

Docket UE-991832
Exhibit T-____ (DLT-T)
REVISED 5/9/00

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DOCKET NO.	UE-991832	
EXHIBIT #	210-T	
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BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

PACIFICORP

Revised Direct Testimony of David L. Taylor

Cost of Service

Legislative Format

May 2000

1 Energy-related costs vary with the output of a kWh of electricity. Customer-
2 related costs are driven by the number of customers served.

3 Q. How does PacifiCorp determine cost responsibility between customer groups?

4 A. After the costs have been functionalized and classified, the next step is to allocate
5 them among the customer classes. This is achieved by the use of allocation
6 factors which specify each class' share of a particular cost driver such as system
7 peak demand, energy consumed, or number of customers. The appropriate
8 allocation factor is then applied to the respective cost element to determine each
9 class' share of cost. A detailed description of PacifiCorp's classification and
10 allocation procedures and the supporting calculations for the allocation factors are
11 contained in my workpapers.

12 Q. How are generation and transmission costs apportioned among customer classes?

13 A. Production and transmission plant and non-fuel related expenses are classified as
14 75 percent demand related and 25 percent energy-related. The demand-related
15 portion is allocated using twelve monthly peaks coincident with the PacifiCorp
16 system firm peak. The energy portion is allocated using class MWhs adjusted for
17 losses to generation level.

18 Q. Are distribution costs determined using the same methodology?

19 A. No. Distribution costs are classified as either demand-related or customer-related.
20 In this study only meters and services are considered as customer-related with all
21 other costs considered demand-related. Distribution substations and primary lines
22 are allocated using ~~the weighted~~ monthly coincident distribution peaks.

1 Q. Please state your name, business address and present position with PacifiCorp (the
2 Company).

3 A. My name is David L. Taylor. My business address is 825 N. E. Multnomah, Suite
4 800, Portland, Oregon 97232 and my present position is Manager of Cost of
5 Service.

6 **Qualifications**

7 Q. Please briefly describe your education and business experience.

8 A. I received a B.S. in Accounting from Weber State College in 1979 and an M.B.A.
9 from Brigham Young University in 1986. I have been employed by PacifiCorp
10 since the merger with Utah Power in 1989. Prior to the merger I was employed
11 by Utah Power, beginning in 1979. In my 20 years with the Company I have
12 worked two years in Accounting, three years as a Budget Coordinator in one of
13 the Company's Region Offices, and 15 years in the Pricing and Regulatory areas.
14 From 1987 to the present I have held several supervisory and management
15 positions in Pricing and Regulation.

16 Q. Have you appeared as a witness in previous regulatory proceedings?

17 A. Yes. I have testified on numerous occasions in California, Idaho, Montana,
18 Oregon, Utah and Wyoming.

19 **Purpose of Testimony**

20 Q. What is the purpose of your testimony?

21 A. I will present the functionalization of PacifiCorp's 1998 Results of Operations and
22 the Class Cost of Service study.

1 **Functionalized Results of Operations**

2 Q. Please identify Exhibit____(DLT-1) and explain what it shows.

3 A. Exhibit____(DLT-1) summarizes PacifiCorp's 1998 Functionalized Results of
4 Operations for the State of Washington. It separates the results of operations into
5 the primary functions of the Company: Generation (also referred to as
6 Production), Transmission, Distribution, Retail Services, and Miscellaneous.

7 **Class Cost of Service Study**

8 Q. Please identify Exhibit____(DLT-2) and explain what it shows.

9 A. Exhibit____(DLT-2) is the summary table from PacifiCorp's 1998 Class Cost of
10 Service Study for the State of Washington. It summarizes, both by customer
11 group and by function, the results of the 1998 cost study. Page 1 presents results
12 at the Company's 1998 earned rate of return. Page 2 presents results at the target
13 rate of return.

14 Q. Please identify Exhibit____(DLT-3) and explain what it shows.

15 A. Exhibit____(DLT-3) shows the cost of service results in more detail by class and
16 by function. Page 1 summarizes the total cost of service summary by class and
17 pages 2 through 6 contain a summary by class for each major function.

18 Q. Why has the Company chosen to show the Results of Operations and the Cost of
19 Service study on a functionalized basis?

20 A. In 1998, under the direction of HB 2831, the Washington Commission opened
21 Docket UE-980181 to look at unbundled costs of the various electric utilities in
22 the state. PacifiCorp's functional studies attempt, as closely as possible, to

1 determine a separate revenue requirement and class cost of service responsibility
2 for the Generation, Transmission, Distribution, Retail Services and Miscellaneous
3 functions of the Company.

4 **Description of Procedures**

5 Q. Please explain how the Functionalized Results of Operations and Cost of Service
6 Study were developed.

7 A. The Functionalized Results of Operations and Class Cost of Service Study are
8 based on PacifiCorp's 1998 annual results of operations for the State of
9 Washington filed by Mr. Larsen. The studies employ a three-step process
10 generally referred to as functionalization, classification, and allocation. These
11 three steps recognize the way a utility provides electrical service and assigns cost
12 responsibility to the groups of customers for whom those costs were incurred.

13 Q. Please describe functionalization and how is it is employed in the Cost of Service
14 Study.

15 A. Functionalization is the process of separating expenses and rate base items
16 according to utility function. The Generation function consists of the costs
17 associated with power generation, including coal mining and wholesale purchases.
18 The Transmission function includes the costs associated with the high voltage
19 system utilized for the bulk transmission of power from the generation source and
20 interconnected utilities to the load centers. The Distribution function includes the
21 costs associated with all the facilities that are necessary to connect individual
22 customers to the transmission system. This includes distribution substations,

1 poles and wires, line transformers and service drops. The Retail Services function
2 includes the costs of meter reading, billing, collections and customer service. The
3 Miscellaneous function includes costs associated with energy efficiency
4 programs, franchise taxes, regulatory expenses, and other miscellaneous expenses.

5 Q. How have you assigned the various cost elements to these three functions?

6 A. In the study, all assets and expenses that are identified as directly supporting one
7 of the three major functions are assigned to that function. Assets and expenses
8 that currently support more than one of the three functions are separated between
9 generation, transmission and distribution through detailed analyses. When a
10 causal link to one or more of the major functions cannot be found, assets and
11 expenses are allocated to functions in the same proportion as generation,
12 transmission and distribution plant. A detailed description of PacifiCorp's
13 functionalization procedures, detailed functionalized results by FERC account and
14 the supporting calculations for the functionalization factors are contained in my
15 workpapers (Exhibit ____(DLT-4)).

16 Q. Describe classification and explain how PacifiCorp uses it in the Cost of Service
17 Study.

18 A. Classification identifies the component of utility service being provided. The
19 Company provides, and customers purchase, service that includes at least three
20 different components: demand-related, energy-related, and customer-related.
21 Demand-related costs are incurred by the Company to meet the maximum demand
22 imposed on generating units, transmission lines, and distribution facilities.

1 Energy-related costs vary with the output of a kWh of electricity. Customer-
2 related costs are driven by the number of customers served.

3 Q. How does PacifiCorp determine cost responsibility between customer groups?

4 A. After the costs have been functionalized and classified, the next step is to allocate
5 them among the customer classes. This is achieved by the use of allocation
6 factors which specify each class' share of a particular cost driver such as system
7 peak demand, energy consumed, or number of customers. The appropriate
8 allocation factor is then applied to the respective cost element to determine each
9 class' share of cost. A detailed description of PacifiCorp's classification and
10 allocation procedures and the supporting calculations for the allocation factors are
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14 75 percent demand related and 25 percent energy-related. The demand-related
15 portion is allocated using twelve monthly peaks coincident with the PacifiCorp
16 system firm peak. The energy portion is allocated using class MWhs adjusted for
17 losses to generation level.

18 Q. Are distribution costs determined using the same methodology?

19 A. No. Distribution costs are classified as either demand-related or customer-related.
20 In this study only meters and services are considered as customer-related with all
21 other costs considered demand-related. Distribution substations and primary lines
22 are allocated using monthly coincident distribution peaks.

1 Distribution line transformers and secondary lines are allocated using the
2 weighted NCP method. Services costs are allocated to secondary voltage delivery
3 customers only. The allocation factor is developed using the installed cost of new
4 services for different types of customers. Meter costs are allocated to all
5 customers. The meter allocation factor is developed using the installed costs of
6 new metering equipment for different types of customers.

7 Q. Please explain how customer accounting, customer service, and sales expenses are
8 allocated?

9 A. Customer accounting expenses are allocated to classes using weighted customer
10 factors. The weightings reflect the resources required to perform such activities as
11 meter reading, billing, and collections for different types of customers. Customer
12 service expenses are split between energy efficiency expenditures and other
13 customer service expenses. The energy efficiency expenditures are allocated
14 based on 50 percent demand and 50 percent energy. The other customer service
15 expenses are allocated on the number of customers in each class. Sales expenses
16 are directly assigned to the residential, commercial and industrial revenue classes
17 and then allocated to rate schedules within the revenue class according to revenue.

18 Q. How are Administrative & General expenses, general plant and intangible plant
19 allocated by PacifiCorp?

20 A. Most general plant, intangible plant, and administrative and general expenses are
21 functionalized and allocated to classes based on generation, transmission, and
22 distribution plant. Employee pensions and benefits costs as well as the net cost

1 savings from the recent early retirement have been assigned to functions and
2 classes on the basis of labor. Costs that have been identified as supporting
3 customer systems are considered part of the retail services function and have been
4 allocated using customer factors.

5 Q. Are costs and revenues associated with wholesale non-tariff contracts included in
6 the Cost of Service Study?

7 A. No costs are assigned to wholesale and system allocated retail contracts. The
8 revenues from these transactions are treated as revenue credits and are allocated to
9 customer groups using appropriate allocation factors. Other electric revenues are
10 also treated as revenue credits. Revenue credits reduce the revenue requirement
11 that is to be collected from firm retail customers.

12 Q. Have you included your workpapers?

13 A. Yes. Workpapers showing the complete functionalized results of operations and
14 cost of service detail are provided as Exhibit ____ (DLT-4). Also included in the
15 workpapers are detailed narratives describing the Company's functionalization,
16 classification and allocation procedures.

17 Q. Does this conclude your testimony?

18 A. Yes.