
12 matter of fact, the costs of practically any other type of business, may be considered
13 as comprised of the following major components.

- 14 a. Fixed Costs - annual capital and operating costs which are controlled by the
15 size and extent of plant and service installations and not by the number of
16 customers or the extent of use of plant facilities.
- 17 b. Variable Costs - the cost of fuel and other consumable elements which are
18 used in the supply of gas. Certain variable labor and even some capital costs
19 may be included in this category if these costs are a direct function of the
20 quantity of the product sold.

- 1 c. Customer Costs - fixed and annual capital and operating costs which are
2 directly affected by the number of customers served; i.e. meters, billings,
3 services.
- 4 d. Overhead and Other General Costs - certain fixed and annual capital costs,
5 salaries and wages of general administrative personnel, supplies, certain taxes,
6 insurance and expenses not directly related to the operations.
- 7 e. Revenue Costs - income taxes and other general costs which are related
8 directly to revenues.

9 These are general definitions to describe the broad categories into which costs are
10 segregated for purposes of ultimate allocation to classes.

11 3. Cost Items

12 There are at least three basic items in gas utility operations which regulate cost
13 behavior:

- 14 a. Capacity or Demand: The sizes, or capacities of facilities installed to serve
15 customers are directly related to the composite maximum rates of use
16 (coincident demands) of the classes of customers. Therefore, the allocations
17 of the related costs, both investment and operating, should flow to the classes
18 in direct proportion to the demands made on the facilities. The capacity costs
19 are sometimes called readiness-to-serve costs.
- 20 b. Commodity or Energy: The total quantity of the purchased and distributed

1 commodity controls the quantities of consumable elements and certain other
2 cost elements (labor, maintenance, etc.) which are used in providing the
3 required service. The commodity component should be spread to the customer
4 classes on the basis of their respective commodity requirements.

- 5 c. Customer: A considerable portion of both capital and operating costs is a
6 function of the number of customers served. This item is important to a
7 distribution company due to the great number of customers.

8 The above three cost components provide the measurements by which the bulk of all
9 utility costs is normally allocated. Even so, there are a number of costs that do not
10 fall neatly into any of these categories and which must be assigned by some
11 appropriate formula or by assignment based upon experienced judgment. Certain
12 elements of costs can only be assigned after all basic costs have been allocated.
13 These costs then follow proportionately the assignment of the functional costs. For
14 example -- supervision costs are classified and allocated the same as the costs that
15 require supervision. Account 870, Operation Supervision & Engineering, is classified
16 and allocated based upon Accounts 871 through 894.

17 Q. Please explain how these cost classifications are used in the cost allocating procedures.

18 A. Briefly, the allocating procedure follows three basic steps:

- 19 1. All of the costs (plant investment, depreciation, operating and maintenance expenses,
20 etc.) that are available from the utility records are analyzed, adjusted and assigned to

1 functional categories and related subfunctions. Some costs do not fall into one or
2 another function and must be studied by further detailed analysis of the utility records
3 and then assigned.

- 4 2. After functional assignment, costs are further classified into the cost categories of
5 capacity, commodity, customer and/or revenue based upon the cost causation factors
6 of each individual item.
- 7 3. Once assigned to cost categories, allocation to classes follows according to the
8 allocation factor developed for each specific cost item by function or subfunction. At
9 times, when data are available, direct assignment to classes is preferred. For
10 example, Account 310, Manufactured Gas Production, is assigned to the Firm
11 customers only. But each such direct assignment must be specifically supported.

12 Q. Please explain the development of allocation factors.

13 A. The development of allocation factors for the following three cost categories is as set forth
14 below:

- 15 1. Capacity/Demand - Capacity factors are controlled by size or capacity of the facilities
16 which in turn are dictated by the demands placed upon the system by the customers.
17 Normal use and general characteristics of load for the broad classes result in distinct
18 and different load patterns for each. The problem of selecting a demand allocation
19 method can be a controversial question in cost analysis. Even the regulatory bodies
20 indicate no clear pattern of preference of which method to use. Some years ago the

1 National Association of Regulatory Utility Commissioners (NARUC) formed a
2 committee to study this problem. Guidelines which it developed for demand
3 allocation methods include:

4 a. The method should be based on some basic philosophy.

5 b. The method should recognize the following factors:

6 (1) demand;

7 (2) supply;

8 (3) time of use of energy.

9 c. The method should recognize the characteristics of various loads.

10 d. It should not be dependent on judgment introduced in the allocating process.

11 2. Commodity - Again, by definition, commodity costs are those which relate directly to
12 consumables used in producing and distributing the commodity and the related labor,
13 maintenance, and other costs. The allocation factors are the ratios of the commodity
14 that each class requires to the total required for the system.

15 3. Customer - The development of a customer allocation factor is rather
16 straight-forward. By definition those costs assigned to the customer item relate
17 directly to the number of customers in each class. The allocation factor for each class
18 then is the ratio that the number of customers in the class bears to the total number of
19 customers for the utility. Certain refinements are made from time to time when
20 circumstances indicate, such as weighting the customers according to the difficulty of

1 reading the customers' meters or according to the amount of record keeping necessary
2 to bill the account, etc. Choices between average customers or year-end must be
3 made.

4 Q. What methods of demand allocations are used in cost allocation studies?

5 A. Perhaps the most widely used methods of demand allocations are:

- 6 1. The Coincident Peak; 2. The Non-Coincident Peak; 3. The Average and Excess; 4.
7 The Peak and Average.

8 1. The Coincident Peak Method

9 This method is based upon the demands of the various classes of service at the time
10 of the system or subsystem peak. This method assumes that the costs associated with
11 the maximum load should be divided among the customers creating such maximum
12 peak load regardless of the magnitude of their demands at other times of the month or
13 year or how long they may use the demands they create. The apportionment of the
14 capacity costs under this method would be the ratio of the various classes of service at
15 the time of the system peak to the total demand at the same time.

16 2. The Non-Coincident Peak Method

17 This method is based upon the maximum demands of the individual classes of service
18 regardless of when the demands occur. Under this method the effects of diversity are
19 apportioned equally to each class. The apportionment of demand costs would be in
20 the ratio of each of the class maximum demands to the sum of all the maximum

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 demands irrespective of time of occurrence.

2 3. The Average and Excess Demand Method

3 This method of apportioning demand costs considers that they should be assigned on
4 the basis of a two-part formula which recognizes first: average use of capacity, and
5 second: responsibility for the additional capacity required to meet the maximum
6 system demands.

7 4. The Peak and Average Demand Method

8 This method of apportioning demand costs considers that they should be assigned on
9 the basis of a two-part formula which recognizes first: average use of capacity, and
10 second: responsibility for the capacity required to meet the maximum system
11 demands.

12 It is apparent from these methods of demand cost apportionment and from others that have
13 not been described that much study has been done on the subject. The analyst must have a
14 thorough knowledge of the problems involved and any one of the various apportionment
15 methods may be appropriate under certain circumstances. If the system has no capacity
16 limitations, the annual commodity method could also be used.

17 Q. Please discuss the Average and Excess Demand Method and the Peak and Average Demand
18 Method.

19 A. These two allocation methods were developed in the 1960's to overcome perceived inequities
20 in the Coincident Peak Demand allocation method. The Average and Excess Method was

1 developed first, the main purpose was to allocate demand costs to those customers on the
2 system who were not taking service at the time of the system peak and therefore were not
3 being allocated any demand costs. This method allocated demand costs based upon the Load
4 Factor, the Excess Demands and the Average Demands (annual usage divided by 365) of the
5 Classes of Service or Rate Schedules being used. Since the method was developed to insure
6 those Classes who were off-peak (not receiving service at the time of the system peak) would
7 be allocated costs, the method, if no customer class (or rate schedule) were served as an
8 off-peak class, produced the same allocation factors as coincident peak allocation factors.
9 The method worked as it was designed to do. Some persons felt that the method was flawed
10 since it reverted to the coincident peak method absent an off-peak class and they, therefore,
11 developed the Peak and Average Method which does not revert to the Coincident Peak
12 Method if no class is off-peak. Both methods use the System Load Factor, the Peak
13 Demands and the Annual Usage of the classes of service or rate schedules to develop
14 allocation factors. In both methods, the Average Demands are weighted by the Load Factor
15 and the Peak or Excess Demands are weighted by the Complement of the Load Factor.

16 Q. Would you please outline the method followed in making this study?

17 A. This study was based on appropriate statistical data such as customers, peak day demands and
18 annual sales, which were provided to me by Mr. Peter A. Schwartz of Cascade Natural Gas
19 Corporation for the test year ending December 31, 1994. From these data the following
20 steps were taken to determine the cost of service for each rate schedule:

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

- 1 1. Allocation factors were developed for each rate schedule. Customer factors were
2 developed to allocate the customer classified items, demand factors were developed to
3 allocate the capacity classified items, commodity factors were developed to allocate
4 the commodity classified items, and a portion of the rate base and expense items were
5 directly assigned. The demand factors were developed by using the peak and average
6 demand method of allocation. Commodity factors were developed by using the
7 annual commodity requirements of each rate schedule. Customer factors were
8 developed by using the number of customers served by each rate schedule.
- 9 2. Schedules were prepared classifying all rate base items and all expense items as either
10 Customer, Capacity, Commodity, Direct or Revenue or combinations of these items.
- 11 3. Each of the above items was then allocated to the rate schedules using the allocation
12 factors developed above.
- 13 4. The return dollars per rate schedule were then determined by adding together the
14 expense items per rate schedule and subtracting each total from the revenues per rate
15 schedule.

16 Q. In the capacity allocation process, how were the demands for the rate schedules calculated?

17 A. The five highest observed peak day demands for 1992, 1993 and 1994 were averaged for
18 each rate schedule. The average demand was calculated by using data for the test year
19 ending December 31, 1994. The load factors were then calculated using the above furnished
20 data. The allocation factors were then calculated as shown on my workpapers.

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 Q. Did you consider alternate demand allocation methods other than the peak and average
2 method?

3 A. Yes, I also considered the coincident peak, the non-coincident peak, the average and
4 excess-cp and the annual usage methods.

5 Q. What demand allocation method do you advocate in this proceeding?

6 A. The peak and average demand allocation method best fits the situation for this Company.
7 Cascade Natural Gas Corporation has sized its facilities to meet the peak day demands on the
8 system. Therefore, customers taking service at that period in time should be allocated the
9 demand related investment and expenses incurred by the Company. However, if such an
10 allocation procedure is followed, the interruptible class of customers might get a partial free
11 ride as far as the demand-related items are concerned. I do not consider this to be equitable
12 and, therefore, I am advocating the peak and average demand allocation method which not
13 only recognizes the fact that the peak demand should be considered when allocating demand
14 related rate base and expense items but also that the system is used and useful in serving the
15 annual requirements of all classes. In using this method of demand allocation, no class of
16 service gets a free ride on the system, all classes share in the demand related rate base and
17 expense items. The classes that receive service on the peak day are allocated more of the
18 investment and expense than those classes that do not receive peak day service but do utilize
19 the system at other times during the year.

20 Q. How were the rate base and expense items classified?

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION
CASCADE NATURAL GAS CORPORATION
222 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON 98109
(206) 624-3900

1 A. Each item, since it was functionalized by FERC account number, was classified based upon
2 the particular use of the item, i.e., customer, capacity, commodity or direct assignment.

3 Q. Can you explain in more detail the classification and allocation of the plant items?

4 A. Yes, a review was conducted by members of the rate department of the Company. We
5 discussed each item of the plant-in-service and also the expense items and determined the
6 cost causation of each item and to which rate schedules each item should be allocated.

7 Q. In addition to the above mentioned review, was another study undertaken to directly assign
8 plant and expenses to the transportation rate schedules 663, 678 and 901?

9 A. Yes, the Engineering Department produced distribution maps and spotted these customer
10 locations on the maps, they traced the route the natural gas would take from the
11 Transmission tap to the customer location and noted the Expenditure Requisition (ER)
12 numbers. From the Engineering records, the equipment installed to serve these customer
13 was also identified on the ER's. After this step was completed, a load flow program was run
14 to ascertain these customers could be served over the route determined on the peak day.
15 This ER information was then given to the Plant Accounting Department and the original
16 cost, the depreciation reserve and the depreciation expense for this plant was obtained.
17 These items were then directly assigned to these rate schedules.

18 Q. How did you handle the intangible plant?

19 A. The intangible plant classification and allocation was derived based upon the sum of the
20 Production, Transmission and Distribution Plant.

1 Q. Was the Intangible Plant allocated to the Special Contract 901 customers?

2 A. No, it wasn't. The Intangible Plant was not changed when the 901 contracts were negotiated
3 and was not included in the investment costs when the rates were established. If these large
4 customers were to by-pass the system, none of the Intangible Plant would leave with them;
5 therefore, this plant was not allocated or assigned to those customers.

6 Q. How did you handle the manufactured gas production plant?

7 A. This plant is used to serve the Firm Core Market customers when the pipeline supplied gas is
8 not available, therefore it was allocated to those customers using the Peak and Average
9 Demand allocation method.

10 Q. How did you handle the transmission plant?

11 A. The transmission plant was allocated to those customers being served by that plant, based on
12 the above mentioned reviews. The Peak and Average Demand allocation method was used.

13 Q. How was the distribution plant classified and allocated?

14 A. The above-mentioned reviews actually were used to determine the classification and
15 allocation methods to be used for not only the plant items but also the other rate base items
16 as well as the expense items. More specifically, the Mains, the M&R Station Equipment,
17 both General and Industrial were classified as being demand related and allocated using the
18 appropriate factors. The Services, Meters, Meter Installations, House Regulators, House
19 Regulator Installations and Other Property were classified as being customer related and
20 allocated to the appropriate customers. The Land & Land Rights and Structures &

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION
CASCADE NATURAL GAS CORPORATION
222 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON 98109
(206) 624-3900

1 Improvements classification and allocation factors were derived based on the above accounts
2 classification and allocation.

3 Q. How did you handle the general plant?

4 A. The general plant was classified and allocated based upon the operating plant in service. The
5 statement made in answer to the Intangible Plant regarding the 901 Special Contract
6 customers is applicable here as well, except for the plant that was directly assigned to them.

7 Q. How were other rate base items classified and allocated?

8 A. Contributions in Aid of Construction, Customer Advances for Construction, Deferred Income
9 Taxes and the Restatement and Proforma Rate Base Adjustments were classified and allocated
10 based upon the operating plant-in-service. The Working Capital Allowance was classified
11 and allocated based upon the Operating and Maintenance Expenses.

12 Q. How were operation and maintenance expenses handled?

13 A. All operation and maintenance expense items were classified and allocated based upon the
14 reviews referred to above. Where it was appropriate, the classification and allocation of the
15 expense items were derived based upon the plant items to which they relate.

16 Q. How was the gas supply expense handled?

17 A. Manufactured Gas Production expenses were allocated to the Firm Core Market customers
18 based upon their Peak and Average Demand allocation factors.

19 Q. How were customer accounting related expenses handled?

20 A. Meter reading, customer records and collection expenses, miscellaneous expenses and

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 customer service and information were classified as customer related and allocated to the
2 appropriate customers. Sales expenses were classified evenly as customer, capacity and
3 commodity and allocated to all customers. Uncollectible accounts and the restatement and
4 proforma adjustments were allocated based upon the rate schedule revenues.

5 Q. How were the administrative and general expenses handled?

6 A. Administrative and General expenses were classified and allocated based fifty percent on the
7 Operating and Maintenance expenses and fifty percent on throughput, the employee pensions
8 were classified and allocated on labor ratios, the property insurance and maintenance
9 expenses were classified and allocated based upon the net plant and the restatement and
10 proforma adjustments were classified and allocated based upon the operating and maintenance
11 expenses.

12 Q. How were the Taxes Other Than Income handled?

13 A. Property, payroll and miscellaneous taxes were classified and allocated based upon the
14 operating plant in service. Miscellaneous B&O taxes were directly assigned as they were
15 collected. Revenue taxes and the restatement and proforma adjustments were allocated based
16 upon the rate schedule revenues.

17 Q. How were depreciation expenses and income taxes handled?

18 A. Depreciation expenses were classified and allocated based on the applicable plant in service,
19 the depreciation expense for the non core customers was directly assigned where it was
20 identified. Federal Income Tax and the restatement and proforma adjustments were classified

1 and allocated based upon net taxable income for each rate schedule.

2 Q. How were the revenues allocated?

3 A. The rate schedule revenues were directly assigned to the appropriate rate schedules after the
4 restatement and proforma adjustments were made. The B&O tax revenue was directly
5 assigned as it was collected and the other operating revenues were classified as customer
6 related and allocated to the classes.

7 Q. After this classification and allocation process you have described was completed, what was
8 the next step in this cost allocation study?

9 A. The next step was allowing the computer model to perform the allocation to the various rate
10 schedules and print the results which are the rates of return for each rate schedule and for the
11 total Company. The Summary of Operations report is shown in Exhibit ____ (LMD - 1),
12 Schedule 1 of 4, Pages 1 and 2 of 2 for the current rates, the Rate Base Report is shown in
13 Exhibit ____ (LMD - 1), Schedule 2 of 4, Pages 1 and 2 of 2, the Expense Report is shown in
14 Exhibit ____ (LMD - 1), Schedule 3 of 4, Pages 1 and 2 of 2 and the Revenue & Income Tax
15 Report is shown in Exhibit ____ (LMD - 1), Schedule 4 of 4, Pages 1 and 2 of 2.

16 Q. Please explain your Exhibit ____ (LMD - 1).

17 A. Exhibit ____ (LMD - 1) contains four schedules, Schedule 1 is the Summary Report and
18 contains the results of operations as allocated or directly assigned to the rate schedules.
19 Lines one through four show the Rate Schedule Revenue, the Other Operating Revenue, the
20 B&O Tax Revenue and the Total Revenue. All of these revenues are directly assigned

1 according to the Total Proforma Results of the Company for the Twelve Months Ended
2 December 31, 1994. Lines six through twelve contain the expenses as allocated or directly
3 assigned to the rate schedules. Line thirteen shows the Income Tax as allocated or directly
4 assigned to the Rate Schedules. Line fourteen shows the Return or Net Operating Income as
5 derived by subtracting the sum of lines twelve and thirteen from line four for each Rate
6 Schedule. Line fifteen shows the Rate Base as allocated or directly assigned to each Rate
7 Schedule. Line sixteen shows the calculated Rate of Return earned on the Rate Base for each
8 Rate Schedule, this number is calculated by dividing the Return by the Rate Base. Line
9 seventeen shows the Relative Rate of Return for each Rate Schedule which is obtained by
10 dividing the Rate Schedule Rate of Return on Line sixteen by the Total Company Rate of
11 Return in Column (b) on Page 1 of 2.

12 Schedule 2 contains the Rate Base Report and shows the dollars of Rate Base allocated or
13 directly assigned to each Rate Schedule. Lines two through thirty-six show the Rate Base
14 Plant - Net Plant, line forty-two shows the Restated and Proforma Rate Base Adjustments,
15 lines thirty-eight through forty-three show the Rate Base Other Items and line forty-five
16 shows the Total Rate Base.

17 Schedule 3 of 4 shows the Expense Accounts as allocated or directly assigned to each Rate
18 Schedule. Lines fifty through fifty-four show the Taxes Other Than Income Expenses, lines
19 one through twenty-nine show the Operating and Maintenance Expenses, lines thirty-eight
20 through forty-eight show the Customer Accounting, Service & Information and Sales

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION
CASCADE NATURAL GAS CORPORATION
222 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON 98109
(206) 624-3900

1 Expenses, lines thirty-two through thirty-six show the Administration and General Expenses,
2 line fifty-seven shows the Depreciation Expense and line fifty-nine shows the Total Expense
3 Less Income Tax.

4 Schedule 4 of 4 contains the Revenue & Income Tax Report. Lines two through four are the
5 B&O Tax, the Other Operating and the Rate Schedule Revenues, line five is the sum of lines
6 two through four, line eight shows the Total Expense Less Income Tax, line ten shows the
7 Pretax Adjustments, line twelve the Net Taxable Income, line fifteen shows the Federal
8 Income Taxes, line sixteen was reserved for the Restated & Proforma FIT Adjustments
9 which are all included in the Federal Income Taxes on line fifteen and line eighteen shows
10 the Total Income Taxes.

11 Q. Have you prepared a workpaper which shows the classification and amount allocated to each
12 rate schedule for every item of Rate Base, Expense, Revenue and Income Taxes contained in
13 this study?

14 A. Yes, these are all contained on pages twenty-three through seventy-six of my workpapers.

15 Q. You discussed the demand allocation factors earlier. Do you have a report which gives the
16 input numbers and the factors developed?

17 A. Yes, such a report is in my workpapers on pages eighty through eighty-four, the allocation
18 factor worksheet is used to develop the demand allocation factors as well as all other input
19 allocation factors used in this study.

20 Q. Did you prepare a report which contains every allocation factor used in this study?

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 A. Yes, the report is in my workpapers on pages eighty-five through one hundred twelve, these
2 pages contain every allocation factor used in this study.

3 Q. Did you produce a report that indicates what the revenue requirements would be for the Core
4 Market Rate Schedule and the Distribution Transportation Rate Schedule if they earned a
5 levelized Rate of Return of 8.619%?

6 A. Yes, I did. That report is in my workpapers on pages one hundred twelve a, b and c. The
7 report shows the change in Return, the change in Revenue Requirements, the change in
8 Customer Accounts, the change in Taxes Other Than Income and the change in Income
9 Taxes along with the New Rate Schedule Revenues for each Rate Schedule.

10 Q. If the Company were to implement Rate Schedules based on the levelized rate of return
11 revenue requirements, what type of rate design would you recommend?

12 A. The cost of service study, when done properly, will produce the customer, capacity and
13 commodity costs for each rate schedule. Given that these are available, the customer charge
14 for each rate schedule can be established. The excess customer related cost over the monthly
15 customer charge can be assigned to the first block of a two block rate, the commodity charge
16 is calculated by taking the commodity costs and dividing by the total annual energy
17 requirements for each rate schedule, this cost is then collected uniformly in both the first and
18 second block, the capacity costs then can be assigned to the first block of the rate. This type
19 of rate design is used in several jurisdictions that I am aware of, it is strictly a cost based
20 rate with the fixed charges collected only in the customer charge and the first block of the

1 rate and the variable costs collected uniformly in both blocks of the rate. It is a fact that a
2 flat rate, or more properly, a uniform rate per therm, allows the Company to overcollect the
3 costs incurred in serving the customer in the event of weather that is colder than normal.
4 This is true because the customer and the demand costs that are spread uniformly in the rate
5 do not increase with colder than normal weather. It is also a fact that a uniform rate does
6 not allow the Company to collect the costs incurred in serving the customers when the
7 weather is warmer than normal because the customer and demand costw incurred and
8 charged at the uniform rate are not collected due to the reduced consumption. The two block
9 type of rate design is not "promotional" since the fixed costs are recovered early in the
10 revenue stream and the variable costs are recovered uniformly. This type of rate design
11 insures the customer that he will not be overcharged in the event of weather that is colder
12 than normal and allows the Company to have the opportunity to recover its fixed costs even
13 if the weather is warmer than normal.

14 Q. Please comment on the reasons for applying the levelized rate of return revenue requirements
15 to the jurisdictional rate schedules.

16 A. The levelized rate of return concept insures the customers that no rate schedule is receiving
17 service at less than the cost of providing that service, in other words, no rate schedule is
18 being subsidized by another rate schedule. Several Regulatory Bodies have now recognized
19 the value of not having one rate schedule subsidize another rate schedule and have ordered
20 Companies to implement rates that produce levelized rates of return.

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION

CASCADE NATURAL GAS CORPORATION

222 FAIRVIEW AVENUE NORTH

SEATTLE, WASHINGTON 98109

(206) 624-3900

1 Q. Are there other areas where you would make recommendations?

2 A. Yes, I would recommend that all services rendered by Cascade Natural Gas Company be cost
3 based and that the Company be allowed to recover the total costs of providing service to
4 those customers who cause those costs, for instance, the costs of processing a bad check
5 should be charged to those customers who cause these costs to be incurred, the cost of
6 turning off a service for non-payment of the bill and the cost of reconnecting that customer
7 should also be charged to those customers who cause the Company to incur these costs.

8 Another recommendation regarding the monthly customer charge is also in order, there are
9 customer related costs incurred by the Company that are not related to the amount of Natural
10 Gas consumed by the customers, i.e. meter investment, service line investment, meter
11 reading costs, customer billing costs, etc., these costs should be collected from all customers
12 who request service regardless of the amount of gas consumed, the current monthly service
13 charge does not allow the Company to recover these total customer costs as such.

14 Q. Have you prepared a schedule that shows the customer, capacity and commodity costs on a unit
15 cost basis?

16 A. Yes, that schedule is a part of my workpapers on pages seventy-seven through seventy-nine.
17 The customer costs per month are shown, the capacity cost per annual therm and the commodity
18 cost per annual therm are shown, I used the annual therm in calculating the capacity cost per
19 unit since the demand therms are not used for billing.

20 Q. Did you provide a copy of the input data set for the cost allocation study?

TESTIMONY OF LAMAR M. DICKEY - 1995 WA GENERAL RATE APPLICATION
CASCADE NATURAL GAS CORPORATION
222 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON 98109
(206) 624-3900

- 1 A. Yes, the input data set is contained in my workpapers as pages one through twenty-two.
- 2 Q. Mr. Dickey, does this conclude your testimony?
- 3 A. For the present time it does.