

Exhibit No. ____ T (CTM-1T)
Dockets UE-120436 et al.
Witness: Christopher T. Mickelson

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**AVISTA CORPORATION, d/b/a
AVISTA UTILITIES,**

Respondent.

**DOCKETS UE-120436/UG-120437
(consolidated)**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**AVISTA CORPORATION d/b/a AVISTA
UTILITIES,**

Respondent.

**DOCKETS UE-110876/UG-110877
(consolidated)**

TESTIMONY OF

CHRISTOPHER T. MICKELSON

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

*Aldyl-A Pipe Replacement Program
Electric Cost of Service, Revenue Allocation, and Rate Design
Natural Gas Cost of Service, Revenue Allocation, and Rate Design*

September 19, 2012

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1 asset is retired before, or after the average service life of the group is reached, the
2 resulting gain or loss is buried in the Accumulated Depreciation account. This
3 practice is justified because some assets will be retired before the average service life
4 and others after the average life.

5 The group or composite method simplifies the bookkeeping process and
6 tends to average out errors caused by over-or under depreciation. As a result,
7 periodic income is not distorted by gains or losses on disposals of assets.

8

9 **IV. ELECTRIC COST OF SERVICE, REVENUE**
10 **ALLOCATION, AND RATE DESIGN**
11

12 **A. Cost of Service Study**

13

14 **Q. What does a cost of service study measure?**

15 A. A cost of service study measures whether the revenue provided by the customers
16 recovers the cost to serve those customers, by apportioning the revenue, expenses,
17 and rate base associated with providing service to defined groups of customers.

18

19 **Q. Did Staff review the Company's proposed electric cost of service study?**

20 A. Yes. The Company's proposed electric cost of service is contained in Ms. Knox's
21 Exhibit No. ____ (TLK-3). Ms. Knox's study reasonably functionalizes, classifies
22 and allocates capital investments and operating expenses to each rate schedule.
23 Therefore, Staff uses the same method of allocation, adjusted proportionally to
24 reflect Staff's lower revenue requirement recommendation.

1

2 **Q. Does the Company's electric cost of service study follow the same methodology**
3 **that the Commission has accepted in the past?**

4 A. Yes, with one exception. The Company's current cost of service study revises the
5 peak credit classification of production and transmission costs. According to Ms.
6 Knox, the Company's prior method was "complicated to compute and apply,
7 unrelated to the actual usage of the system, and has a tendency to shift costs back and
8 forth between energy and demand."⁴

9 Under the prior method, the Company would classify energy and demand
10 using a comparison of the replacement cost for thermal and hydro plants separately,
11 which created separate peak credit ratios. For transmission costs, Avista assigned a
12 50/50 weighting of the separate peak credit ratios to energy and demand while
13 classifying fuel and load dispatching expenses to energy and peaking plant related
14 costs to demand.

15 In contrast, the Company's current method is a less complex way to
16 determine a fair and reasonable allocation of costs, by applying a single peak credit
17 ratio uniformly to all production and transmission costs based off a system load
18 factor to determine the proportion of the functions that are demand-related.

19

20 **Q. Has the Company proposed this methodology change in any prior general rate**
21 **case?**

22 A. Yes. In Avista's two prior electric rate cases, Dockets UE-100467 and UE-110876,
23 the Company proposed this changed methodology. However, each of those dockets

⁴ Direct Testimony of Tara L. Knox, Exhibit No. ____ (TLK-1T), at 15.

1 was resolved by settlement, and the cost of service study issue was not resolved in
2 either settlement.

3

4 **Q. Do the results from the cost of service study using the new methodology differ**
5 **from using the former methodology?**

6 A. Very slightly. The change in method slightly increases the overall production and
7 transmission costs that are classified as demand. This shifts the parity ratio by
8 approximately one one-thousandth (0.001). This difference is immaterial because
9 Staff typically uses parity ratios out to the hundredth (0.01) decimal place for rate
10 design.

11

12 **Q. Should the Commission accept the Company's proposed method to allocate**
13 **plant and expenses?**

14 A. Yes. The refinement to the Company's prior method is reasonable. Overall, the
15 Company's cost of service study reasonably functionalizes, classifies and allocates
16 capital investments and operating expenses to each rate schedule. The Company's
17 electric cost of service study fairly and equitably identifies the costs required to serve
18 each particular customer class.

19 In addition, this method should be more stable compared to the prior method,
20 due to the reduction of shifting costs back and forth between energy and demand, as
21 the cost of natural gas to fuel combustion turbines changes.

22

1 **Q. What is the typical output of a cost of service study?**

2 A. Typically, the outputs of a cost of service study are parity ratios for each customer
3 class.

4

5 **Q. What is a parity ratio?**

6 A. A parity ratio indicates how close a particular rate schedule is to covering its cost of
7 service. For example, if a rate schedule is producing revenues that are 100 percent of
8 its cost of service, that rate schedule has a parity ratio of 1.00. If a rate schedule
9 covers only 70 percent of its cost of service, it has a parity ratio of 0.70. If a rate
10 schedule covers 130 percent of its cost of service, its parity ratio is 1.30.

11

12 **Q. What parity ratios result from the Company's cost of service study in this case?**

13 A. Table 1 below sets forth the parity ratios using the Company's cost of service study,
14 under the current rate structure and the Company's proposal. Avista shows the
15 results of the cost of service study in Ms. Knox's Exhibit No. ____ (TLK-4).

16

Table 1: Summary of Parity Ratios

17

Customer Class	Current	Company Proposal
Total System	1.00	1.00
Residential (Schedule 1)	0.89	0.89
General Service (Schedules 11, 12)	1.31	1.30
Large General Service (Schedules 21, 22)	1.14	1.14
Extra Large General Service (Schedule 25)	0.93	0.94
Pumping Service (Schedules 31, 32)	0.97	0.97
Street & Area Lights (Schedules 41-49)	1.01	0.98

23

1

2 **Q. Does that table provide a fair representation of each customer class'**
3 **contributions to the overall rate of return?**

4 A. Yes. While Staff's different revenue requirement adjustments change the resulting
5 parity ratios somewhat, the relative proportion of each schedule's contribution to the
6 total remains approximately the same. However, the Company does not allocate the
7 revenue increase among the schedules per its cost of service study. Therefore, the
8 inequities between the rate schedules remain. I address that issue next.

9

10 **B. Revenue Allocation**

11

12 **Q. Please explain the general concept of revenue allocation.**

13 A. Revenue allocation, also known as "rate spread," is the process of determining the
14 portion of total revenues to be collected from each rate schedule.

15

16 **Q. How should the Commission use the parity ratios from the cost of service study**
17 **to allocate revenues in this case?**

18 A. The Commission should consider parity ratios as an important part of the process.
19 Overall, the Commission should move rate schedules closer to parity if they are
20 significantly out of parity.

21 However, parity is not the only factor. The Commission should also consider
22 the appearance of fairness, perceptions of equity, economic conditions in the service

1 territory, and rate stability.⁵ I discuss each of these considerations later in my
2 testimony.

3

4 **Q. Is it practical to achieve a parity ratio of 1.00 for every rate schedule?**

5 A. No. For one thing, the assumptions and results of the cost of service study are often
6 disputed among the parties. It is a matter of informed judgment to determine how
7 much of the average rate increase is fairly apportioned to each schedule.
8 Consequently, if a rate schedule is at 95 percent parity or 105 percent parity, that
9 likely justifies an equal percentage increase.

10

11 **Q. Where are the imbalances shown in the results of the cost of service study?**

12 A. As the above Table 1 shows, the parity imbalances are reflected in Residential
13 Schedule 1, which is covering 89 percent of its cost of service; while General Service
14 Schedules 11 and 12 covers 131 percent of its cost of service, and Large General
15 Service Schedules 21 and 22 covers 114 percent of its cost of service. The other rate
16 schedules are within an acceptable range of covering their particular cost of service.

17

18 **Q. Why are the parity ratios for the Residential and General Service Schedules so
19 out of balance?**

20 A. This is likely due to the equal percentage increases that were applied in the past
21 several general rate cases, most of which involved settlements.

22

⁵ *Utilities & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 and UG-111049, Order 08 (May 7, 2012), at 125.