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REVISED July 8, 1994

STATE OF WASH.
HIGHWAY AND TRANSP.
COMMISSION

BEFORE THE WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

KING COUNTY DEPARTMENT OF
PUBLIC WORKS, SOLID WASTE
DIVISION,

Complainant,

vs.

SEATTLE DISPOSAL COMPANY,
RABANCO, LTD., d/b/a/EASTSIDE
DISPOSAL AND CONTAINER HAULING

Respondent.

DOCKET NO. TG-940411

REVISED REBUTTAL TESTIMONY OF
LISA A. SKUMATZ, Ph.D

INTRODUCTION

Q. CAN YOU PLEASE SUMMARIZE THE MAIN TOPICS THAT YOU WILL
ADDRESS IN YOUR REBUTTAL TESTIMONY?

A. In my rebuttal testimony, I will focus on six key topics.
First, that the WUTC witnesses have argued that no evidence
was provided by King County witnesses to show that there are
waste reduction or recycling impacts from incentive variable
rates ~~separate~~ from the effects of other aspects of programs.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
TG-940411 T-73 ✓

REVISED REBUTTAL TESTIMONY OF
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1 This is not true, and several studies were provided both in
2 direct testimony as well as in response to numerous data
3 requests from the WUTC to support this finding. Most
4 relevant is the "Garbage by the Pound" study which
5 demonstrated that, if rates with stronger incentives than the
6 existing variable can program are introduced, even with no
7 changes in recycling or other programs, customers reduced the
8 weight of waste set out for disposal by a statistically
9 significant 15%. The WUTC staff has provided no studies to
10 support its position, and argues that the WUTC should not
11 conduct any studies as they would be "imprudent".
12

13 Second, the WUTC witnesses argue that the elasticity
14 estimates provided by King County's witnesses are small, and
15 should, therefore, be effectively assumed to be zero. This
16 approach would be contrary to the WUTC's policy concerning
17 similarly-sized elasticities for electric and
18 telecommunications rate cases decided by the same
19 commissioners. Although the demand elasticities are
20 technically "inelastic", one has to take into account the
21 magnitude of the price change, the level of demand, as well
22 as the elasticity to determine the final effect on demand of
23 a price change. The demand elasticities cited here are
24 inelastic, but they are statistically distinguishable from
25 zero, and elasticities within the same range are routinely

1 incorporated into conservation policy, demand forecasting,
2 and pricing policy for the energy and communications
3 utilities in Washington state.

4
5 Third, the WUTC witnesses argue that, because demand is
6 inelastic, King County should rely on "other" methods of
7 affecting demand. However, the witnesses provide only vague
8 theoretical possibilities for affecting demand, provide no
9 empirical evidence that any other policies have been shown to
10 have an effect on demand in the real world, and ask the
11 County to dismiss the only policy instrument that has shown a
12 statistically significant impact -- pricing. The WUTC
13 witnesses recommend that the County focus on programs to
14 change people's tastes and preferences. Unfortunately the
15 connection is based merely on speculation, and, as noted
16 earlier, there is no empirical proof that such a link exists,
17 in contrast to the numerous studies that demonstrate the
18 significant impact of price.

19
20 Fourth, the WUTC argues that some of the estimates provided
21 by the County's witnesses contain errors. Errors were not
22 made, as was repeatedly pointed out in the responses to data
23 requests. The elasticities were properly estimated over a
24 period in which only prices changed, which is the appropriate
25 estimation method. These estimated elasticities would be

1 very appropriate for estimating impacts on subscriptions
2 during a period like the present time, when prices are the
3 main change being made. However, as properly pointed out in
4 the report in which the numbers were provided, when these
5 elasticities are applied to a period when rates are not the
6 only thing changing (for instance when new service levels and
7 programs are introduced), the estimates will be best used
8 incorporating judgment as to the manner in which these other
9 factors will affect customer reactions.

10
11 Fifth, the WUTC witnesses present information of an unclear
12 source and very limited documentation regarding the weights
13 per can that were assumed for the rate calculations. These
14 weights do not appear to be consistent with weights used for
15 other WUTC rate cases, and are distinctly different from the
16 weights measured and used by the City of Seattle, which has
17 operated a similar variable can program with similar cans for
18 many years. They appear inconsistent with previous rate
19 filings to the WUTC. As a result, these weights do not
20 appear to be stable or robust, which leads one to question
21 the assumptions and methodology used to derive them, as well
22 as the "cost of service" rates derived using them.

23
24 Finally, the WUTC witnesses argue that cost of service is a
25 policy that cannot be violated and maintain appropriate

1 rationing of service. Unfortunately, this ignores the fact
2 that calculation of cost of service incorporates a
3 significant degree of judgment as to the estimation and
4 apportionment of costs. As the WUTC witnesses know, cost of
5 service justification can be applied to a wide range of
6 actual rate levels. The direction of choices in this rate
7 case seem to have been made in one direction, with the effect
8 of purging any incentives that could be provided, even within
9 the moniker of justifiable "cost of service". Also, the WUTC
10 bases cost of service solely on historical costs, unlike the
11 practice of energy and telecommunications industries where
12 forward-looking long range marginal cost is used. The result
13 is to simply ignore the fact that all costs can be expected
14 to increase in the future.

15
16
17 **SEPARATE IMPACTS FROM RATES**

18
19 **Q. ON PAGE 14 OF HIS TESTIMONY, LINES 17-25, MR. POPOFF**
20 **INDICATED THAT NONE OF KING COUNTY'S WITNESSES ISOLATED THE**
21 **EFFECTS OF INCENTIVE-BASED VARIABLE RATES FROM OTHER ASPECTS**
22 **OF RECYCLING PROGRAMS. DO YOU AGREE WITH HIS ASSESSMENT?**

23
24 **A. No. Mr. Popoff neglected to mention several directly-**
25 **relevant studies provided by King County's witnesses which**

1 were discussed both in direct testimony as well as in the
2 responses to data requests. The most appropriate study is
3 the "Garbage by the Pound" study which specifically addresses
4 this issue. This study introduced rates with greater
5 incentives than the mature, variable rates program in Seattle
6 which had been in place for about eight years. The customers
7 were required to participate and were selected to ensure
8 coverage for customers with a range of incomes. They
9 experienced the same recycling and other programs as other
10 residents. We found that customers reduced their tonnage by
11 a statistically significant amount of 15% over the run of the
12 experiment.

13
14 The witnesses also neglected to mention that an estimated 24%
15 of Seattle's tonnage was recycled after the introduction of
16 incentive variable can rates and before the implementation of
17 convenient programs.

18

19

20 **INELASTIC DEMAND**

21

22 **Q. MR. POPOFF TESTIFIES THAT THE ESTIMATED DEMAND ELASTICITIES**
23 **ARE INELASTIC, AND THAT IT IS NOT WORTH USING PRICING**
24 **INCENTIVES TO AFFECT DEMAND FOR SOLID WASTE SERVICE. DO YOU**
25 **AGREE?**

1 A. The testimony argues that elasticities of -0.07 to -0.14
2 "show that rate level does not have much of an impact on
3 weight of waste landfilled". First of all, these elasticity
4 estimates are statistically significant, and indicate that
5 increasing rates have a clear negative impact on the amount
6 of tonnage disposed. The definition of statistically
7 significant is that these estimates are significantly
8 distinguishable from a zero impact.

9
10 Second, these elasticity estimates are in the same range as
11 the demand elasticities estimated for electricity and for
12 telecommunications. Elasticities less than (in absolute
13 terms) -.2 are common in electricity and these are not
14 assumed to be zero because they are small, either in demand
15 forecasts nor in rate cases presented before the WUTC. The
16 impacts of prices on electricity demand are considered
17 crucial underpinnings to the peak load pricing, and
18 conservation-pricing that has long been a part of the
19 judgement imposed on cost of service rates to better ration
20 services from a regional, societal, and environmental
21 viewpoint. In the telecommunications field, elasticities as
22 low as -.01 to -.03 are crucial inputs to assumptions
23 affecting universal service. Zero elasticities are not
24 assumed in these cases, unlike the recommendation in this
25 case.

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Although Mr. Popoff is technically correct in stating that these elasticities are inelastic, this does not mean that they have minimal impact on waste reduction. In order to calculate the final effect on demand, one needs to take into account the magnitude of the price change and the level of demand as well. Indeed, Dr. Albert estimates that the change to the WUTC's rate would lead to an increase of 9% in waste disposal, which is not an insignificant amount.

Further, I am unaware of cases within electricity that base rates calculations on historical costs with no adjustments for new estimations of demand or price impact. The case here appears to assume last year's costs with virtually no assumed adjustments by customers for changes in the rates. Customers are assumed to maintain virtually the same subscription levels (the unit by which revenues are collected) and are apparently allowed no tonnage reaction (the unit by which many costs are derived). This differs from the standard policy for electricity or telecommunications cases when they are presented before the WUTC. Elasticity estimates of these levels are routinely taken into account in rate design for other utilities.

1 Q. IT IS ALSO ARGUED THAT THE ELASTICITIES FOR CAN SUBSCRIPTIONS
2 ARE ALSO marginally INELASTIC. DO YOU AGREE?

3
4 A. No. The estimates shown on page 19 of Mr. Popoff's testimony
5 present only the first three estimated elasticities. The
6 elasticity from one can to zero cans is not relevant because
7 customers were not generally allowed to qualify for the zero
8 can service in 1987. The elasticity for two cans to one is
9 an absolute value of 1, the cutoff for calling an elasticity
10 inelastic or elastic. Mr. Popoff only presents one more
11 elasticity -- the one for three cans to two cans (an
12 elasticity of -1.5). This one, as well as the two
13 elasticities for higher can levels that both exceeded an
14 absolute value of two, are clearly above the level considered
15 elastic. These estimates all indicate that rate changes have
16 a strong impact on can subscriptions.

17
18
19 "OTHER" METHODS OF AFFECTING DEMAND

20
21 Q. MR. POPOFF REPEATEDLY MENTIONS THAT "SHIFTS IN THE DEMAND
22 CURVE" DUE TO CHANGES IN CONSUMERS' TASTES AND PREFERENCES
23 COULD BE BETTER AFFECTED BY EDUCATION OR OTHER PROGRAM
24 FEATURES. DOES MR. POPOFF PROVIDE ANY EMPIRICAL EVIDENCE
25 DEMONSTRATING THESE EFFECTS?

1 A. No. Mr. Popoff provides absolutely no empirical evidence to
2 this effect.

3
4 In addition, Mr. Popoff recommends that the County focus
5 its efforts on programs that have no demonstrable
6 effect, and, unlike price, only affect demand indirectly
7 and unreliably.

8
9
10 Q. IN HIS CONCLUSION, ON PAGE 31, MR. POPOFF RECOMMENDS THAT, IN
11 ORDER TO MEET ITS WASTE REDUCTION AND RECYCLING GOALS, KING
12 COUNTY SHOULD "CONCENTRATE ITS RESOURCES AND EFFORTS ON WAYS
13 TO SHIFT THE DEMAND FOR WASTE COLLECTION SERVICE IN THE
14 COUNTY RATHER THAN ATTEMPT TO MOVE ALONG AN INELASTIC DEMAND
15 FUNCTION". DO YOU BELIEVE THIS WOULD BE A PRUDENT POLICY FOR
16 THE COUNTY TO FOLLOW?

17
18 A. No I do not. Mr. Popoff asks King County to dismiss the one
19 policy instrument (pricing) that has a direct, demonstrable
20 and statistically significant effect on demand, and rely on
21 unspecified policies that will "shift the demand" by altering
22 people's tastes and preferences for recycling. Mr. Popoff's
23 speculative discussion argues that some policies will shift
24 demand, but provides no evidence, either empirical or
25 otherwise, that would substantiate that there are options

1 (practical or otherwise) with demonstrated effects. Granted,
2 Mr. Popoff's background does not emphasize solid waste, but I
3 am unaware of any literature within the energy field (Mr.
4 Popoff's area of specialization within the WUTC) that
5 demonstrates a measurable impact from information-only
6 programs, despite attempts to measure these effects.
7 Further, information programs are expensive, and would, I
8 believe, have a shorter lifetime than periodic pricing
9 reminders encouraging behavior changes. I do not believe
10 that a reliance on these types of programs alone would allow
11 King County to reach its recycling and waste reduction goals.

12
13
14 King County has shown a history of "balance", implementing
15 information campaigns, convenient programs, and pricing to
16 move the County toward its goals. Mr. Popoff's suggestions
17 would remove a key strategy from King County's arsenal in
18 favor of unclear strategies with no proven effects.

19
20
21 **Q. DOESN'T MR. POPOFF PROVIDE CASE STUDIES OF TWO CITIES IN**
22 **WASHINGTON WITH AWARD-WINNING RECYCLING PROGRAMS BUT NO**
23 **INCENTIVE-BASED VARIABLE RATES?**

1 A. Yes he does. However, the diversion rates for these cities
2 are not provided. Nor are the criteria for presenting the
3 award discussed. Mr. Popoff defines these communities as not
4 having incentive rates because "none of the companies have
5 rate differentials greater than 35% between any service
6 level" (page 29). In fact, these are much higher
7 differentials than are recommended by the WUTC in association
8 with this rate case. The rate differentials presented in the
9 staff recommended rates in association with TG-940411 are,
10 respectively 13%, 17%, and 24%, for increasing can sizes.
11 These are considerably lower incentives than the "non-
12 incentive" rate threshold defined by Mr. Popoff for these two
13 cities.

14
15 In my testimony I cited numerous case studies for communities
16 in California and Washington with very high diversion levels
17 that have incentive-based rates, and which attribute a good
18 deal of their success to the incentives provided by rates. I
19 understand that Seattle views incentive rates as their most
20 effective recycling program.

21
22 Finally, on this point, I wanted to note that, in my opinion,
23 you will find that the recycling programs would tend to be
24 more cost-effective -- and thus a more prudent expenditure of
25 funds and more fiscally sustainable -- if they are augmented

1 by incentive-based rates. Rates are also a much cheaper
2 incentive than the "cadillac" types of programs and
3 extensive, expensive educational efforts that are needed to
4 achieve high diversion on their own.

5

6

7 Q. MR. POPOFF RECOMMENDS THAT, BECAUSE A VERY LARGE PRICE EFFECT
8 MIGHT BE NEEDED TO CAUSE A LARGE CHANGE IN SERVICE DEMAND,
9 THE COUNTY SHOULD EMPHASIZE EDUCATION OR OTHER PROGRAMS. CAN
10 YOU COMMENT ON THIS?

11

12 A. If we take Mr. Popoff's logic one step further, if a large
13 price effect is needed to affect demand when there is
14 actually a demonstrated, significant price coefficient, we
15 would need a tremendous amount of education to affect demand
16 when there is no demonstrated coefficient presented for
17 education's effect on demand. The County is being asked to
18 rely on a policy instrument that has a speculative, rather
19 than a demonstrated, effect on demand.

20

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1 ELASTICITY ESTIMATION

2
3 Q. MR. POPOFF REPEATEDLY ARGUES THAT THE ELASTICITY ESTIMATES
4 WERE WRONG AND SHOULD HAVE BEEN HIGHER (E.G., PAGE 20 OF HIS
5 TESTIMONY). CAN YOU CLARIFY?
6

7 A. Although clarified in the data requests, Mr. Popoff does not
8 appear to understand the information presented. The
9 elasticity estimates being referred to here are the estimates
10 of the reaction of customer "can" subscription levels in
11 reaction to changing rates for those cans.
12

13 As Mr. Popoff points out in his lengthy discussion of basic
14 economics, elasticities reflect the effects of price changes
15 on demand. The elasticities presented in my testimony were
16 estimated in a period in which rates were the main thing that
17 changed. This is an especially appropriate time to estimate
18 price elasticities. These elasticities would then
19 appropriately provide estimates of the effect of changes in
20 rate levels -- in the absence of changes in other major
21 factors -- on subscriptions. Price elasticities were
22 calculated and presented in Exhibit___(LAS-6). These
23 estimates are not incorrect, and in fact, were estimated in
24 an appropriate time period and under suitable circumstances
25 for price elasticities.

1 My original document Exhibit___(LAS-6) then reports that
2 Seattle experienced a rate change during a period in which
3 two other major factors came into play -- a new subscription
4 level was introduced, and new programs were introduced. I
5 noted that strict application of the estimated elasticities
6 (which were estimated to take into account only price
7 effects) without using judgment to estimate the complicating
8 effects of new service levels and programs, would not be
9 appropriate. And the discussion that follows in the text in
10 Exhibit___(LAS-6) illustrates the point. In fact, the
11 resulting changes taking into account all three factors
12 (prices, new can size, and programs) were different than the
13 estimated price effect alone. This does not make the
14 estimates wrong, just incomplete tools for measuring the
15 impacts of multiple effects. They are highly appropriate,
16 however, for providing estimates of the effects of changes in
17 rates where rates are the main thing being changed -- for
18 instance, the current case.

19
20 The results show highly elastic changes in customer
21 subscription levels in response to changes in price absent
22 any other effects.

23
24
25

1 **WEIGHTS PER CAN**

2
3 **Q. THE WEIGHTS FOR EACH OF THE CAN SIZES USED FOR ESTIMATING THE**
4 **RATES WERE PROVIDED. CAN YOU COMMENT ON THESE WEIGHTS?**

5
6 **A.** The weight levels were apparently provided from a variety of
7 sources. Page 10 of Layne C. Demas's testimony mentions
8 monthly "calculations" of weights, where cans are not
9 weighed, but apportioned based on route tonnage totals and
10 distributions of cans based on the route. The weights are
11 apparently estimated based on fixed percentage differentials
12 from one can. The documentation on the one-can differential
13 basis is unclear, but may be the Meeks work, presented as
14 Exhibit ___ (LCD-4). In addition, a 1990 study by Eastside
15 is mentioned, and discusses actually weighing cans. However,
16 the can weights are not presented. The discussion also
17 mentions "comparing" the actual weights from the 1990 study
18 to the Meeks work. No discussion on the method for
19 "comparison" was provided. Exhibit ___ (LCD-3), presented as
20 from Eastside's cost of service study, also includes can
21 weights. The basis for these weights is not made clear.

22
23 Based on the columns in the table presented in Exhibit ___
24 (LAS-9), the comparison between the Meeks weights and the
25 1990 study must have led to some concerns about the

1 methodology for one study or the other, because the
2 differentials between the Meeks work (Column 6, Exhibit ____,
3 (LCD-4)) and the figures used in this rate case (Column 4,
4 from Exhibit ____ (LCD-1)) are dramatically different, both in
5 level and in differentials. However, based on the response
6 to data requests, it appears that the WUTC staff does not
7 have a copy of the actual 1990 study, and did not review the
8 actual 1990 study or its methodology.

9
10 Without the numbers from the 1990 study, it is difficult to
11 make a judgment as to the validity of the approach for
12 determining the can weights, which were then used as an
13 integral part of the cost of service determination. However,
14 if Meeks was ever used, the numbers in this study do not
15 appear consistent with the weights used in previous rate
16 filings with the WUTC. No discussion or information was
17 provided on the source or justification of these differences,
18 which are the most important single determinant of the
19 calculated cost of service differentials in the proposed and
20 recommended rates.

21
22 A more reliable set of weights, based on actual customer data
23 are contained in the work that I have conducted in
24 association with the "Garbage by the Pound" (GBTP) study.
25 This study provided a weekly weighing of 1,500 cans both

1 before and after the pilot program. A comparison of the
2 weights derived in the GBTP study, the assumed rates for
3 Eastside's recommended (and adopted) rates, the assumed
4 weights submitted by Eastside Disposal, and the Meeks weights
5 is contained in Exhibit ____ (LAS-9). The average can weights
6 before the pilot, but after several years of an incentive-
7 based variable can system and convenient recycling and yard
8 waste programs, are presented in Column 2 of Exhibit ____
9 (LAS-9). After the additional rate incentives from pound-
10 based rates, the numbers in Column 3 resulted, Exhibit ____
11 (LAS-9). The weights in this experiment are based on weekly,
12 in-field measurements, and should be fairly similar to the
13 types of programs and effects King County customers have been
14 experiencing. The City of Seattle assumes weights in this
15 range when it calculates its rates. The Demas testimony and
16 the Meeks numbers are presented in Columns 4 and 6,
17 respectively, Exhibit (LAS-9).

18
19 Please refer to Confidential Exhibit ____ (LAS-10) for
20 this paragraph of testimony.
21
22
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25

1 The basis for the work deriving these weights was not clearly
2 documented, and because it is an important underpinning to
3 the cost of service basis, its lack of consistency may call
4 into question the "cost of service" basis for the recommended
5 rates. In our testimony we noted that the cost of service
6 nature of the rates could not be justified on a volume basis
7 under any of a wide array of assumptions.

8

9

10 **COST OF SERVICE**

11

12 **Q. THE WUTC WITNESSES ARGUE THAT IT IS IMPORTANT NOT TO DEVIATE**
13 **FROM COST OF SERVICE AS A BASIS FOR RATES OR IT LEADS TO**
14 **INEFFICIENT RATIONING OF SERVICE. THE WITNESSES MAINTAIN**
15 **THAT THE RECOMMENDED RATES REPRESENT COST OF SERVICE. CAN**
16 **YOU COMMENT ON THIS**

17

18 **A.** I believe that both the proposed and the recommended
19 (subsequently adopted) rates were portrayed as representing
20 cost of service. This just goes to illustrate the point that
21 there is no one set of numbers that represents cost of
22 service. Rather, there is a great deal of estimation,
23 apportioning, and judgment that goes into determining the
24 total revenue requirements, as well as deriving the proper
25 beneficiaries of those costs. Therefore, depending on where

1 in the range each of the cascading assumptions is made, "cost
2 of service" can be used to properly justify a wide range of
3 actual rate levels. The assumptions that were made in this
4 case seem to have been made to result in minimizing the
5 differentials between service levels, whether or not
6 similarly reliable assumptions could have been made that
7 would have resulted in rates that provided greater
8 incentives. For example, differences in assumptions made
9 about the weight of cans on the street would, for one, lead
10 to significant differences in cost of service calculations.

11
12 My understanding is that the WUTC generally does not believe
13 in applying a cost of service model as a mathematical model
14 without incorporating judgment and policy. In this case,
15 "cost of service" appears to be portrayed to the
16 Commissioners as one number when, in fact, based on my
17 experience, I believe an equally justifiable number could be
18 calculated that would result in greater incentives for
19 customers. This alternative set of rates could provide King
20 County with a continuing foundation on which to build to meet
21 its waste reduction and recycling goals. This set of
22 recommended rates represent an apparently abrupt change in
23 policy and structure from the previous rates.

24
25

1 Q. DO YOU DISAGREE WITH THE CONCERNS THAT MR. COLBO MADE NOTING
2 (ON PAGE 8 OF HIS TESTIMONY) THAT "THE STAFF FEELS THAT
3 INCENTIVE BASED VARIABLE RATES ARE ONE OF THE MOST UNFAIR AND
4 UNREASONABLE APPROACHES TO FOSTERING A RATIONAL SOLID WASTE
5 ENVIRONMENT FOR THE 1990'S"?

6
7 A. I believe that the underpinnings of rates must be cost of
8 service. However, I also understand that cost of service is
9 a concept that allows significant room for judgment and
10 incorporation of policy choices in rate design. I have seen
11 rates for solid waste that have very aggressive differentials
12 (100% differentials or even higher than the resulting "a can
13 is a can") in order to lead to strong incentives for
14 recycling and waste reduction. I have also seen rates with
15 zero and very small differentials, with the incumbent small
16 effect on customer waste management choices. Neither of
17 these probably represents the best approach to providing
18 signals for rational use of solid waste services.

19
20 Based on my training and experience, long run marginal cost
21 (LRMC) pricing, incorporating appropriate environmental and
22 societal costs into pricing policy, seems to make the most
23 long-term sense. However, applying LRMC in a shorter term
24 time frame is complicated because: 1) current disposal and
25 other costs may not be reflecting long term costs, and 2)

1 marginal cost pricing does not lead to a precise calculation
2 of revenue requirements. Adjustments must be made in the
3 "level" of rates in order to incorporate marginal cost
4 pricing. I believe rates that incorporate cost of service as
5 well as incentive policy are the most appropriate mix. Using
6 some of the balance between conservation and cost of service
7 pricing principles that were applied to the electricity
8 industry may provide a model for appropriate policy in solid
9 waste. Properly applied, these approaches can provide
10 signals, recover needed revenues, and represent socially
11 responsible policy.

12
13 In addition, I believe that the spirit of the Waste Not
14 Washington Act is to look at cost of service, but to
15 incorporate policy and judgment to assist in providing clear
16 long run price signals to customers to take care in their
17 waste management decisions. If cost of service, non-
18 incentive rates policy is interpreted as minimizing the
19 differentials between cans to assure revenue recovery, I do
20 not believe it represents either the flavor of the
21 legislation, nor does it provide a basis for a rational solid
22 waste environment.

23
24 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

25 **A. Yes.**