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Ex \_\_\_\_\_ (NSP-T)

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  
)  
) TESTIMONY OF  
) NICHOLAS S. PEALY  
)  
)  
)  
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)

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Nicholas S. Pealy.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am currently the Director of Strategic Planning,  
Finance and Information System, Seattle Solid Waste  
Utility.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.

TESTIMONY OF  
NICHOLAS S. PEALY - 1  
WUTC\Pealy.tes

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION  
No. TG-940411 T-49v

Norm Maleng  
Prosecuting Attorney  
CIVIL DIVISION  
E550 King County Courthouse  
Seattle, Washington 98104-2312  
(206) 296-9015  
FAX (206) 296-0191

1 A. I received a Bachelor of Arts Degree in Political  
2 Science and Mathematics, with Honors, from Whitman  
3 College. In 1985 I received a Masters of Arts in  
4 Economics from the University of Washington. I am  
5 presently a Candidate for a Doctorate in Economics at  
6 the University of Washington.

7  
8 Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES IN YOUR CURRENT  
9 JOB.

10 A. I am Manager of Strategic Recycling and Disposal System  
11 Planning. I am also the Manager of Finance and  
12 Information Systems. In these capacities I am  
13 responsible for rates, transfer station billing, and  
14 data processing.

15  
16 Q. ARE YOU FAMILIAR WITH THE SUBJECT MATTER OF WUTC DOCKET  
17 NO. TG-940411?

18 A. Yes. I have reviewed information provided to me by the  
19 King County Solid Waste Division, including King  
20 County's Complaint in Docket No. TG-940411, its Petition  
21 for Reconsideration of Docket No. TG-931585, and a  
22 memorandum, dated February 24, 1994, from Teresa  
23 Osinski, Policy Specialist, to Chairman Nelson and  
24 Commissioners Hemstad and Casad. See Exhibit \_\_\_\_ (NSP  
25 1).

1 Q. WHAT AREAS WILL YOU ADDRESS IN THIS TESTIMONY?

2 A. I will address the question "To what extent does solid  
3 waste rate design affect solid waste disposal and  
4 recycling in Seattle?" I will also address the  
5 experience of the City of Seattle Solid Waste Utility  
6 since instituting curbside recycling pick-up and  
7 inverted rates for garbage and recycling service. I  
8 will address Seattle's estimates of the elasticity of  
9 demand for garbage disposal. I will also address market  
10 trend data compiled for various recyclable materials by  
11 the Seattle Solid Waste Utility.

12  
13 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

14 A. I will testify that between 1981 and 1992, Seattle Solid  
15 Waste Utility has experienced a dramatic shift in service  
16 levels from 82% of customers at the 120 gallon level in 1981  
17 to 93% of customers at the micro-can, mini-can or one-can  
18 levels in 1992. This shift in service levels has been the  
19 result of Seattle's implementation of rates that offer  
20 significant incentives to reduce waste and recycle, and the  
21 introduction of curbside collection of recyclables and yard  
22 waste.

23

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1 Between 1986 and 1988, rate incentives were in effect but  
2 curbside recycling collection was not. During that period  
3 there was a reduction in residential disposed tons.  
4

5 Seattle reduced its estimate of the elasticity of garbage  
6 disposal in 1988. It computed the new elasticity using an  
7 average rate, and we expected the elasticity to decline over  
8 time because of Seattle's high curbside recycling  
9 participation rate and our high recovery rates. In an area  
10 where rates are less steeply inverted than Seattle, I would  
11 expect further inversion of rates to have a significant  
12 impact on recycling participation and recovery rates.  
13

14 Q. AS PART OF YOUR JOB RESPONSIBILITIES, DO YOU OR DO OR  
15 DOES SOMEONE THAT YOU SUPERVISE COMPILE AND MAINTAIN  
16 DATA REGARDING SERVICE LEVEL PRICING FOR SEATTLE SOLID  
17 WASTE UTILITY CUSTOMERS AND MARKET TREND DATA REGARDING  
18 PRICES FOR RECYCLABLE MATERIALS?

19 A. Yes. Individuals that I supervise routinely maintain  
20 service level pricing data and market trend data over  
21 time.  
22

23 Q. ARE YOU FAMILIAR WITH SEATTLE SOLID WASTE UTILITY'S RATE  
24 DESIGN SINCE THE MID-1980'S?

25 A. Yes.

1 Q. WHAT HAS BEEN SEATTLE'S POLICY DURING THAT PERIOD  
2 REGARDING THE PRICING OF LEVELS OF SERVICE?

3 A. Since the mid-1980's Seattle has steadily increased the  
4 price of additional cans of service beyond the one-can,  
5 and later the mini-can and micro-can, levels of service.  
6

7 Q. DURING THE PERIOD SINCE THE MID-1980'S, WHAT HAS BEEN  
8 SEATTLE'S EXPERIENCE WITH REGARD TO THE SERVICE LEVEL  
9 DISTRIBUTION OF ITS SOLID WASTE CUSTOMERS?

10 A. The Table, attached as Exhibit \_\_\_ (NSP 2), illustrates  
11 the service level distribution for Seattle Solid Waste  
12 Utility customers from 1981 to 1992. During that  
13 period, and most notably since the mid-1980's, there has  
14 been a dramatic shift in service levels. In 1981, 82%  
15 of customers had service at the 120 gallon level; in  
16 1992, 93% of customers received service at the micro-  
17 can, mini-can, or one-can levels.  
18

19 Q. TO WHAT DO YOU ASCRIBE THIS SHIFT IN SERVICE LEVELS?

20 A. This shift in service levels has been a result of two  
21 factors: (1) the City's decision to increase the "extra  
22 can" rate from \$5.00/month per container in 1989 to  
23 \$14.98/month per container in 1992; and (2) the  
24 introduction of curbside collection of recyclables and  
25

1 yard waste, which occurred in 1988 and 1989,  
2 respectively.

3

4 Q. DOES THE "EXTRA CAN" RATE EQUATE TO THE ACTUAL FINANCIAL  
5 COST OF COLLECTING THE EXTRA CAN?

6 A. No. The "extra can" rate exceeds the financial cost of  
7 collecting an extra can. The decision to charge this  
8 rate is based upon the policy that the Mayor and the  
9 City Council have consistently taken that the City's  
10 rates should provide significant incentives to recycle.

11

12 Q. WHAT IS THE BASIS FOR THIS POLICY?

13 A. This policy is based on the fact that the resource  
14 conservation benefits of recycling and recycling and  
15 waste reduction exceed those of disposal or  
16 incineration. These benefits are documented in Working  
17 Paper #1 by John Schall, "Does the Solid Waste  
18 Management Hierarchy Make Sense?", October 1992. See  
19 Exhibit \_\_\_ (NSP 3). Here in Seattle, recycling is  
20 cheaper on a per ton basis than garbage disposal. See  
21 Exhibit \_\_\_ (NSP 4). From the perspective of Seattle's  
22 policy makers, it important to encourage recycling, even  
23 if it means shifting costs from lower service level  
24 customers to customers with larger cans. Exhibit \_\_\_

25

1 (NSP 5) illustrates the history of Seattle's variable  
2 can rates since 1981.

3  
4 Q. YOU ASCRIBE THE SHIFT IN SERVICE LEVELS FROM LARGER TO  
5 SMALLER CANS TO TWO CAUSES: THE CITY'S DECISION TO  
6 INCREASE THE "EXTRA CAN" RATE AND THE INTRODUCTION OF  
7 CURBSIDE COLLECTION OF RECYCLABLES AND YARD WASTE. WHAT  
8 HAS BEEN THE CUMULATIVE EFFECT OF THESE TWO FACTORS?

9 A. Exhibit \_\_\_ (NSP 6) and Exhibit \_\_\_ (NSP 7), which are  
10 examples of reports prepared monthly by Solid Waste  
11 Utility Staff, illustrate the impact that the City's  
12 rate design and convenient programs have had on garbage  
13 disposal and recycling tonnage. The "December 1993  
14 Garbage Report (Exhibit \_\_\_ (NSP 6)) shows that  
15 Seattle's residential garbage tonnage has decreased from  
16 179,966 tons in 1988 to 144,127 tons in 1993 despite  
17 substantial population growth in the late 1980's and  
18 early 1990's. Curbside recycling tonnage, on the other  
19 hand, increased from 23,984 tons in 1988 to 50,795 tons  
20 in 1993. See Exhibit \_\_\_ (NSP 7). These shifts from  
21 more costly garbage disposal to less costly recycling  
22 are a direct consequence of our steeply inverted rates  
23 and the fact that we provide convenient programs.  
24 Although the absence of data makes it difficult to  
25 separate the impact of rate design from the impact of

1 convenience or customer's recycling and waste reduction  
2 practices, a rough estimate of the impact of changes is  
3 the extra can rate or disposal would be -.1 to -.2.  
4 This figure is based on the reduction in residential  
5 disposed tons that Seattle experienced between 1986 and  
6 1988 before curbside recycling was introduced, but a  
7 period when the extra can rates increased from  
8 \$.3.30/month to \$5.00/month.

9  
10 Q. WHAT IS THE CITY'S ESTIMATION OF THE ELASTICITY OF  
11 GARBAGE DISPOSAL?

12 A. The City's current estimation is -.07, which was  
13 calculated in 1992.

14  
15 Q. HAS THE CITY'S ESTIMATE OF ELASTICITY OF GARBAGE  
16 DISPOSAL CHANGED OVER TIME.

17 A. Yes. It was estimated to be -.14 in 1988.

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1 Q. IS THIS REDUCTION IN ELASTICITY FROM  $-.14$  TO  $-.07$   
2 EVIDENCE OF A CONCLUSION BY THE SOLID WASTE UTILITY THAT  
3 THE RATE DESIGN DOES NOT HAVE A SIGNIFICANT IMPACT ON  
4 GARBAGE DISPOSAL?

5 A. No. Such a conclusion is erroneous because (1) the  
6 more-recent elasticity was computed using an average  
7 rate, meaning that it measures the impact of changes in  
8 the level of rates, not the structure of rates; and (2)  
9 given the high curbside recycling participation rate in  
10 Seattle, and our high recovery rates, we would expect  
11 this elasticity to decline over time. High recovery  
12 rates mean that less recyclable material remains in the  
13 garbage stream, so the rate increases produce smaller  
14 and smaller increases in recovery rates over time.

15  
16 Q. WHAT WOULD YOU EXPECT THE ELASTICITY OF GARBAGE DISPOSAL  
17 TO BE IN AN AREA WHERE RATE LEVELS ARE LOWER AND RATES  
18 LESS STEEPLY INVERTED THAN IN SEATTLE?

19 A. I would expect that further inversion of rates would  
20 have a significant impact on recycling participation and  
21 recovery rates.

22  
23 Q. YOU STATED EARLIER THAT THE SOLID WASTE UTILITY  
24 MAINTAINS AND COMPILES DATA REGARDING MARKET TRENDS FOR  
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RECYCLABLE MATERIALS; HAS THE UTILITY COMPILED THIS DATA  
SINCE 1992?

*all*

A. Yes. Exhibit 48 (DAD-3) (~~NSP-8~~), reflects prices for various  
recyclable materials as reported to the City by Waste  
Management, as well as various price indicators tracked  
by the City.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.