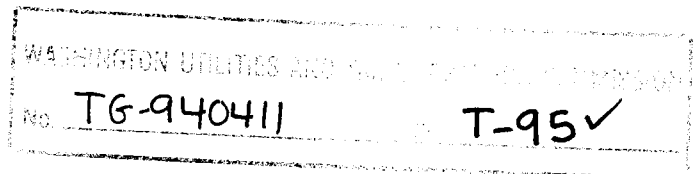


BEFORE THE
UTILITIES AND TRANSPORTATION COMMISSION
of the
STATE OF WASHINGTON

In the Matter of
KING COUNTY DEPARTMENT OF PUBLIC
WORKS, SOLID WASTE DIVISION

TESTIMONY
OF
LAYNE C. DEMAS
Revenue Requirements Specialist

JUNE, 1994



1 Q. Please state your name and business address.

2 A. My name is Layne C. Demas. My business address is Chandler
3 Plaza Building, 1300 South Evergreen Park Drive S.W.,
4 Olympia, Washington 98504.

5 Q. By whom are you employed and in what capacity?

6 A. I am employed by the Washington Utilities and Transportation
7 Commission as a Revenue Requirements Specialist.

8 Q. How long have you been employed in this capacity?

9 A. Seven and one half years.

10 Q. What are the duties of a Revenue Requirements Specialist?

11 A. The work of the Revenue Requirements Specialist entails the
12 inspection, verification and auditing of the books and
13 records of regulated companies in connection with rate
14 filings before the Commission. Generally, it involves the
15 examination of revenues, expenses, investment, cost of
16 service, and rate design. Also included is the preparation
17 of reports, exhibits and testimony for these investigations
18 for presentation before the Commission.

19 Q. What is the purpose of your testimony in this case?

20 A. The purpose of my testimony is to describe the basis for the
21 rate design in the case of Seattle Disposal Co., Rabanco
22 Ltd. d/b/a Eastside Disposal and Container Hauling G-12
23 (Eastside) in Cause No. TG-940411.

24 Q. Please describe the background of this proceeding.

25 A. On December 28, 1994, Eastside filed for rate increases for

1 residential and commercial solid waste service and
2 residential curbside recycle service in Docket TG-931585.
3 At the Commission open meeting of February 9, 1994, the
4 filing by Eastside was approved at staff recommended rates
5 to become effective February 15, 1994.

6 Q. Is Exhibit____(LCD-2) a copy your memorandum that was
7 presented at the February 9, 1994, open meeting?

8 A. Yes.

9 Q. Was this exhibit prepared by you and is it true and correct
10 to the best of your knowledge and belief?

11 A. Yes.

12 Q. Please explain this exhibit.

13 A. Pages 1 and 2 of Exhibit____(LCD-2) contain the discussion
14 of the filing and the recommendation of staff. Pages 3, 4,
15 5, and 6 show the results of operations for the historical
16 test period ended June 30, ~~1994~~¹⁹⁹³. The results of operations *all*
17 are the company's per book numbers for the test period
18 adjusted for ratemaking purposes. The end result is the
19 revenue requirement needed for the Eastside to achieve their
20 target operating ratio. Rates are set based on the revenue
21 requirement.

22 Q. What is the significance of using a historical test period?

23 A. A historical test period is a snapshot of a past period of
24 time during which all the activity and associated costs can
25 be measured.

26 Q. Is this important for cost of service methodology?

1 A. Yes, to have accurate cost of service based rates, only
2 known and measurable activity levels and costs can be used.

3 Q. Can hypothetical activity levels and costs be used?

4 A. No. When any estimate is made, such as what the customer
5 base or mix may be in the future, a myriad of other
6 conditions present themselves that hinders the accuracy of
7 the forecast.

8 Q. Please explain the difference.

9 A. The historical test year represents a "typical" period of
10 activity for a company. The level of activity and
11 associated costs are known. Any increase in customer base
12 will cause a resultant increase in costs by approximately
13 the same proportion. Hypothetical activity and costs leaves
14 a wide margin for error. For example, for every customer
15 assumed to be added to the base, all costs have to be
16 incrementally increased to try to determine the effect on
17 the company's operations. To compound this, fixed costs per
18 customer can drop as the customer base grows. At least
19 until another truck is needed. Then the fixed cost per
20 customer jumps. This brief example is to show that the
21 historical statistics used in the cost of service study more
22 accurately reflect the cause and effect relationship of
23 activity and costs than hypothetical scenarios of what the
24 future may bring.

25 Q. What happens when a new service such as recycling is
26 implemented?

1 A. Obviously, there will be changes to revenue as some
2 customers change service levels. The disposal fees will be
3 impacted by any diversion from the waste stream. This can
4 be compounded by an overall change in the total number of
5 customers.

6 Q. How would the Commission determine the rates necessary to
7 accommodate these changes?

8 A. The Commission may approve temporary rates subject to refund
9 and/or credit during a trial period. These rates may be
10 based on hypothetical changes from the historical test year.
11 The rates implemented and the actual real world activity
12 would be recorded. At the end of the trial period (usually
13 four to five months), the trend would be identified and
14 permanent rates established based on the current actual
15 customer count. The Commission would generally approve
16 rates at the high end of the scale. The rates could be
17 approved with the condition that, should the staff determine
18 that they are too high, the company would be required to
19 give the excess back to the ratepayer. The company would
20 either refund the overpayments or issue credits to the
21 ratepayers account. The rationale of this methodology is
22 that it allows the company to implement the program with
23 minimal danger of significant underearning during the
24 measurement period. The refund/credit mechanism ensures
25 that the ratepayer ultimately pays the correct (fair, just,
26 reasonable and sufficient) rate. The methodology used by

1 the Commission recognizes the potential problems using
2 hypothetical numbers. The Commission would be able to
3 approve rates in these filings and still uphold the hallmark
4 of the regulatory mission of having fair, just, reasonable
5 and sufficient rates in effect for the ratepayer and the
6 carrier.

7 Q. Does the Commission do this every time there is a rate
8 filing?

9 A. No. The Commission has the discretion to apply that
10 particular methodology when it deems necessary. It is
11 commonly used when the effect of a major change in service,
12 such as a new recycling program, is not easily measurable by
13 historical methods. Once the measurement period is completed
14 the cost of service study can be applied to future rate
15 cases using historical data.

16 Q. Does Exhibit____(LCD-2) show the effect of Eastside's
17 proposed and staff revised solid waste and recycling rates?

18 A. Yes.

19 Q. Were there any conditions imposed on this filing?

20 A. Yes, there were. The Commission Order in Cause Number
21 TG-2016 et. al., requires all Class A solid waste companies
22 to prepare a cost of service study in order to determine the
23 specific costs associated with each level of service
24 provided.

25 Q. Did Eastside prepare a cost of service study?

26 A. Yes, Exhibit____(LCD-3) is a copy of the cost of service

1 study prepared by Eastside. It is a summary sheet showing
2 the spread of costs and the unit cost for each service
3 provided.

4 Q. Were the rates in this case filed using the results from
5 this cost of service study?

6 Y. Yes.

7 Q. Where the lower rates recommended by the staff determined
8 using the same cost of service study?

9 A. Yes. However, the staff took into consideration the target
10 operating ratio for the company. Commercial rates are still
11 a little high and no increase was proposed for them.

12 Proposed residential rates were lowered to reach the target
13 operating ratio. The spread between rates was consistent
14 with the cost of service study.

15 Q. Why weren't the rates already based on cost of service?

16 A. Rates recommended by staff generally have a "floor" and a
17 "ceiling". The floor is the current level of rates for any
18 given service. The ceiling is the proposed level of rates
19 for the service. The Commission has not rejected a filing
20 if the rates filed did not strictly adhere to cost of
21 service recommendations. Instead, companies have been
22 allowed to approach cost of service based rates over time in
23 each subsequent filing. The following excerpt is from the
24 open meeting memorandum of March 10, 1993, of Eastside in
25 Docket TG-921472, in which staff points out that residential
26 rates were set below cost of service and that the company's

1 next filing would be at cost of service levels.

2 "The results of the cost of service study
3 reveal that residential rates are below cost
4 and commercial rates are currently priced
5 above cost. In this filing, the revenue
6 deficiency is recovered wholly from
7 residential customers. The company has
8 indicated that in it's next general rate
9 filing it intends to file rates that are cost
10 of service based."

11 Q. How does the cost of service study work?

12 A. The cost of service study assigns costs to the various
13 service levels by weight and time factors. For example,
14 drivers wages are assigned by time. The time is divided
15 into run and stop time. One hundred percent of the stop
16 time is allocated to the specific customer. Run time is
17 allocated by the weight assigned for that particular
18 customer as a percentage of the total weight collected by
19 the disposal vehicle. Disposal fees are distributed to each
20 customer by the weight assigned to their level of service.

21 Q. Was the previous minican rate based on cost of service?

22 A. No, as is pointed out the memorandum excerpt above, the
23 residential rates were below cost of service. The minican
24 was way under the cost to provide service. The minican rate
25 was \$5.64 per month for weekly service. The recycle
26 component of that rate was \$4.03. That left \$1.61 for solid

1 waste service. With a \$66.00 per ton disposal fee and an
2 estimated can weight of twelve pounds the cost to dispose of
3 the refuse in the can would be \$1.72 per month. That would
4 be a loss of \$.11 per month, plus the additional cost of
5 getting the truck and driver to the house and to the
6 landfill. If the average weight per can was higher, the
7 difference would be even more pronounced.

8 Q. Is twelve pounds an appropriate weight for one minican of
9 solid waste to weigh?

10 A. Yes. The actual weight of a can of solid waste is subject
11 to many variables. The time of year can affect the average
12 weight per can. Recycling has altered the weight by
13 removing certain items from the waste stream. The specific
14 weight assigned to a can of solid waste is used to determine
15 the weight based costs of that level of service. The cost
16 of service study adjusts the weight per can up or down to
17 match the actual disposal tons. Eastside compares the
18 actual customer service levels with actual disposal tons to
19 determine the weight of a can at a given point in time.

20 Q. What was the weight assigned for one can service?

21 A. Twenty pounds.

22 Q. Is that the main reason for the \$1.25 difference between the
23 minican and one can rates?

24 A. Yes.

25 Q. Please explain how this difference was calculated.

26 A. The weight difference between the two service levels used is

1 eight pounds. The disposal fee is \$66.00 per ton or \$.033
2 per pound. Eight pounds times \$.033 times 4.333 (the
3 average number of pickups per month) equals \$1.14.

4 Q. The difference between rates is \$1.25. What costs are
5 included in the remaining eleven cents?

6 A. The primary cost (approximately eight cents) included in the
7 remaining eleven cents is the calculation of the run time
8 allocation. Since the waste from one can takes up more
9 space in the truck than the waste from a minican, the one
10 can picks up an incrementally higher share of the run time
11 costs. The remaining cost (approximately three cents) is
12 the state excise tax of 2.13 percent.

13 Q. Was an increase recommended for three can service?

14 A. No. The cost of service study indicated that the rate was
15 compensatory at the current level.

16 Q. Please explain the \$3.05 difference between the two can and
17 three can rates.

18 A. The costs are spread in a manner similar to the difference
19 in the minican and one can costs. The weight difference is
20 calculated at nineteen pounds per weekly pickup.

21 Multiplying that by \$.033 and 4.333, you arrive at \$2.72 for
22 the monthly disposal fee increment. The remaining \$.33
23 includes run time costs and additional stop time for the
24 third can.

25 Q. How were the can weights and stop times in the Eastside cost
26 of service study derived?

1 A. The can weights are calculated each month. All service
2 level weights are set at a fixed percentage higher or lower
3 than the one can weight. The one can service level is the
4 base unit for measurement purposes. The actual disposal
5 tons compared with the actual customer count for each month
6 determines the weight to be assigned to a particular service
7 level. The cost of service study uses these monthly
8 distributions. The stop times are from a later study that
9 Eastside performed. They exercised a time and motion study
10 similar to the one that Ron Meeks used to determine stop
11 time for his original cost of service model adopted by the
12 Commission in Cause Number TG-2016 et. al.

13 Q. What is the basis for the fixed percentage weight spread
14 between service levels?

15 A. Eastside performed a study in 1990. Customer weight
16 statistics were compiled by actually weighing individual
17 cans at various service levels. The results were compared
18 to the weights calculated in the Meeks study. The final
19 allocation percentages were based on the need to match the
20 activity in any one period with the actual disposal tons
21 generated in the same period. The current percentage weight
22 spread has been determined to best represent Eastside's
23 activity.

24 Q. Have other can weights and stop times been used for purposes
25 of the cost of service study?

26 A. Yes. Exhibit____(LCD-4) is an attachment from Ron Meeks

1 original testimony in Cause Number TG-2016 et. al., where
2 the model weights and stop time factors are listed. These
3 weights and times are to be used where company specific
4 statistics are not available.

5 Q. How were these weights derived?

6 A. Statistical data was obtained from field studies performed
7 by Commission and study carrier staff and data requests sent
8 to the carriers. Average weights were calculated from route
9 and tonnage statistics.

10 Q. Why not just use the weights and times calculated by Mr.
11 Meeks?

12 A. These weights and times were intended as a guide. Mr. Meeks
13 testified that periodic route and weight studies should be
14 prepared by carriers to maintain valid statistical data.
15 The cost of service model adjusts the can weights upward or
16 downward on a percentage basis to reconcile with actual test
17 period disposal tons. The stop times are fixed. The
18 Commission recognized that the can weights and stop times in
19 the Meeks model were a composite from studies of several
20 companies. The results derived from a study an individual
21 carrier undertakes are considered a valid substitute for the
22 Meeks numbers.

23 Q. What statistical changes in the customer base have taken
24 place since the Commission approved the current rates and
25 rate design?

26 A. The minican base has been increasing slowly over time.

1 Exhibit____(LCD-5) shows the minican, one can, and two can
2 customer base as of November 30, 1993, and April 30, 1994.
3 The exhibit shows that the Eastside regulated residential
4 customer base has grown by approximately .5 percent. The
5 minican base has increased by approximately 2.5 percent, and
6 the one can and two can indicate approximately a 5.4
7 increase and decrease respectively.

8 Q. What is the significance of the November 1993, and April
9 1994, dates for customer statistics?

10 A. The November date was chosen since was the latest count
11 before the customer notice went out announcing the proposed
12 increase. Any reaction to the announcement would not have
13 occurred until after that date. The April date was the count
14 from latest completed records at the time testimony was
15 being written. The April date shows the customer
16 statistical base two months after rates were approved.

17 Q. Were there any adjustments made to the customer counts?

18 A. Yes, Lake Forest Park completed the annexation of an area
19 previously under WUTC jurisdiction. The customers were
20 added back to the regulated customer base for the purpose of
21 this analysis so as not to skew the results.

22 Q. Does this complete your direct testimony?

23 A. Yes.