OFFICIAL TRANSCRIPT OF PROCEEDINGS BEFORE THE POSTAL RATE COMMISSION

In the Matter of:))		
EXPERIMENTAL RATE AND SERVICE CHANGES TO IMPLEMENT NEGOTIATED SERVICE AGREEMENT WITH CAPITAL ONE SERVICES, INC.))))	Docket No.	MC2002-2 Feb 11 7 01 M . POSTAL RATE CONNICA- OFFICE OF THE SECRET

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ORIGINAL

POSTAL RATE COMMISSION

In the Matter of:)		
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EXPERIMENTAL RATE AND)	Docket No.	MC2002-2
SERVICE CHANGES TO IMPLEMENT	')		
NEGOTIATED SERVICE AGREEMENT	')		
WITH CAPITAL ONE SERVICES,)		
INC.)		

Room 300 Postal Rate Commission 1333 H Street, N.W. Washington, D.C.

Volume 8 Friday, February 7, 2003

The above-entitled matter came on for hearing

pursuant to notice, at 11:00 a.m.

BEFORE:

HON. GEORGE A. OMAS, CHAIRMAN HON. DANA B. COVINGTON, VICE-CHAIRMAN HON. RUTH Y. GOLDWAY, COMMISSIONER HON. TONY HAMMOND, COMMISSIONER

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WITNESSES APPEARING: JOHN C. PANZAR

WITNESSES:	DIRECT	CROSS	REDIRECT	RECROSS	VOIR <u>DIRE</u>
John C. Panzar					
by Mr. Corcoran	1572		1787		
by Mr. Luby		1646			
by Mr. Baker		1661			
by Mr. Olson		1671			
by Mr. May		1699			• -
by Mr. Koetting		1727,			
		1768			
by Mr. Costich		1761	~ -		

DOCUMENTS TRANSCRIBED INTO THE RECORD	<u>PAGE</u>
Corrected direct testimony of John C. Panzar, JCP-T-1	1573
Corrected designated written cross-examination of John C. Panzar, JCP-T-1	1608

<u>EXHIBITS</u>

EXHIBITS AND/OR TESTIMONY	IDENTIFIED	RECEIVED
Corrected direct testimony of John C. Panzar, JCP-T-1	1572	1573
Corrected designated written cross-examination of John C. Panzar, JCP-T-1	1608	1608

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PROCEEDINGS 1 2 (11:00 a.m.) 3 CHAIRMAN OMAS: Good morning, everyone. Thank you for coming on such a snowy day. I hope none 4 5 of you had too much of a problem getting in this I would like to thank you all for being here 6 morning. today, as well as all the Commissioners and our 7 8 witness. 9 This morning we will hearing testimony 10 provided by Professor John C. Panzar at the request of the Commission. Professor Panzar is represented by 11 12 Brian Corcoran, an attorney employed by the 13 Commission. Mr. Corcoran will not be involved in any way with the Commission's determination in this case. 14 Professor Panzar, Mr. Corcoran, let me 15 publicly express the Commission's appreciation for 16 17 your rapid response to discovery requests. The 18 Commission is trying to provide the Postal Service with a prompt decision on its request in this case, 19 20 and your efforts have enabled us to maintain a tight 21 procedural schedule. We do thank you for that. 22 Does any participant have a procedural matter to raise before we begin today? 23 24 (No response.) 25 CHAIRMAN OMAS: Mr. Corcoran, would you Heritage Reporting Corporation (202) 628-4888

1 please call your first witness?

MR. CORCORAN: Yes. Thank you, Mr. 2 Chairman. I call Professor John C. Panzar. 3 CHAIRMAN OMAS: Dr. Panzar, would you stand, 4 5 please, and raise your right hand? Whereupon, 6 JOHN C. PANZAR 7 having been duly sworn, was called as a 8 witness and was examined and testified as follows: 9 CHAIRMAN OMAS: Please be seated. 10 Mr. Corcoran? 11 12 MR. CORCORAN: Thank you, Mr. Chairman. (The document referred to was 13 marked for identification as 14 15 Exhibit No. JCP-T-1.) DIRECT EXAMINATION 16 BY MR. CORCORAN: 17 Professor Panzar, do you have before you a 18 Q document that's been marked JCP-T-1, the testimony of 19 John C. Panzar? 20 21 Α Yes. 22 0 Was that testimony prepared by you or under 23 your supervision? 24 Α Yes. 25 0 Do you have any changes to that testimony? Heritage Reporting Corporation (202) 628-4888

I have a couple of typos to correct. 1 Α On page 17, line 4, it should read, "Even if the 2 established tariff..." instead of establish. 3 In Appendix 1, page 2, the page numbers of 4 those two articles are incorrect. The Bell Journal 5 article, the page numbers should read from 351 to 54, 6 and the International Economic Review article, the 7 8 pages should read 659 to 675. 9 And with those changes, if you were to 0 testify today orally would this be your testimony? 10 Yes, it would. 11 А 12 MR. CORCORAN: Mr. Chairman, I hand two copies of JCP-T-1 to the reporter and ask that it be 13 transcribed and admitted into evidence. 14 15 CHAIRMAN OMAS: Without objection. 16 (No response.) 17 CHAIRMAN OMAS: Hearing none, I will direct 18 counsel to provide the reporter with two copies of the corrected direct testimony of John C. Panzar. 19 That 20 testimony is received and will be transcribed into the 21 record. 22 (The document referred to, 23 previously identified as 24 Exhibit No. JCP-T-1, was 25 received in evidence.)

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JCP-T-1

BEFORE THE POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

Experimental Rate and Service Changes to Implement Negotiated Service Agreement with Capital One Services, Inc. Docket No. MC2002-2

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Testimony of John C. Panzar

January 16, 2003

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1 Autobiographical Sketch

2 My name is John C. Panzar and I am Louis W. Menk Professor of Economics 3 at Northwestern University, where I hold appointments in the Economics Department 4 and in the Transportation Center. I received my B.A. from Carleton College in 1969 5 and my A.M. and Ph.D. degrees from Stanford University in 1973 and 1975, 6 respectively. At Northwestern I have taught graduate and undergraduate courses in 7 microeconomics and regulatory economics, while serving as Department Chair 8 (1988-92) and Director of Graduate Studies (1984-88; 1993-). I have also taught at 9 the University of Pennsylvania, the University of California at Berkeley, and the 10 University of Auckland. For nine years I held an appointment as a Member of the 11 Technical Staff at Bell Telephone Laboratories, where I also served as Department 12 Head. I have published two books and many articles on subjects related to pricing 13 and other issues concerning regulated enterprises. A statement of my gualifications

14 and copy of my curriculum vitae are attached as Appendix 1 and 2, respectively.

15 Purpose and Scope of Testimony

I have been retained by the Postal Rate Commission to assist in developing a
record on economic issues in this proceeding. See Presiding Officer's Notice of
Anticipated Sponsorship of Testimony on Economic Issues, December 20, 2002. I
have contracted to perform an independent analysis of the economic issues raised
by the Negotiated Service Agreement ("NSA") jointly proposed by the United States
Postal Service and Capital One Services, Inc. ("Capital One"). In particular, I have
been asked to:

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(1) analyze the economic implications and potential consequences, in general, of introducing negotiated rate and service terms available to a sole user into a pre-existing regulatory regime of uniform tariff rates and conditions of service; (2) identify the conditions under which it is economically desirable to introduce declining-block rates or other rate structures that discriminate among users of the affected services, with or without any basis in identifiable cost differences; (3) address the specific economic implications and potential consequences of introducing negotiated rate and service terms available to a sole user where the affected service is provided under a monopoly established by Federal statute, taking into account that such negotiated arrangements may include preferential pricing terms; that access to the negotiated terms may be limited to a small number of users for administrative or other reasons; and that competition may exist among users of the affected service or services; and 16 4) identify and describe regulatory measures that might be taken to accommodate potential concerns regarding the impact of such negotiated 18

rate and service arrangements on fairness in regulation and competition. 19

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1 The Economics of Optional Tariffs The issues in this proceeding that I have been asked to address involve 2 optional or self-selecting tariffs.¹ These are tariffs that allow customers to choose 3 between an established tariff and an alternative outlay schedule. The quantity 4 discounts described in the Capital One NSA clearly fall under this category. Before 5 agreeing to the terms of the NSA, Capital One had the option of continuing to make 6 7 purchases under established tariffs. 8 Optional tariffs have had great theoretical and practical appeal. This is not surprising, because the economic logic behind them is guite intuitive. Consider the 9 10 relationship between a vendor and any of its large customers. The customer makes 11 its purchase decision on the basis of the vendor's established tariff. But before the 12 customer reveals its decision, the vendor makes the following offer: "You may select 13 a quantity and pay the corresponding outlay specified by my established tariff 14 schedule. However, you may, instead, choose a quantity and pay the outlay from an 15 alternative, specially designed tariff." If the customer chooses to utilize the alternative tariff, it does so because it expects to be better off. That is, it expects 16 17 that the surplus it obtains from the quantity, outlay combination chosen from the alternative tariff is higher (or at least as high) as the surplus resulting from the 18

¹ Self selection was introduced into the nonlinear pricing literature by Faulhaber and Panzar: "Optimal Two Part Tariffs with Self Selection," Bell Laboratories Economics Discussion Paper (1977). The seminal paper of R. D. Willig, "Pareto Superior Nonlinear Outlay Schedules," *Bell Journal of Economics 11 1* (Spring 1978), pp. 56-69, showed how such optional tariffs can be used to achieve allocations that improve the welfare of the firm and all of its customers.

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1 quantity, outlay combination that it would have chosen from the established tariff. 2 What about the vendor? Presumably, it would not introduce the alternative tariff 3 option unless it expected that any choice the consumer might make would be more 4 profitable for it than what the consumer would have chosen under the established 5 tariff. Finally, how are the vendor's other customers impacted by the introduction of 6 the optional tariff? With respect to their purchases, they can be no worse off as long 7 as the established tariff option remains available. This result follows from the fact 8 that consumers retain the option to select the same quantity, outlay option (and 9 obtain the same level of surplus) that they would have selected had the alternative tariff never been introduced. 10 11 The possibility of making the vendor and at least one consumer better off,

without making any other consumer worse off, makes optional tariffs appealing to
both economists and regulators.² However, there are some crucial, largely implicit
assumptions lying behind the above analysis. I will discuss each in some detail,
since all are relevant for this proceeding.

16 Resale and Abitrage

The success and desirable attributes of optional tariff plans are predicated on the absence of resale between customers. If it were practical for the favored customer to transfer the quantities purchased under the optional tariff plan to other

² In economic terms, the introduction of optional tariffs makes possible a *Pareto improvement* in the allocation of resources.

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customers facing the established tariff, the vendor would find its profits eroded. In
 the limiting case of costless resale, arbitrage by customers would ensure that sole
 effect of the optional tariff offering would be to convert high-priced sales into low priced sales.

5 The Impact of a Revenue Requirement or Break-even Condition

The above argument that optional tariffs can be used to generate Pareto 6 7 improvements seemed to depend on the pre-existence of an established tariff that 8 the consumer could resort to as an alternative to the optional tariff offering. Yet, for 9 firms subject to a break-even constraint, the cost and revenue effects of the 10 "established tariff" and the "optional tariff" must be assessed jointly and simultaneously. This is not a problem as long as it can be presumed that the vendor 11 is a profit maximizer. In that case, it can be counted upon to expect to make 12 13 additional profit whenever any customer accepts its optional tariff offering. Then, the expected additional profits can be "spent" by lowering the vendor's overall rate 14 15 structure, including the established tariff. Thus the notion that the established tariff in some sense "precedes" the optional tariff is ultimately only for expositional purposes. 16 17 Indeed, in this case, imposition of the break-even constraint strengthens the appeal 18 of optional tariffs. The lowering of the overall rate structure provides a mechanism 19 that benefits users who are not a party to the optional tariff offering. 20

However, this feedback effect works in the opposite way if the customer accepts an optional tariff that causes a reduction in the vendor's profits. Then, imposition of the break-even constraint necessitates an increase in the vendor's

overall rate structure, which makes worse off customers not a party to the optional
tariff offering. Thus, the automatic presumption of the desirability of optional tariffs
relies heavily on the assumption that the vendor is a profit seeker.

4 Discrimination

5 The basic argument demonstrating the desirability of optional tariff schedules 6 applies to NSAs that are not available to all customers, and are therefore overtly 7 discriminatory. Thus, discriminatory optional tariffs may be useful tools for 8 promoting the public interest. They may even make possible Pareto improvements 9 that leave all parties better off. The appeal of discriminatory tariffs is reflected in 10 OCA Witness Callow's proposal to formalize discriminatory optional tariff offerings 11 through the use of a niche tariff classification. That is, any user can receive an X 12 percent discount by expanding its volume by Y percent.

13 I am not a lawyer; however, the use of optional tariffs and/or NSAs whose
14 provisions are not available to all potential users may well be viewed as "unduly
15 discriminatory". Fortunately, it is not necessary to resort to discrimination (in the
16 economists' sense) to achieve the benefits of optional tariff offerings. As I discuss in
17 detail below, the use of *nonlinear outlay schedules* (i.e., quantity discounts) can
18 make possible Pareto improvements without discriminating between users.

19 Independence of User Demands

The final implicit assumption behind the basic analysis of optional tariff offerings is the assumption that the demand schedules of various users are *independent*. The purchase decisions of one user are not impacted by the

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1 purchases of any other user. This is a standard assumption in the microeconomic 2 analysis of markets. However, there is reason to question the validity of this 3 assumption when the service at issue is purchased by firms for the purpose of 4 providing goods or services to final consumers: i.e., when the service being sold is 5 itself a factor of production. In that case, the demands of customers that compete in 6 the same final product markets are necessarily interdependent. A discount offered 7 to one competitor puts its rivals at a cost disadvantage relative to that input. This, in 8 turn, leads to an erosion of rivals' sales in the final product market and a decrease in 9 their demands for the input. This is an important consideration in the case of postal 10 services, since the vast majority of mail is sent by businesses that use postal 11 services as input in the production of their final products or services. 12 The analysis of optional tariff offerings for inputs is central to this proceeding. 13 Clearly, Capital One purchases mail services in order to market its services to

14 consumers. Below, I will discuss the topic of quantity discounts for inputs in some 15 detail. Here, it is sufficient to point out that competition between mailers in their final 16 product market makes possible a form of indirect arbitrage. The competitive process 17 allows final consumers' purchases and associated mail volumes to shift from mailers 18 purchasing according to the standard tariff toward mailers availing themselves of the 19 discounts incorporated in the optional tariff offering. Thus, like resale between 20 customers, competition in final product markets can transform high priced sales into 21 low priced sales for the monopolist.

1	Economic Analysis of Quantity Discounts with Independent User Demands
2	The use of quantity discounts has long been widely practiced in both
3	monopoly and competitive environments. Analysis of the practice also has a long
4	history in economic theory. Long classified as "2 nd Degree Price Discrimination," ³
5	the modern term "nonlinear pricing" is more accurate. It refers to the use of a price
6	schedule under which the total outlay is not the simple product of a constant price
7	times the quantity purchased. ⁴ The practice is not inherently discriminatory because
8	the same outlay schedule is available to all consumers. ⁵ There is a vast theoretical
9	economic literature on the subject. ⁶ Here, I shall focus on the nonlinear pricing
10	policies that can be used to establish optional tariff offerings of the type at issue in
11	this proceeding.
12	Figure 1 depicts the situation of a monopoly vendor serving two types of
13	users: a large user with a demand schedule given by D_{Large} and some number of
14	small users, each of whom has a demand schedule given by $D_{Small}.$ Assume that,
15	under its established tariff, the monopolist serves these users at a uniform price of p,
16	measured by the distance 0p in the diagram. Assume also that the monopolist's

³ The classic reference is A. C. Pigou, *The Economics of Welfare*, London, Macmillan, 1920.

⁴ That is, the graph of a consumer's total outlay is *not* a straight line through the origin, but rather some *nonlinear* function.

⁵ As discussed in more detail below, while all customers may be free to choose any point on the proffered outlay schedule, they will typically *not* have an equal ability to avail themselves of the quantity discounts incorporated in said schedule.

⁶ The most comprehensive reference is Robert Wilson, *Nonlinear Pricing*, Oxford University Press (1993). A more accessible, less technical exposition of most of the issues can be found in S. J. Brown and D. S. Sibley, *The Theory of Public Utility Pricing*, Cambridge University Press, (1986).

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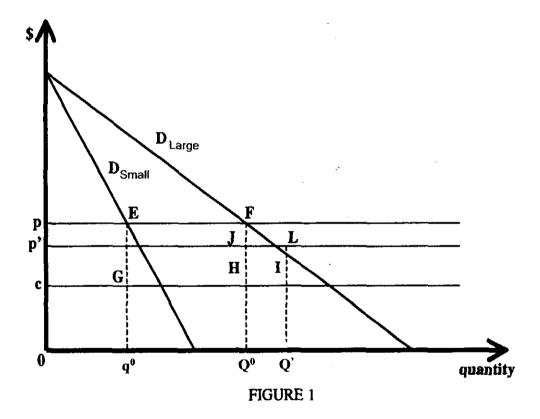
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(constant) marginal cost is c, measured by the distance 0c. At this price, the large user would choose to purchase Q^0 units (distance $0Q^0$). Each small user would choose to purchase q^0 units (distance $0q^0$). In this situation, the large user is making a contribution to institutional costs equal to area pFHc, the amount by which the

5 revenues received from it exceed the incremental costs of providing it with service.

6 Similarly, each small user makes a contribution of area pEGc.



Now suppose that the monopolist offers its consumers the following optional
tariff plan: All consumers may continue to purchase their desired quantity at price p,
but any consumer that agrees to purchase *more* than Q⁰ units will pay a price of p'
on those additional units, with c<p'<p. Small consumers will not be interested in

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changing their behavior. Their valuation of an additional unit purchased (measured
by the vertical height of their demand curve) falls below p' even before reaching
output level Q⁰. However, the large customer would eagerly accept this offer. For
each unit between Q⁰ and Q', its valuation exceeds the price paid. It would therefore
expand its purchases to Q', the quantity at which its valuation of an additional unit is
exactly equal to the incremental price p'.

7 Clearly, the large user is better off as a result of the optional tariff offering. 8 What of the monopolist? It finds that its sales have expanded. Although sold at a 9 discount, the increased quantities are sold at a price above marginal cost, so that 10 the contribution received from the large user has increased, by the amount equal to area HILJ, i.e., the amount $(p'-c)(Q'-Q^0)$. Next, consider the impact on the 11 12 monopolist's other customers. The small users do not directly benefit from the 13 optional tariff offering, but they are no worse off, since they retain the option to make 14 a purchase at the initial uniform price p. The consumers of the monopolist's other 15 service are no worse off because their rates are not affected.

However, both groups can be made strictly *better off* when an overall breakeven condition is imposed on the monopolist. The large user's acceptance of the optional tariff offering resulted in an increase in contribution. If the monopolist were just covering its total costs at the initial rate p, it would then be over-recovering its costs. To restore the desired balance would require it to reduce the uniform rate p and/or its other rates. This would result in *all* of its customers benefiting from the optional tariff offering.

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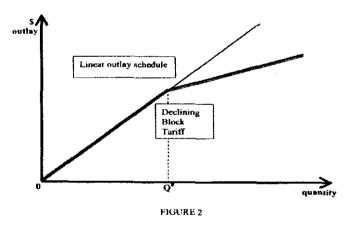
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This example illustrates both the simplicity and appeal of optional tariff offerings. While the analysis is straightforward, there are some points that warrant further discussion.

4 Discrimination

5 Despite the fact that it is, in a very real sense, *designed for* the large user, the 6 resulting optional tariff offering is inherently nondiscriminatory. It merely replaces 7 the established tariff with a nonlinear price schedule that is, in principle, equally 8 available to all.⁷ A graph of total outlay as a function of volume illustrates this point 9 most clearly. In Figure 2, the initial established tariff is just a straight line through the 10 origin with slope equal to the price p. The outlay schedule in effect after the optional



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12 tariff offering coincides with the original schedule through output level Q⁰. There it

13 develops a "kink" and continues along a straight line with the (lower) slope given by

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⁷ Some might hold the view that this equality is akin to that ridiculed by the French philosopher: "The rich and the poor are equally free to sleep under the bridges of Paris, but the rich don't have to."

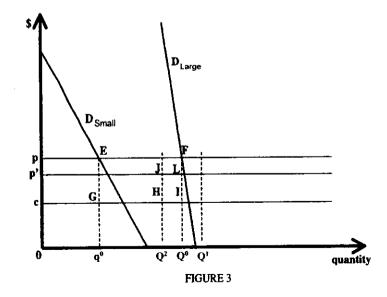
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1 the discount price p'. Any customer is free to select any point along this resulting

2 (nonlinear) outlay schedule.

3 Threshold for Quantity Discount

The example illustrates the key role typically played by the large user's initial •4 Volume, Q⁰, in the design of an optional tariff offering. It is no accident that this 5 quantity determines the beginning of the quantity discounts (and the "kink" in the 6 outlay schedule). In the theoretical analysis, this guarantees that, whatever the 7 shape of the large user's demand curve, the large user will find it desirable to 8 expand its purchases and the monopolist's profits will increase as a result. This may 9 not be the case if the threshold is set at other than Q⁰. Consider the situation in 10 11 Figure 3, in which the demand curve of the large user is nearly vertical. Then, the large user would not change its quantity much in response to the lower price. If the 12 threshold for quantity discounts lay significantly beyond Q⁰, say at Q¹, 13



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the tariff option would not be taken up. On the other hand, if the threshold were set significantly below Q⁰, say at Q², the large user would avail itself of the lower price for quantities it had previously purchased at the established rate, thereby decreasing the monopolist's profit contribution from this market. While the quantity discount would induce a slight expansion in volume beyond Q⁰, the contribution earned from the increment would not offset the losses resulting from discounting the "original" volumes.

In practice, there will typically be a range of quantity discount threshold levels 8 around Q⁰ that will result in an optional tariff offering that is both attractive to the 9 large user and profitable for the monopolist. The difficulty is that, for any threshold 10 level other than Q⁰, these issues become empirical questions. When the optional 11 tariff offering results from negotiation between the two parties, it is reasonable to 12 assume that the selected quantity threshold is satisfactory to the large user. One 13 would have similar confidence about the impact on profits if the monopolist were a 14 profit maximizer. However, if this cannot be assumed, then it would be necessary to 15 forecast the expected effects on the monopolist's profits in order to evaluate the 16 desirability of a negotiated optional tariff arrangement, even absent the issue of 17 18 demand interdependence (discussed below).

Finally, it is important to recognize that the above theoretical analysis presumed stable, unchanging demand curves. When, as in reality, demand schedules change over time, the focal point becomes the quantity that the large user *would have demanded* at the established rate. Thus, in any practical application, the

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1 evaluation of any optional tariff offering will always be an empirical question, but 2 perhaps no more so than many other elements of the typical rate proceeding. 3 **Economic Analysis of Quantity Discounts for Inputs** 4 As is the case in most of the economics literature, the above discussion of 5 optional tariff offerings posited a situation in which a good or service was sold to final 6 consumers. However, in the case of postal services, volume discounts are likely to 7 be offered to business users. For these mailers, postal services are used as an 8 input in the provision of other products and services to other businesses and final consumers. This complicates the analysis considerably.⁸ 9 10 First, the input demand curves of firms that compete in the final product 11 markets are necessarily interdependent. This interdependence causes the 12 breakdown of the elegant Pareto improvement argument in support of optional tariff 13 offerings. Indeed, one cannot even presume that the introduction of optional tariff 14 offerings will increase total surplus in the market. Thus, assessing the desirability of 15 optional tariff offerings requires the detailed analysis of (forecasted) demands and 16 costs typical of rate proceedings. 17 Market Induced Demand Interdependence 18 Figure 1 and the subsequent analyses incorporate the assumption that the 19 demand schedule of each of the small users is not affected by the price and quantity

⁸ The theoretical basis of this section was developed in Ordover and Panzar (1980) and Ordover and Panzar (1982).

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choices available to the large user. This standard assumption is quite reasonable when the service in question is being sold to final consumers or as an input to firms operating in different final product markets. If the large user is a credit card vendor such as Capital One, there is no reason to expect that, if it makes use of a quantity

such as Capital One, there is no reason to expect that, if it makes use of a quantity
discount, there will be any effect on the demand curves for mail of other users that
are individual consumers or small firms in, say, the floral industry. However, things
are very different for Capital One's competitors. Their demand curves for mail
services depend very much on the mailing options available to Capital One.

9 This interdependence is a result of the economics of price determination in 10 multi-firm markets. Let us trace the impact of a quantity discount received by one 11 firm through the chain of market interactions. A reduction in the price that a firm pays at the margin⁹ for a normal input¹⁰ causes it to increase its supply of output. 12 13 This, in turn, leads to a reduction in the market price of the final product. This lower 14 price impacts other firms participating in that output market that, because of their 15 small size, do not avail themselves of the quantity discount. They respond to the 16 lower market price by reducing their quantity sold. Normally, this output reduction 17 results in a corresponding reduction in the quantity of input demanded.

⁹ In deciding whether or not to supply one more unit of output, the input price relevant to the firm is that of the incremental unit of input required. This is the discounted price for a firm that takes up a quantity discount offer.

¹⁰ The economic definition of the term "normal input" corresponds well to everyday usage. It refers to a productive input whose utilization increases when the firm's output increases, *ceteris paribus*. Intuitively one would expect that input and output quantities "normally" increase and decrease together.

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1	The above discussion applies literally to the outcome in a textbook perfectly
2	competitive industry. The story is only slightly more complicated in imperfectly
3	competitive industries. A game theoretic analysis of an oligopolistic industry is
4	based on the firms' reaction functions. These specify the relationship between the
5	firms' output or price choice and other market variables, including the prices it pays
6	for inputs. When the price that a particular firm pays for a normal input decreases,
7	that firm's reaction function "shifts out". That is, the firm would choose a larger
8	quantity (lower price), everything else equal. In the new market equilibrium: (1) the
9	market price of output falls; (2) the output of the favored firm increases; and (3) the
10	output, input purchases, and profits of firms not receiving the discount decrease.
11	There Can Be No Presumed Pareto Improvement
12	This network of feedback interactions has profound implications for the
13	evaluation of optional tariff offerings. Recall that, when user demands are
14	independent, any optional tariff offering voluntarily agreed to by a user and a profit-
15	seeking monopolist can be presumed to be efficient because it can make possible a
16	Pareto improvement. No such presumption is possible when there are downstream
17	competitors of the favored user. The elegant, simple argument of the previous
18	section breaks down because the output expansion of the favored user will be (to
19	some extent) offset by an output contraction of users that do not avail themselves of

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the discount.¹¹ A foresighted monopolist would of course take such feedback effects
into account when designing an optional tariff offering, ensuring that it would be
attractive to the (foresighted) large user and profitable if taken up. However, the
negative effect on small users will remain, *even if the establish tariff remains available*.

In some circumstances it may be possible to design an optional tariff offering that makes feasible a reduction in the established tariff that results in benefits to the monopolist and *all* users.¹² The problem is that there can be no presumption that such is the case when the quantity discounts are offered for inputs.

10 The Impact of Discriminatory Discount Policies

Thus far, my analysis has focused on the case in which the optional tariff offering takes the form of a quantity discount plan available to all consumers, at least in principle. Of course a NSA, such as the one at issue, might involve a quantity discount provision that is not made available to others. Here, I shall discuss the economic efficiency results under the assumption that such input tariffs can be negotiated individually with *all* firms competing in a given output market; e.g., all

¹¹ Note that it does not matter whether the small users choose not to avail themselves of the quantity discount (because it is not profitable) or it is simply not offered to them. They are made worse off in either case.

¹² However, Ordover and Panzar (1980) present a set of plausible circumstances in which such Pareto improvements are *impossible*.

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1	credit card companies. ¹³ Although such tariffs might seem to be "unduly
2	discriminatory," the analysis provides a useful efficiency benchmark.
3	Consider a situation in which a profit-seeking monopolist serves a group of
4	heterogeneous firms that compete in the same output market. Initially, there is an
5	established uniform price that has been determined through the ratemaking process.
6	The monopolist is then permitted to offer different NSAs to each of these customers.
7	The outcome of this process would be the efficient transfer of the input to each and
8	every customer. The gains from this increased efficiency would be divided between
9	the monopolist and the firms. ¹⁴ If the firms were not in the same market, this
10	negotiation process would make possible a Pareto improvement. However, when
11	the customers are competitors in the same final output market this will not
12	necessarily be the case. The NSAs result in the lowering of the input price facing all
13	firms at the margin, causing them to expand supply. As above, the end result of this
14	feedback effect is that the equilibrium output price falls. This fall in output price may
15	harm some of the firms more than the benefits they obtain through their NSA.
16	However, in this example, it seems likely that economic efficiency will
17	improve. That is, the sum of the contribution received by the monopolist, profits of
18	the firms, and the consumers' surplus of final consumers (their customers) will

¹³ Different quantity discount offerings for different customers is incorporated in the niche tariff proposal of OCA Witness Callow.

¹⁴ Economic theory does not provide a definitive prediction about the nature of this division, except to say that it will be determined by "relative bargaining power".

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increase. I am not aware of a formal demonstration of this result in the literature.
But, the intuition seems clear: NSAs allow each firm to receive its services without
distortion at the margin. This, in turn, makes possible increased productive
efficiency downstream, which makes possible both a lower final product price and
increased firm profits.

6 Evaluating NSAs for Inputs

7 The economic literature on quantity discounts almost always assumes that the product or service in question is being sold to final consumers. In the case of the 8 . NSA at issue in this proceeding, and postal services generally, mail services are an 9 input used in the provision of products and services to the final consumer. It has 10 long been known that this complication eliminates the strong efficiency results 11 associated with the introduction of optional tariff offerings. This is unfortunate, 12 because those results provided a justification for a very permissive regulatory policy 13 toward optional tariff offerings, and NSAs more generally: anything voluntarily 14 agreed to by the firm and any of its large customers was most likely to be in the 15 "public interest". Therefore, the details of such agreements need not be subject to 16 17 the elaborate scrutiny of the ratemaking process. Alas, this situation is more complicated. NSAs and other types of optional tariff offerings may be useful policy 18 tools. That is, in some circumstances they can be used to increase economic 19 efficiency. However, they must be subject to the usual scrutiny of the ratemaking 20 21 process.

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1	On the basis of my analysis, I make the following general observations
2	regarding the evaluation of optional tariff offerings:
3	(1) The impact of the tariff on the profitability of the Postal Service must be
4	evaluated. Since the Postal Service is not a profit-seeking enterprise, it
5	cannot be presumed that any NSA it offers will improve its bottom line.
6	Ensuring the profitability of any optional tariff offering is a legitimate concern
7	of all mailers.
8	(2) Competitors of the firm receiving the NSA should have "economic
9	standing" in evaluating its provisions. They may be adversely affected
10	notwithstanding the profitability of the NSA. The NSA may be in the public
11	interest even if they are damaged, but their concerns are an important part of
12	the evaluation process.
13	(3) A niche tariff approach similar to that proposed by OCA Witness Callow
14	may be a pragmatic approach to deal with the issue of fairness to competitors
15	of any firm that is a party to a NSA. This is likely to have desirable efficiency
16	properties without requiring smaller competitors to incur the costs of initiating
17	and undertaking lengthy negotiations. Unlike OCA Witness Callow, I would
18	not suggest making quantity discount plans available to all mailers. Rather, I
19	would suggest that they be made available only to firms competing with one
20	benefiting from a NSA.

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1 Conclusion

2 Economists have praised optional tariff offerings as an innovative policy tool 3 whose use can be counted upon to improve efficiency without requiring significant 4 regulatory scrutiny. Unfortunately, the presumed desirability of such tariffs depends 5 quite crucially on assumptions that may not be fulfilled in postal applications: e.g., profit-seeking behavior on the part of the monopoly vendor and independence of 6 7 consumer demand functions. As a result, NSAs and other optional tariff offerings 8 must be determined on a case by case basis, using empirical procedures typical of 9 the ratemaking process generally.

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Qualifications of the Author

Lam Louis W. Menk Professor of Economics at Northwestern University, Evanston, Illinois, USA, where Lhave taught since 1983. Learned my Ph.D. in Economics from Stanford University in 1975. From 1974-1983, I was employed at Bell Telephone Laboratories ("BTL"). Several aspects of my career have contributed to developing the expertise on which I have drawn in preparing this Report. Each is briefly discussed below.

Academic Experience

In addition to teaching at Northwestern University, I have also taught as a visitor at UC Berkeley (1977), the University of Pennsylvania (1983), and the University of Auckland (1998, 1999, 2001, 2002). Thus, I have taught graduate and undergraduate courses in Industrial and Regulatory Economics for 25 years. Many of my former graduate students have gone on to staff positions at the U. S. Department of Justice, the Federal Trade Commission, the Federal Communications Commission, and the Illinois Commerce Commission.

Corporate Experience

From 1974 to 1983, I was a member of the Technical Staff at BTL. I was the head of the Economic Analysis Research Department at BTL from 1980 to 1983. My duties at BTL involved conducting original research on the fundamental economic principles of regulatory pricing and costing analysis as well as consulting on regulatory and antitrust issues involving the Bell System. Research

My published research includes two books and numerous articles in major professional journals. Most of my publications are focused on pricing and costing issues facing multi-product network industries such as telecommunications, electric power, railroads, and postal services. The following are of particular relevance to the issues addressed in this proceeding: "On the Nonexistence of Pareto Superior Outlay Schedules," with J. A. Ordover, *Bell Journal of Economics* 11 1, Spring 1980, pp. 311=57/ 15. ("Ordover and Panzar (1980)"); "On the Nonlinear Pricing of Inputs," with J. A. Ordover, *International Economic Review*, 23 3, October 1982, pp. 710-261. ("Ordover 659-675" and Panzar (1982)").

Consulting

I have consulted extensively on regulatory policy issues. In addition to consulting for numerous corporations, over the past decade I have served as an economic consultant to the United States Postal Service, Federal Aviation Administration, the World Bank, the Federal Trade Commission, Deutsche Telecom, Deutsche Post, and Senate of the Commonwealth of Puerto Rico. I have testified before this Commission on several occasions, beginning in 1984. I have also provided written and/or oral testimony before the U.S. Congress, the U.S. Interstate Commerce Commission, the U.S. Federal Communications Commission, the Pennsylvania Public Utilities Commission, and the U.S. Department of Justice.

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Other Relevant Professional Activities

I am an Associate Editor of the Journal of Regulatory Economics and a member of the Editorial Board of Information Economics and Policy. These journals publish specialized contributions on regulatory theory and practice. Recently, I have also become co-editor of the Review of Network Economics, a new internet journal that provides timely reviews of both published and unpublished papers of relevance to practitioners working in network industries. Finally, since 1990, I have been an active participant in more than a dozen international conferences on postal economics.

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May 2002

CURRICULUM VITAE

John C. Panzar

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Education:	B.A. cum laude, with distinction in Economics, Carleton College, A.M., Economics, Stanford University, 1973 Ph.D., Economics, Stanford University, 1975	
	Dissertation:	"Regulation, Service Quality, and Market Performance: A Model of Airline Rivalry"
	Advisor: James	N. Rosse
Employment:	 Index and the second sec	
and 2002 Visiting Professor of Economics, Unive		or of Economics, University of Auckland, 1998, 1999, 2001, for of Economics, University of Pennsylvania, Spring 1983 ate Professor of Economics, UC Berkeley, Autumn, 1977
	Member of Technical Staff, Bell Laboratories, 1974-83 Lecturer in Economics, San Francisco State University, Fall 1972	
Research Assistant, Stanford University 1970-74		stant, Stanford University 1970-74

I. Journal Publications:

"Vindication of a 'Common Mistake' in Welfare Economics," (with R. D. Willig), *Journal of Political Economy* 84 6, December 1976, pp. 361-64.

"A 'Neoclassical' Approach to Peak Load Pricing," *Bell Journal of Economics* 7 2, Autumn 1976, pp. 521-30.

"Free Entry and the Sustainability of Natural Monopoly," (with R. D. Willig), Bell Journal of Economics 8 1, Spring 1977, pp. 1-22.

"Economies of Scale in Multi-Output Production," (with R. D. Willig), *Quarterly Journal of Economics* 91 3, August 1977, pp. 481-93.

"On the Comparative Statics of a Competitive Industry with Inframarginal Firms," (with R. D. Willig), *American Economic Review* 68 3, June 1978, pp. 474-78.

"Public Utility Pricing under Risk: The Case of Self-Rationing," (with David S. Sibley), American Economic Review 68 5, December 1978, pp. 888-95.

"Theoretical Determinants of the Industrial Demand for Electricity by Time of Day," (with R. D. Willig), *Journal of Econometrics 9 1*, January 1979, pp. 193-207.

"Equilibrium and Welfare in Unregulated Airline Markets," American Economic Review 69 2, May 1979, pp. 92-95.

"Economies of Scale in Multi-Output Production: Reply," (with R. D. Willig), *Quarterly Journal of Economics* 93 4, November 1979, pp. 743-44.

"On the Nonexistence of Pareto Superior Outlay Schedules," (with J. A. Ordover), *Bell Journal of Economics* 11 1, Spring 1980, pp. 311-15.

"Regulation, Deregulation, and Economic Efficiency: The Case of the CAB," *American Economic Review* 70 2, May 1980, pp. 311-15.

"The Contestability of Airline Markets During the Transition to Deregulation," (with E. E. Bailey), *Journal of Law and Contemporary Problems* 44 1, Winter 1981, pp. 125-45.

"Economies of Scope," (with R. D. Willig), American Economic Review 71 2, May 1981, pp. 268-72.

"On the Nonlinear Pricing of Inputs," (with J. A. Ordover), *International Economic Review* 23 3, October 1982, pp. 710-26.

"Contestable Markets: An Uprising in the Theory of Industry Structure: Reply," (with W. J. Baumol and R. D. Willig), *American Economic Review* 73 3, June 1983, pp. 491-96.

"An Economic Analysis of Alternative Fee Shifting Systems," (with R. R. Braeutigam and B. M. Owen), *Journal of Law and Contemporary Problems* 47 1, Winter 1984, pp. 173-85.

"Testing for 'Monopoly' Equilibrium," (with J. N. Rosse) *Journal of Industrial Economics* 35 4, June 1987, pp. 443-56.

"Public Utility Pricing and Investment Under Risk: A Rational Expectations Approach," (with S. Coate). *Journal of Regulatory Economics,* December 1989, pp. 305-17.

"Diversification Incentives Under 'Price-Based and 'Cost-Based' Regulation," (with R. R. Braeutigam) Rand Journal of Economics, Autumn, 1989, pp. 373-91.

"Two-Part Tariffs for Inputs: The Case of Imperfect Competition," (with D. S. Sibley), *Journal of Public Economics*, 40 1989, pp. 237-49.

"Effects of the Change from Rate of Return to Price Cap Regulation," (with Ronald R. Braeutigam), *American Economic Review, 83* 2 May 1993, pp. 191-98.

"Network Competition and the Provision of Universal Service," (with Steven S. Wildman), *Industrial and Corporate Change*, *4* 4 December 1995, pp. 711-719.

"On Setting Prices and Testing Cross-Subsidy with Accounting Data," (with Michael Bradley and Jeffrey Colvin), *Journal of Regulatory Economics*, *16* 1 July 1999, pp. 83-100.

"A Methodology for Measuring the Costs of Universal Service," *Information Economics and Policy*, 12 3 September, 2000.

II. Books

Regulation, Service Quality, and Market Performance: A Model of Airline Rivalry, Garland Press, New York, 1979.

Contestable Markets and the Theory of Industry Structure, (with W. J. Baumol and R. D. Willig), Harcourt Brace Jovanovic, San Diego, 1982, Revised Edition, 1987.

III. Publications in Conference Proceedings and Other Volumes

"Some Thoughts on the Market Implications of the Federal Aviation Act of 1975," Printed in *Regulatory Reform and the Federal Aviation Act of 1975, DOT-TST-76-59.*

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"The Pareto Domination of Usage Insensitive Pricing," in H. S. Dordick, ed., *Proceedings of the Sixth Annual Telecommunications Policy Research Conference*, Heath, Lexington, Mass., 1979.

"Sustainability, Efficiency, and Vertical Integration," in B. M. Mitchell and Paul Kleindorfer, eds., *Proceedings of an International Symposium on Public Regulation and Public Enterprises,* Heath, Lexington, Mass., 1980.

"Open Entry and Cross-Subsidy in Regulated Markets: Comment," in Gary Fromm, ed., Studies in Public Regulation, M.I.T. Press, Cambridge, Mass., 1981.

"On the Theory of Perfectly Contestable Markets," (with W. J. Baumol and R. D. Willig) in F. W. Matthewson and J. E. Stiglitz, eds., *New Developments in the Theory of Industry Structure*, M.I.T. Press, Cambridge, Mass., 1986.

"Competition and Efficiency," in John Eatwell, Murray Milgate, and Peter Newman, eds., The New Palgrave: A Dictionary of Economics, Stockton Press, New York, NY, 1988.

"Technological Determinants of Firm and Industry Structure," Chapter 1 in Richard Schmalensee and Robert Willig, eds., *Handbook of Industrial Organization*, North Holland, Amsterdam, 1989.

"Regulation, Deregulation and Safety: An Economic Analysis," (with Ian Savage), in Leon Moses and Ian Savage, eds., *Transportation Deregulation and Safety*, Oxford University Press, 1989.

"Is Postal Service a Natural Monopoly?" in Michael Crew and Paul Kleindorfer, eds., Competition and Innovation in Postal Services, Kluwer, 1991.

"Competition, Efficiency, and the Vertical Structure of Postal Services," in Michael Crew and Paul Kleindorfer, eds., *Regulation and the Evolving Nature of Postal abd Delivery Services:* 1992 and Beyond, Kluwer, 1993.

"Contestability: Useful Benchmark or Empty Box?" Proceedings of an International Congress on the Value of Competition, Milan, March 26-28, 1992.

"The Economics of Mail Delivery," in G. Sidak, ed., *Regulating the Postal Service* American Enterprise Institute, 1994.

"Issues in Measuring Incremental Cost in a Multi-Function Enterprise," (with Michael Bradley and Jeff Colvin) in Michael Crew and Paul Kleindorfer, eds., *Managing Change in the Postal and Delivery Industries,* Kluwer, 1997.

"The Way I See It," in M. Gaudry and R. R. Mayes, eds., *Taking Stock of Air Liberalization,* Kluwer, 1999.

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"Incentive Regulation in the U.S. Telecommunications Industry." In 1999 Industry Economics Conference: Regulation, Competition and Industry Structure, Conference Proceedings, Australian Productivity Commission 1999.

"Funding Universal Service Obligations: The Costs of Liberalization," In Michael Crew and Paul Kleindorfer, eds., *Proceedings of the 8th Conference on Postal and Delivery Services*, Kluwer, 2000.

IV. Book Review

Nonlinear Pricing. By Robert Wilson. Oxford University Press, 1993. Journal of Economic Literature, XXXIII 4 (September 1995), pp. 1339-41.

V. Work in Progress

"Vertical Organization of Competitive Industries," (joint with Federico Ciliberto), paper presented in September 2001 at EARIE in Dublin.

"Reconciling Competition, Downstream Access, and Universal Service in Postal Markets," paper presented in December 2001 at the 2nd Toulouse Conference on Competition and Universal Service in the Postal Sector.

PROFESSIONAL ACTIVITIES

Memberships:	American Economic Association European Association for Research in Industrial Economics (E.A.R.I.E.) Econometric Society International Telecommunications Society AEA Commission on Graduate Education in Economics Board of Directors, Telecommunications Policy Research Conference, 1991-95, Chair 1994-95
Editorial Boards:	Review of Network Economics, Co-Editor 2002 Journal of Regulatory Economics, Associate Editor 1988- Journal of Economic Literature 1983-85 Journal of Information Economics and Policy 1982-
Program Committees:	Eighth Annual Telecommunications Policy Research Conference, 1979 Econometric Society 1980 North American Winter Meetings. E.A.R.I.E. Annual Conference 1984 Econometric Society 1985 World Congress. American Economic Association Annual Meetings 1987. Econometric Society 1991 North American Summer Meetings

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	Chair, 20th Annual Telecommunications Policy Research Conference, 1992	
Referee for, inter alia:	National Science Foundation, American Economic Review, Econometrica, Journal of Political Economy, Quarterly Journal of Economics, Bell Journal of Economics, Rand Journal of Economics, Journal of Economic Theory, International Economic Review, Journal of Industrial Economics, Journal of Economic Literature.	

GRANTS, FELLOWSHIPS, and AWARDS

- National Science Foundation, "Efficient Regulatory Pricing under Competition," SES-8409171, Principal Investigator, 1984-87.
- U.S. Department of Transportation, "Transportation Deregulation and Safety," Co-Principal Investigator, 1987.

Northwestern University Annenberg Faculty Research Fellowship, 1987.

Northwestern University Ameritech Faculty Research Fellowship, 1990.

FAA, Center for Aviation Systems Reliability, Northwestern University Transportation Center, 1991-93.

Ameritech Foundation, "Consortium for Research on Telecommunications Policy." 1994-96.

Alumni Distinguished Achievement Award, Carleton College, June 1994.

Andrew Mellon Foundation, "Economics of the Scholarly Publishing Industry." Co-Principal Investigator, 1995-97.

CONSULTING EXPERIENCE

Corporations:	Ameritech, AT&T, Bell Atlantic, Bell South, British Telecom, Commonwealth Edison, GT&E, Niagara Mohawk Power Company, Nynex, Pacific Telesis, Southern California Gas, Southwestern Bell, Telephone and Data Systems, Telstra, Union Pacific RR, and U.S. West.
Industry Groups:	American Newspaper Publishers Association, Electric Power Research Institute
Governmental:	Deutsche Post AG, Deutsche Telekom AG, New Zealand Commerce Commission, U. S. Department of Transportation, U. S. Federal Trade

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	Commission, United States Postal Service, Senate of the Commonwealth of Puerto Rico, OECD, World Bank.	
Testimony:	Congress of the United States, U. S. Department of Justice, Federal Communications Commission, Postal Rate Commission, Pennsylvania Utilities Commission, Interstate Commerce Commission, Surface Transportation Board.	

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1 CHAIRMAN OMAS: Professor Panzar, have you had an opportunity to examine the packet of designated 2 written cross-examination that was made available to 3 you here in the hearing room this morning? 4 5 THE WITNESS: Yes. CHAIRMAN OMAS: If the questions contained 6 in that packet were posed to you orally today, would 7 your answers be the same as those you previously 8 provided in writing? 9 THE WITNESS: Yes, they would. 10 11 CHAIRMAN OMAS: Do you have any additional corrections or additions to the answers? 12 13 THE WITNESS: Nothing of substance. I believe there's an error in the header on one set of 14 15 the responses. My name is spelled wrong in the 16 Capital One responses. CHAIRMAN OMAS: Thank you. Those 17 18 corrections will be made. Counsel, will you now provide two copies of 19 the corrected designated written cross-examination of 20 21 Witness Panzar to the reporter? That material is received into evidence and, 22 23 will be transcribed into the record. 11 24 11 25

Heritage Reporting Corporation (202) 628-4888

1		(The document referred to was
2		marked for identification as
3		Exhibit No. JCP-T-1 and was
4		received in evidence.)
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BEFORE THE POSTAL RATE COMMISSION WASHINGTON, DC 20268-0001

Docket No. MC2002-2

Experimental Rate and Service Changes to Implement Negotiated Service Agreement with Capital One Services, Inc.

DESIGNATION OF WRITTEN CROSS-EXAMINATION OF JOHN C. PANZAR WITNESS JOHN C. PANZAR (JCP-T-1)

Party	Interrogatories
American Postal Workers Union, AFL-CIO	COS/JCP-T1-1-5
	USPS/JCP-T1-1-7
	VP/JCP-T1-1-10
Capital One Services, Inc.	COS/JCP-T1-1-5
	USPS/JCP-T1-4-5,
Newspaper Association of America	COS/JCP-T1-4-5
	USPS/JCP-T1-1-7

Respectfully submitted,

7

Steven W. Williams Secretary

INTERROGATORY RESPONSES OF JOHN C. PANZAR WITNESS JOHN C. PANZAR (T-1) DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory COS/JCP-T1-1 COS/JCP-T1-2 COS/JCP-T1-3 COS/JCP-T1-4 COS/JCP-T1-5 USPS/JCP-T1-1 USPS/JCP-T1-2 USPS/JCP-T1-3 USPS/JCP-T1-4 USPS/JCP-T1-5 USPS/JCP-T1-6 USPS/JCP-T1-7 VP/JCP-T1-1 VP/JCP-T1-2 VP/JCP-T1-3 VP/JCP-T1-4 VP/JCP-T1-5 VP/JCP-T1-6 VP/JCP-T1-7 VP/JCP-T1-8 VP/JCP-T1-9 VP/JCP-T1-10

Designating Parties APWU, Capital One APWU, Capital One APWU, Capital One APWU, Capital One, NAA APWU, Capital One, NAA APWU, NAA APWU, NAA APWU, NAA APWU, Capital One, NAA APWU, Capital One, NAA APWU, NAA APWU, Capital One, NAA APWU APWU APWU APWU APWU APWU APWU APWU APWU APWU

COS/JCP-T1-1. Please refer to the "Threshold for Quantity Discount" subsection of the "Economic Analysis of Quantity Discounts with Independent User Demands" section of your testimony, which begins on page 12. In particular, refer to lines 4-9 of page 12 where you state, "The example illustrates the key role typically played by the large user's initial Volume, Q°, in the design of an optional tariff offering. It is no accident that this quantity determines the beginning of the quantity discounts (and the 'kink' in the outlay schedule). In the theoretical analysis, this guarantees that, *whatever the shape of the large user's demand curve*, the large user will find it desirable to expand its purchases and the monopolist's profits will increase as a result." Please assume independent user demands and that a monopolist negotiated the following NSA with a large user that includes a quantity discount:

- The threshold for a quantity discount is set at a quantity less than Q°.
- As a condition of receiving the quantity discount, the large user agrees to allow the monopolist to change the service provided to the large user in a way that reduces the monopolist's costs by \$10 million.
- The total quantity discount that the large mailer receives if it mails the volume Q° is less than \$10 million.

Is it true that *whatever the shape of the large user's demand curve*, the monopolist's profits will increase as a result of this agreement? Please explain your response fully.

RESPONSE:

Assuming that the discounted rate was above marginal cost, I would agree that the monopolist's profits would increase as a result of this agreement. The worst case for the monopolist's profitability is that in which the large user's demand curve is perfectly inelastic (i.e., vertical) at the quantity Q^0 . Then, the discount induces no new volumes, and the monopolist loses contributions by an amount equal to the magnitude of the discount times the difference between the threshold and Q^0 . However, by hypothesis,

the cost savings exceed this amount so that the monopolist's profits will increase.

COS/JCP-T1-2. Please refer to page 20 of your testimony and, in particular, to lines 8-12 where you state, "(2) Competitors of the firm receiving the NSA should have 'economic standing' in evaluating its provisions. They may be adversely affected notwithstanding the profitability of the NSA. The NSA may be in the public interest even if they are damaged, but their concerns are an important part of the evaluation process."

- (a) Please define fully "in the public interest" as used in the quoted section of your testimony.
- (b) Would you advise the Postal Rate Commission to recommend agreements that are "in the public interest" and increase Postal Service profitability? Please explain your response fully.

RESPONSE:

(a) My use of the phrase "in the public interest" was intended to characterize

whatever criteria the Commission might employ in reaching its decision

consistent with its statutory responsibility.

(b) Yes, consistent with my response to subpart (a).

COS/JCP-T1-3. Please refer to the "Market Induced Demand Interdependence" subsection of the "Economic Analysis of Quantity Discounts for Inputs" section of your testimony, which begins on page 14. In particular, please refer to lines 6 through 10 on page 16 of your testimony where you state, "When the price that a particular firm pays for a normal input decreases, that firm's reaction function "shifts out". That is, the firm would choose a larger quantity (lower price) everything else equal. In the new market equilibrium: (1) the market price of output falls; (2) the output of the favored firm increases; and (3) the output, input purchases, and profits of firms not receiving the discount decrease." Please confirm that consumers will benefit if the market price of output falls. If not confirmed, please explain fully.

RESPONSE:

Confirmed.

COS/JCP-T1-4. Please refer to the "Economic Analysis of Quantity Discounts for Inputs" section of your testimony, which begins on page 14. In particular, please refer to lines 13-14 of page 14 where you state, "This interdependence causes the breakdown of the elegant Pareto improvement argument in support of optional tariff offerings. Indeed, one cannot even presume that the introduction of optional tariff offerings will increase total surplus in the market. "

- (a) In what circumstances will offering quantity discounts to a large business user increase total surplus in the market?
- (b) In what circumstances will offering quantity discounts to a large business user not increase total surplus in the market?
- (c) In what circumstances will offering quantity discounts to a large business user result in a pareto improvement?
- (d) In what circumstances will offering quantity discounts to a large business user not result in a pareto improvement?

RESPONSE:

- (a)-(b) I am not aware of a simple, easy to check set of conditions that would indicate that the result of a quantity discount plan would increase total surplus when user demands are interdependent. There will be both winners and losers.
 Whether or not the gains of the winners outweigh the losses of the losers will, in general, depend on many details of the particular situation.
 - (c) When user demands are interdependent, offering a quantity discount to a large business user will harm that user's competitors. Therefore, it can only result in a Pareto improvement (which makes all users better off) if the price facing those competitors is reduced by enough to offset this damage but does not reduce the monopolist's profits.

. .

(d) When user demands are interdependent, offering a quantity discount to a large business user will harm that user's competitors. Therefore, it will not result in a Pareto improvement (which makes all users better off) unless the price facing those competitors is also reduced and the monopolist's profits are increased. **COS/JCP-T1-5.** Please refer to page 1 of your testimony where you state, "I have published two books and many articles on subjects related to pricing and other issues concerning regulated enterprises." In your experience, in situations where regulated enterprises have costing systems that develop unit cost estimates for providing Service A to their customers as a whole, but where it would be difficult to estimate the unit cost of providing Service A to a particular customer, how do regulated enterprises generally evaluate the financial implication of offering optional tariffs for Service A to a particular customer? Please explain your response fully.

RESPONSE:

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Under the scenario posited, a regulated enterprise's evaluation would proceed from its self-interest. To that end, it may wish to develop an optional tariff based on the estimated unit costs of that customer perhaps coupled with other provisions to assure that it would be better (or at least as well) off under the optional tariff. Nevertheless, regardless of its internal evaluation, the regulated enterprise would be required to justify its proposal before the appropriate regulatory authority. While the proposal may raise a host of policy issues for the regulator to consider, it would also involve, at a minimum, trying to estimate the unit costs savings associated with the demands of a particular user and the impact of a quantity discount offering.

USPS/JCP-T1-1. Using the concepts elaborated in your written testimony, please define the input or inputs relevant to the Capital One Services, Inc. Negotiated Service Agreement at issue in this proceeding. Please provide as full and precise a description as possible.

RESPONSE:

My testimony did not address the details of Capital One's use of mail services. My

analysis focused on the general economic principles involved when quantity discounts

and other types of optional tariff offerings are used for the sale of inputs. It is my

understanding that Capital One uses First-Class Mail as an input for serving its

customers and soliciting new ones.

USPS/JCP-T1-2. If it were demonstrated that the competitors of Capital One Services, Incorporated currently do not utilize the input or inputs at issue in the NSA, how would this affect your testimony? Please explain fully.

RESPONSE:

It would not significantly affect my analysis. A discount offered to a large user would adversely impact its competitors. As I describe in my testimony, the negative impact results from the effects of the discount on the output market. These will remain even if the other users do not purchase the input in question. Thus, for example, even if Capital One were the only credit card firm using First-Class Mail, its competitors would still be harmed if it received a discount. Its competitors would still tend to reduce their purchases of other mail services, adversely affecting the profits of the Postal Service.

USPS/JCP-T1-3. Is it possible that existing workshare discounts currently give a competitive advantage to large volume mailers? Please explain your answer fully.

RESPONSE:

While that may be possible, it would be a function of the characteristics of each mailer's

mail. Since workshare discounts are available to all qualifying mailers, it is also

possible that a small volume mailer could have a slight competitive advantage by virtue

of the characteristics of its mail, e.g., greater depth of presort.

USPS/JCP-T1-4.

- a. Do you agree that one of the inputs provided to credit card companies by the Postal Service is the ability to reach potential new customers through advertising? If you do not agree, please explain.
- b. Do you agree that the Postal Service has no monopoly in providing this input, as credit card companies have available (and in fact utilize) a variety of other advertising channels besides direct mail (e.g., TV and radio commercials, newspaper and magazine ads, billboards, etc.) to reach potential customers? If you do not agree, please explain.
- c. Regardless of your answer to the above questions, if it were demonstrated that the Postal Service did not have a monopoly with respect to the inputs it provides to credit card companies, how would this affect your testimony? If you are unsure of how it might affect your testimony in terms of formal economic models, please discuss how it might affect your testimony intuitively.
- d. Hypothetically, if, as a result of an NSA with one credit card company, the credit card company entering the NSA increased its advertising expenditures on direct mail, but commensurately reduced its advertising expenditures in other media, with no net change in its overall advertising expenditures, how would this affect the analysis in your testimony?
- e. Hypothetically, if, as a result of an NSA with one credit card company, the credit card company entering the NSA increased its advertising expenditures on direct mail, but commensurately reduced its advertising expenditures in other media, with a net reduction in its total advertising expenditures, but no net change in the total number of responses received from potential customers reached via all advertising media combined, how would this affect the analysis in your testimony?
- f. Hypothetically, if any reduction in advertising expenditures by all other credit card companies that resulted from an NSA with one credit card company were limited to expenditures on other advertising channels (i.e., there were no reduction in the other credit card companies' level of direct mail advertising), how would this affect the analysis in your testimony?

RESPONSE:

a. Yes.

- b. I would agree that alternatives exist; however, the Postal Service has a statutory monopoly in providing this particular input.
- c. My testimony would be essentially unaffected. Because the Postal Service has a monopoly over letter mail no other firm can offer an identical substitute. As a result, all the effects explained in my testimony would continue to apply.
- d. My analysis would not be affected. One of the effects of a price reduction for one input is to reduce the quantities purchased of substitute inputs.
- e. I interpret the hypothetical to mean that the output of the favored firm remained unchanged. In that case, there would be no effect on market conditions or the firm's competitors. However, the conditions of the hypothetical are not likely to be satisfied by a profit-seeking firm. When a firm's cost structure is improved at the margin, it tends to expand its output, to the detriment of its competitors.
- f. In that case, one could directly evaluate the effect of the NSA on Postal Service profitability, without worrying about any indirect effect on mail volumes.
 However, competitors would continue to be harmed by the NSA because of the effects on market conditions in the credit card industry.

USPS/JCP-T1-5.

- a. Do you agree that different company-specific advertising strategies to attract new customers are among the means by which credit card companies compete? If you do not agree, please explain.
- b. Do you agree that credit card companies do not use advertising inputs in fixed proportion to outputs? If you do not agree, please explain.
- c. Regardless of your answer to the above questions, if it were demonstrated that credit card companies do not use the inputs provided by the Postal Service in fixed proportion to outputs, how would this affect your testimony? If you are unsure of how it might affect your testimony in terms of formal economic models, please discuss how it might affect your testimony intuitively.
- d. Hypothetically, if, despite the existence of an NSA with one credit card company, all other credit card companies maintained their previous levels of advertising, including direct mail advertising, how would this affect the analysis in your testimony?
- e. Hypothetically, if additional direct mail advertising by the NSA credit card company stimulated *more* advertising by competing credit card companies, how would this affect the analysis in your testimony?

RESPONSE:

- a. While I am not an expert on the credit card industry, the premise seems likely.
- b. Since, as noted, I am not an expert on the credit card industry, I have no basis either to agree or disagree.
- c. I do not believe that it would affect my testimony in any significant respect.
 Intuitively, all of the identified effects would remain.
- d. Again, in that case, one could directly evaluate the effect of the NSA on Postal Service profitability, without worrying about any indirect affect on mail volumes.

However, competitors would continue to be harmed by the NSA because of the effects on market conditions in the credit card industry.

e. This is an extremely unlikely hypothetical in the context of any economic model with which I am familiar. For it to hold would require that either: (i) advertising is a normal input for the NSA company but an inferior input (that decreased with output) for its competitors or (ii) advertising is an inferior input for the NSA company but a normal input for its competitors. *If* (i) were to hold, the only change in my testimony would be that the indirect effects on the Postal Service profits would be positive instead of negative. Competitors would still be harmed by the NSA. *If* (ii) were to hold, one would expect the output market price to increase because a decrease in the price of an inferior input causes output to contract. This would harm final consumers, but benefit competitors.

USPS/JCP-T1-6. Hypothetically, if the discounted rates available under an NSA with one credit card company allow that company to target solicitations to a group of potential customers that currently are not being targeted by that company or any of its competitors (because the expected response rate from this group of potential customers would not justify expense of the mailings at the current uniform undiscounted rate), would not the result of this expansion of the potential customer base cause the NSA to benefit the Postal Service and the NSA credit card company, with no material impact on other credit card companies? Please explain your answer fully.

RESPONSE:

. •

As I understand it, the hypothetical posits a situation in which the discount enables the favored company to expand service to a new market, unrelated to that served by its competitors. Then, it is true that its competitors would not be harmed by the favored firm's use of the discount *in the new market*. However, this conclusion would require that the new market constituted the *only* use of the discount. This strikes me as unlikely.

USPS/JCP-T1-7.

- a. Do you agree that, to the extent that some credit card companies use First-Class Mail for solicitation mailings, while others rely almost exclusively on Standard Mail for their solicitation mailings, the credit card companies do not use homogenous direct mail advertising inputs? If you do not agree, please explain. What effect might this have on the analysis in your testimony?
- b. Hypothetically, if the Postal Service enters an NSA regarding First-Class Mail rates with one credit card company that relies heavily on First-Class Mail for advertising, and if any resulting decrease in direct mail advertising by other credit card companies is experienced almost exclusively in Standard Mail, and if, even with the NSA discounts, the average contribution (P-MC) from each additional piece of First-Class Mail is greater than the average contribution of the lost pieces of Standard Mail, how would this affect your testimony? If you are unsure of how it might affect your testimony in terms of formal economic models, please discuss how it might affect your testimony intuitively.

RESPONSE:

- a. I agree. However, as indicated above, this fact does not significantly affect my analysis. All of the forces described in my testimony would continue to operate.
- b. Intuitively, the hypothesized situation would make it easier to conclude that the

NSA was profitable for the Postal Service, but the effects on competitors would

remain.

VP/JCP-T1-1.

- a. Please state whether as part of the duties assigned you by the Commission, you believe that you needed to read and study the testimony previously filed in this docket?
- b. Please state if, prior to drafting your testimony, you read or otherwise became familiar with the testimony of:
 - (1) Witness Anita J. Bizzotto (USPS-T-1)
 - (2) Witness Michael K. Plunkett (USPS-T-2)
 - (3) Witness Charles L. Crum (USPS-T-3)
 - (4) Witness James D. Wilson (USPS-T-4)
 - (5) Witness Donald Jean (COS-T-1)
 - (6) Witness Stuart Elliott (COS-T-2)
 - (7) Witness Christopher D. Kent (NAA-T-1)
 - (8) Witness Jeff M. David (NNA-T-1)
 - (9) Witness J. Edward Smith (OCA-T-1)
 - (10) Witness James F. Callow (OCA-T-2)
- c. Why did you feel it was not necessary to comment on any of the testimony filed in this docket, other than that of witness Callow (OCA-T-2), which you cite on page 6, line 10; page 18, footnote 13; and page 20, lines 13 and 17 of your testimony?

RESPONSE

a. As indicated in my testimony (pages 1-2), I was asked to address various

economic issues. I read portions of the testimony previously filed in this docket

in order to obtain an overview of the particular context in which these issues have

arisen.

 b. I reviewed portions of the testimony of all of the above witnesses prior to drafting my testimony.

c. Most of the witnesses whose testimony I reviewed focused upon the particular details of the current proceeding rather than the general economic issues that I was asked to address. Witness Callow's proposal of "niche tariff" quantity discounts transcended the circumstances of this particular docket and raised issues directly related to the analysis in my testimony.

VP/JCP-T1-2.

- a. Based on your familiarity with the facts and issues in this case, is it your understanding that, as part of the Negotiated Service Agreement ("NSA"), Capital One will forego free physical return of non-forwardable Undeliverable as Addressed ("UAA") mail and in return will receive, free of any charges or fees to Capital One, electronic information indicating that the address on the piece is UAA and non-forwardable? If this is not in accord with your understanding, please state your understanding with respect to that aspect of the NSA.
- b. Based on your familiarity with the facts and issues in this case, is it your understanding that providing Capital One with electronic information concerning its non-forwardable UAA mail is expected to cost the Postal Service less than it would cost the Postal Service to physically return those mail pieces? If this is not in accord with your understanding, please state your understanding with respect to that aspect of the NSA.

RESPONSE:

a-b. That is my understanding.

VP/JCP-T1-3.

Please refer to your testimony, page 9, Figure 1, and the explanatory text. Figure 1 shows the monopoly vendor's marginal cost, c, not only as constant (*i.e.*, a horizontal straight line), but also as known to the vendor with essentially perfect certainty (*i.e.*, c is simply a line on the graph, with no width).

- a. Would you agree that Figure 1 as drawn makes an implicit assumption that the monopolist knows with a high degree of certainty its marginal cost of serving various customers? Please explain fully any disagreement.
- b. Instead of assuming that the monopolist vendor knows its marginal cost with near certainty, please assume that: (i) the monopolist only knows the *average* cost of serving its different customers, whose mail has widely varying costs based on characteristics such as weight and shape (e.g., letters, cards, flats and parcels);
 (ii) the *average* cost is used as a proxy for marginal cost; (iii) the *average* cost is known to have a substantial standard deviation that is, for reasons alluded to in (i) above, the marginal cost of serving various customers may differ substantially among those customers, and (iv) the monopolist vendor has no additional knowledge as to whether the marginal cost of serving the customer with the demand schedule given by D_{Large} is significantly less (or significantly greater) than the *average* cost. Given the preceding assumptions, please explain:
 - how Figure 1 would display these assumptions (e.g., would the line, c, used to depict marginal cost be shown as a shaded band instead of a single line), and
 - (2) the economic analysis of quantity discounts with independent user demands, where it becomes increasingly uncertain that price will exceed marginal cost as the price is reduced. If a precise response is not feasible in view of the uncertainty about marginal cost, please give an intuitive answer.

- RESPONSE

a. Figure 1 was drawn for purposes of illustration. Among other simplifying

assumptions, it incorporates constant marginal costs that are known with

certainty.

- b. (1) A diagram, such as Figure 1, is capable of illustrating only a limited set of simplified situations. I do not know how it could be modified to illustrate the uncertainties posed.
 - (2) To my knowledge, the problem posed has not been analyzed in the literature. Intuitively, an analysis similar to that presented in my testimony could be conducted in terms of estimated marginal cost.

VP/JCP-T1-4.

Please refer to your testimony starting on page 12, line 3, the section entitled "Threshold for Quantity Discount." You state that "[i]t is no accident that [the large user's initial volume, Q^0] determines the beginning of the quantity discounts (and the "kink" in the outlay schedule)."

- a. If, despite your logic for beginning the quantity discount at the large user's initial volume, Q⁰, the beginning point for the quantity discount nevertheless were to be set deliberately at a point substantially below the large user's initial volume, Q⁰, please discuss the conditions, if any, that would be necessary in order for the monopolist's profits (or contribution to overhead) to increase. For your answer to this part of the interrogatory, please assume that the monopolist vendor offers the large customer only the quantity discount at issue, with no other offsetting considerations (that is, the monopolist vendor's only possible gain will come from the large user's response to the quantity discount).
- b. Please focus solely on the quantity discount, and ignore any other possible considerations or inducements for offering the discount. Would you agree that setting the beginning point for the quantity discount substantially below the large user's initial volume, Q⁰, could result in a reduction in the monopolist's profits (or contribution to overhead) and a net savings to the large user? Please explain any disagreement.
- c. Assuming that you do not disagree with preceding part b, would you also agree that setting the beginning point for the quantity discount substantially below the large user's initial volume, Q⁰, would be one possible way for the monopolist to "rebate" money to the large user based on for some other consideration? Please explain any disagreement.
- d. Please assume that the monopolist vendor, for whatever reason, wants to rebate a sum of money to a large user. Aside from setting the beginning point for the quantity discount substantially below the large user's initial volume, Q⁰, please list and describe briefly all other methods of which you are aware that have been used, within a regulatory context, to effect a rebate to a large user.
- e. If setting the beginning point for the quantity discount substantially below the large user's initial volume, Q⁰, is one way for the monopolist to "rebate" money to the large user in return for some other consideration, please compare the economics of this "method" of rebating with other means, such as simply issuing the large user a credit for the "desired" amount, or writing a check to the large

user for that amount, as well as any other methods discussed by you in response to preceding part d.

RESPONSE

- a. The contribution earned on any output expansion stimulated by the discount would need to exceed the amount lost on discounted units. A simple formula may make this clear. Let p^0 denote the initial price, c the (constant) marginal cost, Q^0 the initial quantity, Q^T the threshold quantity, Q^1 the new quantity, and p^d the discounted rate. Then, for the monopolist's profits to increase, it is necessary that $(p^d-c)(Q^1-Q^0)>(p^0-p^d)(Q^0-Q^T)$.
- b. Agreed, subject to the qualifications laid out in my testimony. Page 13, lines 19 et seq.
- c. Agreed.
- d. I am not aware of the specifics of any such rebate plan.
- e. The two mechanisms are the same if, as in the example in my testimony, the large user's demand curve is known to be the same before and after the discount is introduced. The end result is a lump sum transfer to the large user.

VP/JCP-T1-5.

Please assume that an NSA is proposed for a single large customer. One critical component underlying the NSA is the estimated cost savings resulting from a change in the way some of the large customer's mail is handled (e.g., mail that can neither be delivered as addressed nor forwarded). That is, the savings are computed as the difference between (i) a "benchmark," where the benchmark is the cost of the way that certain mail is handled currently, and (ii) a "benchmark," where the benchmark is the estimated cost of the way such mail will be handled under the agreement. From a theoretical perspective, should the benchmark from which savings in cost are estimated be based on an average service-wide cost for all such mail in question, or on the current cost of handling only the non-forwardable UAA mail of the large customer?

RESPONSE

Theoretically, the latter would be preferable because the costs associated with the large

customer directly affect the monopolist's profits. However, if such data are unavailable,

the use of average costs may have to suffice.

VP/JCP-T1-6.

Please refer to your testimony at page 21, lines 7-9, where you state that "NSAs and other optional tariff offerings must be determined on a case by case basis, using empirical procedures typical of the ratemaking process generally."

- a. Prior to the NSA being considered in this docket, and with respect to all ratemaking proceedings before the Postal Rate Commission with which you are familiar, would you agree that in each case the Commission generally has recommended rates either for an entire subclass, or for all mail within a niche classification that was under consideration? If you do not agree, please state your understanding concerning the scope of rates established in prior ratemaking proceedings before the Commission.
- b. With respect to all prior ratemaking proceedings before the Commission with which you are familiar, would you agree that the cost basis for the rates under consideration was either the cost of the subclass or the niche classification for the rates at issue? If you do not agree, please provide your understanding of the cost basis generally used to support rate recommendations in prior ratemaking proceedings before the Commission.
- c. When you state that "NSAs ... must be determined ... using empirical procedures typical of the ratemaking process generally," please explain what you mean to imply in terms of the cost basis that should be used for evaluating NSAs with an individual mailer. Specifically, (i) would you recommend that the basis for evaluating the cost effect of the NSA be based on the cost to handle the mail that will be subject to the NSA, or (ii) would it be acceptable to use average costs derived from a much wider category of mail, even though that average cost may be only a rough estimate for the costs of mail subject to the NSA?

RESPONSE

- a. That is my understanding of Commission ratemaking.
- b. That is my understanding. However, I do not claim to be familiar with all of the

cost bases utilized by the Commission.

c. I would recommend procedure (i), because, by definition, it directly reflects the impact upon the monopolist's profits. However, if such data are unavailable, a procedure similar to (ii) may have to suffice.

VP/JCP-T1-7.

Please refer to your testimony at page 20, lines 8-9, where you state that "[c]ompetitors of the firm receiving the NSA should have 'economic standing' in evaluating its provisions."

- a. Please define "economic standing" as you use that term in the above-cited portion of your testimony.
- b. Would other banks that issue credit cards have "economic standing" as you use that term?
- c. Would credit card issuers other than banks (*e.g.*, American Express, Merrill Lynch, etc.) have "economic standing" as you use that term?
- d. Would advertising media other than direct mail that compete for and carry credit card advertising have "economic standing" as you use that term?
- e. Please give examples of other types of firms that would have "economic standing" in this case as you use that term.
- f. If there were a reasonable chance that the Postal Service would actually lose money on the NSA at issue, would other mailers within the same subclass have "economic standing" as you use that term?
- g. If there were a reasonable chance that the Postal Service would actually lose money on the NSA at issue, would other mailers in other subclasses have "economic standing" as you use that term?

RESPONSE

a. I use the term "economic standing" to characterize those entities that might be negatively affected by a proposed NSA. My intention was not to define any precise category, but, rather, to indicate that the impact of the NSA cannot generally be viewed as a matter solely between the Postal Service and the user in question.

- b. Yes.
- c. Yes.
- d. Competitors of the Postal Service, such as *providers* of advertising media other than direct mail, might find themselves adversely affected by an NSA. However,
 I do not believe that competitors should have "economic standing" to protest
 Postal Service pricing policies unless they are anti-competitive.
- e. The list of firms with "economic standing" may sometimes include all mailers.
- f. Yes.
- g. Yes.

VP/JCP-T1-8.

Please refer to your testimony at page 7, line 12, where you state that "[t]he analysis of optional tariff offerings for inputs is central to this proceeding."

- a. Based on your familiarity with and understanding of the facts and issues in this case, to what extent do you perceive the optional tariff offering, as it is embodied in the NSA at issue in this docket, to be (i) an end in itself, meaning a method designed to increase the volume of First-Class Mail above a pre-existing level (e.g., Q⁰ in your Figure 1) in a way that enhances the vendor's profits and consumer surplus, versus (ii) a means to a different end, such as rebating some savings that arise from an agreed-upon change in mail handling procedures?
- b. Assume that the optional tariff offering as it is embodied in the NSA at issue in this docket is viewed as a means to a different end (*e.g.*, simply a method of rebating to a large customer savings that arise from improved efficiency elsewhere). Please explain what effect, if any, this would have on your economic analysis of quantity discounts with independent user demands, as discussed in your testimony at pages 8-14.
- c. For your answer to this part of the question, assume that all efficiency gains under the NSA arise solely from sources that are unrelated to the optional tariff offering.
 - (1) Please explain the economic logic of linking savings from those efficiency gains to an optional tariff offering such as declining block discounts.
 - (2) If the efficiency gains that are expected to result from the NSA do not arise from, and are not related to, the optional tariff offering, please explain what makes the analysis of optional tariff offerings for inputs central to this proceeding.
- d. In general, is it appropriate to use declining block discounts as a means of inducing or rewarding mailers for their agreement to change their mail in a way that reduces cost?

RESPONSE

a. I have not formed an opinion as to the relative importance the parties to the NSA

assign to its various components.

- b. I do not believe it would have any effect on that analysis.
- c. (1) I do not believe that there is any economic reason to link the two under the conditions postulated.
 - (2) Let me distinguish between quantity discount plans and optional tariff offerings. As I point out in my testimony, every NSA is an optional tariff offering. Quantity discount plans are only one type of optional tariff offering. All of the issues raised in my testimony concerning the effect on Postal Service profits and impacts on Capital One's competitors would remain valid even if the NSA contained no quantity discount provisions.
- d. Declining block rates are an established pricing policy in many industries, used principally to improve the efficiency of the rate structure not as a means of inducing or rewarding specific behavior other than as to quantity. As a theoretical matter, they are generally not as effective as rewarding the desired behavior directly.

VP/JCP-T1-9.

Most postal tariffs reflect some degree of rate averaging. That is, many users pay the same rate even though the cost to the Postal Service of processing and delivering their mail may be somewhat different. This is especially the case within First-Class Mail, where the law has been interpreted as mandating that rates be uniform for delivery anywhere in the country. Within such a rate-averaging framework, please answer the following questions.

- a. Suppose a certain characteristic of Company A's mail causes it to have a high cost to the Postal Service, while the same characteristic of Company B's mail causes it to have a low cost to the Postal Service, but both companies pay the same rate.
 - (1) Would you say that Company B is subsidizing Company A?
 - (2) Would you say that Company A is receiving some kind of benefit from the rate setting scheme?
 - (3) Would you say that Company A is treated favorably vis-a-vis the rates being charged?
 - (4) Please provide your own description of the relation between these two mailers vis-a-vis their mail and the Postal Service rates being charged.
- b. During a period in which the overall rate structure does not change, suppose Company A indicates that it is possible for it to make one or more changes that will reduce the high cost of handling its mail, so that the cost of processing and delivering Company A's mail becomes more like that of Company B.
 - (1) Assume that Company A must incur a cost to implement the necessary change(s), and Company A refuses to do so unless the Postal Service first agrees to share with it some of the savings that will accrue to the Postal Service, either via a quantity discount or some other form of rebate scheme. Is Company A's cost of implementing the requisite change(s) relevant to any response that the Postal Service might make to the possibility of inducing a change in Company A's high-cost behavior?
 - (2) Assume that Company A will save itself money if it implements the necessary change(s), but Company A nevertheless refuses to do so unless the Postal Service first agrees to share with it some of the savings that will

accrue to the Postal Service, either via a quantity discount or some other form of rebate scheme. Are Company A's internal savings as a result of implementing the requisite change(s) relevant to any response that the Postal Service might make to the possibility of inducing a change in Company A's high-cost behavior?

- (3) When contemplating whether to implement the requisite change(s) to reduce the Postal Service's cost of handling its mail, what claims does Company A have to the savings which it helps the Postal Service achieve?
- (4) Assume that Company A were to make the requisite change(s) voluntarily, with no consideration given to Company A by the Postal Service. Is there an optimal way for the Postal Service to utilize the savings it realizes from the change(s) implemented by Company A?
- (5) Assume that the Postal Service agrees to return to Company A all the extra costs that it had been causing the Postal Service to incur, either via a volume discount schedule, or some other rebate scheme. Would this distribution to Company A of the savings realized by the Postal Service be consistent with Pareto optimality? Would this distribution be considered discriminatory to other mailers, such as Company B?
- c. Suppose that a low-cost mailer e.g., Company B threatens to implement changes that will cause handling its mail to become high cost, unless it is given a consideration like that given to Company A in recognition of the low cost of handling its mail.
 - (1) Please provide any examples of which you are aware in other regulated industries where a threat like that postulated for Company B has been made, and indicate how the regulated firm responded.
 - (2) Are you aware of any accepted way of responding to such threats? If so, please explain.

RESPONSE

a. (1) No. Under the conditions stated, there is no reason to suppose that

Company A is paying more than the stand alone costs of its service nor any

reason to suppose that Company B is paying less than the incremental costs of its service.

- (2) I cannot answer the question as stated. The term "some kind of benefit" must be defined relative to a clear alternative situation.
- (3) Again, I cannot answer the question as stated. The term "treated favorably" must be defined relative to a clear alternative situation.
- (4) Other things equal, Company A benefits from rate averaging, while Company B is harmed relative to a situation in which each user paid the same mark up over actual cost.
- b. (1) Yes, because Company A will not choose to make the change unless the consideration it receives from the Postal Service is large enough to offset its implementation cost.
 - (2) In a bargaining situation, the gains each party can achieve on its own often have an impact on the outcome, *i.e.*, how the gains are divided between the parties.
 - (3) I do not believe that Company A would have any particular *claim* on the savings. Economists would expect the net gain resulting from implementing

the change to be divided between the two parties on the basis of relative bargaining power.

- (4) Since by hypothesis the rate structure does not change, it is unclear what the optimal way might be.
- (5) The hypothetical does not state whether or not Company A's demand for mail services was independent of those of other users. As noted in my testimony, a rebate to Company A would tend to be consistent with Pareto optimality if its demands were independent. If Company A's demand were interdependent, a rebate could be consistent with Pareto optimality only if it did not affect the terms of competition in the downstream industry. A lump sum rebate might satisfy this latter condition; quantity discount plans generally would not.
- c. (1) I am not aware of the hypothesized situation arising in any other regulated industry.
 - (2) No. However, it would be appropriate to establish policies that would limit their effectiveness.

VP/JCP-T1-10.

- a. Within the context of giving the Postal Service more pricing flexibility, do you see NSAs such as that with Capital One at issue in this docket playing an important role?
- In your opinion, does subjecting an NSA with an optional tariff that embodies volume discounts e.g., the NSA with Capital One at issue in this docket to the "detailed analysis of (forecasted) demands and costs typical of rate proceedings" as discussed in your testimony at page 14, lines 15-16, constitute an undesirable constraint or limitation on the Postal Service? Please explain.
- c. With respect to the analysis in your testimony of optional tariffs, including optional tariffs with volume discounts for large users, what constraints, if any, should limit the Postal Service's pricing flexibility with respect to NSAs, such as that with Capital One at issue in this docket?
- d. In your opinion, should NSAs such as that with Capital One at issue in this docket (i) be viewed primarily as a means for the Postal Service to achieve nonprice goals, such as inducing mailers to abandon inefficient procedures, or to adopt more efficient procedures, or (ii) be viewed primarily as an opportunity for the Postal Service to achieve greater pricing flexibility with respect to the competitive pressures and developments in the market place? Please explain your answer.

RESPONSE

- a. NSAs can play a role in giving the Postal Service more pricing flexibility.
- b. No. While it would constitute a limitation on the Postal Service, such a policy

may be necessary for the Commission to fulfill its statutory responsibilities.

c. My testimony did not attempt to determine the details of any constraints upon the

Postal Service's pricing flexibility with respect to NSAs. Rather, I sought to

emphasize that there is a need to evaluate the impact of any proposed NSA on Postal Service profits and mailers not party to the NSA.

d. In my opinion, NSAs should be viewed as an opportunity for the Postal Service to improve the economic efficiency of its operations. Thus, some NSAs may focus on designing incentives for mailers to adopt more efficient procedures, while others may focus on providing incentives to expand mail volumes. However, my analysis also points out that the impact of the NSA on other parties should be subject to scrutiny. My testimony dealt with NSAs involving monopoly services of the Postal Service, such as the one at issue in this proceeding. Point (ii), above, addresses the role that NSAs might have in competitive markets. That is a subject worthy of thorough analysis as well. However, the cases are fundamentally different in important respects. In particular, if the market for service is fully competitive, the competitors of the firm involved in the NSA cannot claim to be damaged *by the actions of the Postal Service*, since equivalent terms would be available to the favored firm from other vendors.

CHAIRMAN OMAS: Is there any additional 1 cross-examination, those who wish to cross-examine the 2 3 witness? (No response.) 4 5 CHAIRMAN OMAS: There being none, this 6 brings us to oral cross-examination. Five parties 7 have requested oral cross-examination. First, we begin with the American Postal 8 Workers Union AFL-CIO, Mr. Luby. 9 CROSS-EXAMINATION 10 BY MR. LUBY: 11 Professor Panzar, can you give us an outline 12 0 13 of the documents that you reviewed in preparation for 14 your testimony? I reviewed portions of the testimony of the 15 А 16 witnesses to this that have been filed by witnesses of 17 the Postal Service, Capital One, OCA and the 18 newspapers, so four Postal Service witnesses, two COS witnesses, two NNA witnesses and the two OCA 19 20witnesses. 21 0 All right. And that includes the testimony 22 of Professor Callow? Does that include the testimony 23 of Mr. Callow yesterday? 24А The testimony, yes. 25 0 All right. As part of your preparation, I Heritage Reporting Corporation (202) 628-4888

- 1 take it you have reviewed the negotiated service 2 agreement?
- 3 A No.
- 4 Q You have not?

5 A Not the details of it, no.

6 Q You have not read it?

7 A No.

Q Turning to pages 4 and 5 of your testimony, I'm quoting here. You state, "If it were practical for the favored customer to transfer the quantities purchased under the optional tariff plan to other customers facing the established tariff, the vendor would find its profits eroded."

As I understand the negotiated service agreement, it allows Capital One to count towards the volume discount thresholds and subjects to potential discounts the mail volumes generated by subsidiaries and strategic partners and newly acquired businesses. Obviously there's certain limits. They can only do that within certain limits without adjusting

20 only do that within certain finites without adjusting 21 the volume thresholds and without limits after making 22 some adjustments of the thresholds.

I'd like to ask you if you think those
provisions as I've outlined here allow an opportunity
for arbitrage of discounted postal rates?

As I said, I haven't read those provisions 1 А 2 in detail. From your description, it sounds like there may be some opportunity for arbitrage. 3 Whether it's significant or not depends on the limits and 4 restrictions that you referred to. 5 0 With the understanding that you've not 6 7 reviewed the negotiated service agreement, if it were true that it allowed for significant arbitrage that 8 would also create an erosion of postal revenues, would 9 10 it not? Relative to a situation in which no such 11 А 12 resale were possible, yes. And as I described the provisions, do you 13 0 think that that would help Capital One create 14 15 alliances or facilitate mergers? 16А It sounds like it would be a useful thing to offer potential partners. 17 18 Right. And if you gather potential partners 0 19or alliances on that basis, could you see that 20 development harming the Postal Service or Capital One's competitors? 21 22 I could see the postal revenues being eroded А 23 relative to a situation in which it wasn't possible to 24 share the quantity discounts. Whether or not Capital 25 One's competitors would be harmed would I quess depend Heritage Reporting Corporation (202) 628-4888

1 on who it is it's making these partnerships with.

It's possible that that kind of harm similar to what I discussed in my testimony could take place, but the details -- you'd have to know who it was that was utilizing these discounts as well.

Q All right. I understand there's a certain level of speculation there, but certainly that situation is not -- you could certainly see the Postal Service being harmed by that kind of development?

10 A Yes, but presumably they're taking that into 11 account when they negotiate the agreement.

12 Q All right. Now, on page 12 of your 13 testimony you discuss the thresholds of the quantity 14 discounts.

For purposes of this question, if you could assume that the vendor knows little about the specific large customers, the man curve, and relies essentially on their understanding of broad market elasticities and the large companies' representations to

20 approximate changes in the companies' demand.

Under what circumstances would you recommend to the vendor that the vendor offer a threshold amount that is lower than the observed Q' amount?

A I wouldn't recommend a lower threshold unless there were convincing evidence that the demand Heritage Reporting Corporation

situation which generated the Q° amount had changed or 1 in economics terms that the demand curve had shifted 2 to the left, which is what is argued in this case. 3 The advantage of the Q° threshold is that in 4 the absence of evidence that demand has changed, one 5 doesn't need to know the particular elasticities of 6 that customer's demand to be confident that the 7 contribution to the vendor will improve. 8 If you offer some other quantity, you have 9 to do extensive calculations as to whether the net 10 change in contribution will be improved, as was done 11 12in --13 0 I want to understand then. You're saying that you don't know any circumstance that you would 14 recommend to the vendor that they offer a threshold 15 16 amount lower than the observed Q° amount? Oh, no. I didn't say that at all. 17 А 18 Q Okay. А I said I wouldn't recommend a lower 19 threshold amount unless I had what was convinced by 20 various kinds of evidence that the demand in the 21 future was sufficient, was to the left of the demand 22 23 which generated the quantity Q'. 24 All right. Just so I understand, what sort 0 of circumstances are you speaking of or evidence would 25 Heritage Reporting Corporation (202) 628-4888

1 you be looking for?

2	A I'd be looking at I'd be looking for
3	convincing statistical econometric evidence or a
4	verifiable statement of change in the circumstances
5	facing the firm.
6	I don't want to say that this isn't
7	possible. It's just as I think I said in the
8	testimony. If you're going to adopt some threshold
9	other than $Q^\circ,$ you have to defend it. The burden of
10	proof should be on you.
11	Q Do you mean in the firm?
12	A Well, the parties. The firm and the parties
13	to the NSA. There's room for posturing in these
14	situations.
15	Certainly in the self-interest of the firms
16	that say oh, yes, last year I sent a billion pieces,
17	but, you know, this year unless I get a discount I'm
18	not going to send anything. Well, presumably that
19	wouldn't be credible, so that's why I emphasize the
20	need for credible evidence of some kind to justify
21	moving the threshold.
22	Q Now if you would examine the methods by
23	which the change in Capital One's demand has been
24	estimated in this case?
25	A No. I didn't study that in enough detail to
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.

pass judgment on the merits. I didn't study it in
 enough detail to pass judgment on the merits of the
 econometrics and other forecasting techniques used.

4 Q All right. And so those kinds of estimates 5 don't underlie your testimony?

6 A No.

Q All right. Now, if the favored large customer for a negotiated service agreement uses more than one service provided by the vendor and those services are at least rough substitutes for one another, would this complicate the analysis that you presented?

13 A Yes.

14 Q All right. And how would you go about 15 evaluating the possible costs and benefits for an NSA 16 in that kind of situation?

17 А Well, you do it in the same general way, but you'd also have to take into account the effect of say 18 19 a discount offered for first class mail on that customer's use of standard mail or other services of 2.021 the Postal Service because you'd have to account for 22 the loss in contributions of the shift, as well as the 23 gain in contributions from the increased volume of the discounted service. 24

25 Q All right. Now, on page 20 of your Heritage Reporting Corporation (202) 628-4888 testimony you state that insuring the profitability of
 any optional tariff offering is a legitimate concern
 of all mailers.

Does this require an increased contribution towards the incremental cost of providing service compared with what the customer paid?

A I don't think I understand your question, in
particular the term contribution towards incremental
cost. Could you read it again?

10 Q Sure. Does this require an increased 11 contribution towards the incremental cost of providing 12 service compared with what the customer paid? I'd 13 like to rephrase it, but I think it's clear.

14 A Well, how about if I rephrase it a little 15 bit then, okay?

16 Q Go ahead. Try. I mean, it's the same 17 question.

18 A Yes. I think you're asking is it required 19 that the contribution over and above incremental cost 20 generated from the NSA be larger than the contribution 21 that would have occurred under the standard tariff 22 from that customer.

23 Q Well, it's close enough that I'll let you 24 answer on it.

25 A Okay. The answer to that is yes.

Q All right. If you could turn to your
 response to -- I don't know if you have it, but I'll
 read it to you.

A I don't think I have it.

5 Q The response to USPS Interrogatory 6. It's 6 the response in which you discuss a hypothetical 7 situation posited by the Postal Service in which one 8 customer receives an NSA and is able to target an 9 unserved group of potential customers because of its 10 lower cost. Are you with me?

A Yes.

11

Q All right. You make the statement in your response that, "It is true that its competitors would not be harmed by the favored firm's use of the discount in the new market." It's that statement that I want to take a look at.

17 Suppose the new business is an offering of 18 credit cards to a demographic not usually solicited 19 because the expected low response rate might not cover 20 the cost of the solicitation. Would that still be 21 true? By true, would it still be true that the 22 competitors would not be harmed?

A I'm not completely sure that your example fits the conditions of the hypothetical, so let me answer as follows. The key thing in the hypothetical

was that the lower cost allowed a new market of
 unserved customers to be tapped, in which case my
 answer applies.

Your example changes the situation slightly 4 because you're positing a set of customers that is 5 6 untapped by solicitation mail. There may be other 7 people going after those customers who were not previously competitors of Capital One who by virtue of 8 9 Capital One's entry into this niche could be said to 10 be harmed. That's the distinction I'm making --Well, I guess --11 0

y next, i gaebb

12 A -- between your hypothetical and the Postal
13 Service's hypothetical.

14 Q I honestly don't want to quibble with you.
15 You have a proposition here --

16 A Right.

Q -- which it's true that the competitors would not be harmed by the favored firm's use of the discount in a new market. Essentially you're saying that that proposition doesn't apply to the first hypothetical I gave you.

A It might not. I'm not saying it does not. It might not. You could imagine other competitors who entered the scene as a result of Capital One's expanded market.

All right. And with that same proposition 1 Ο 2 in mind let me posit a different hypothetical, which 3 is suppose the new business is an expansion of Capital One's auto loan business. 4 5 Again, the same issues arise. А 6 0 All right. So the proposition may not apply in that situation? 7 8 А Right. Suppose the new business is 9 All right. 0 unrelated to any current Capital One business. 10 Well, it would be the new competitors who 11 А 12 you could argue might possibly be affected, but --13 Q Detrimentally? 14 А Yes. Right. Again, I'm trying to understand where this 15 Ο 16 statement applies and where it doesn't. It may not 17 apply to the hypothetical I just posited? 18 А Right. The question, and I guess I was 19 unclear in my answer and perhaps the original 20 hypothetical, is which customers or which competitors 21 of Capital One we're talking about. 22 In my answer I interpreted the Postal Service's hypothetical to refer to the current 23 24 customers of Capital One, which by definition would 25 not be harmed under their hypothetical. You're Heritage Reporting Corporation (202) 628-4888

1 introducing situations in which there are new competitors, and I agreed that they might be harmed. 2 3 Q All right. I'm simply trying to make sure --4 5 Right. А -- that the record properly reflects --6 Ο 7 А Sure. -- what you're trying to convey. Again with 8 Ο the same sort of exercise, would the proposition above 9 apply in a situation where -- well, let me put it this 10 11 way. 12 Since you've given me a broad proposition, let me try a broad proposition back, which is does the 13 14 character and the industry of the new business matter 15 in determining whether the favored customer's 16 competitors are harmed? I take it from your testimony 17 you would agree that it does? 18 А It does or doesn't? 19 0 Does. That the character and industry of 20 the new business matter if you're going to determine 21 whether or not the favored customer's competitors are 22 harmed. Well, the extent of the harm certainly 23 А 24 varies on a case-by-case basis, but the class of hypotheticals you constructed is based on essentially 25 Heritage Reporting Corporation

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1 the new entry of Capital One.

2	New entry is always going to have an adverse
3	affect on the existing competitors, so in that sense
4	it doesn't matter which kind of new business Capital
5	One might utilize its discount.
6	Q And so in understanding your testimony, the
7	proposition that competitors would not be harmed by
8	the favored firm's use of the discount in the new
9	market, that does not apply to new business?
10	A It doesn't apply to new competitors. It
11	might not apply to new competitors. Yes.
12	Q All right. But aside from that, it's your
13	testimony that it is a true statement where you're not
14	involved with new competitors?
15	A Yes. If I'm understanding your question. I
16	mean, the thrust of my testimony is competitors may be
17	harmed wherever they interact with Capital One.
18	The Postal Service hypothetical just
19	conjured up a particular situation in which it could
20	be argued that existing competitors would not be
21	harmed as a result of the discount, so my response
22	there essentially agreed that they succeeded in
23	conjuring up a circumstance where that's true.
24	The general thrust of my testimony runs
25	along the lines you've been suggesting, so I don't
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1 see --

All right. 2 Q -- any disagreement with that. 3 Α I guess really the purpose of this was not 4 Ο to argue with you. It's to understand. When I 5 6 understand how the statement applies, you're speaking here of existing competitors? 7 А Yes. 8 9 All right. Now, on page 20 of your Q testimony you mentioned OCA Witness Callow's 10 testimony, which I take it you did review? 11 Yes. 12 А 13 Okay. And you're familiar with his Q proposal? 14I'm familiar with the broad outlines of his 15 А 16 proposal. I've made no attempt to keep up with the 17 particular numbers and details. All right. Well, hopefully you know enough 18 0 about it that you can answer a couple of questions. 19 20 А I'll try. 21 Thank you. In taking a look at his Ô 22 proposal, do you believe it's possible to determine 23 appropriate threshold amounts for a wide array of 24mailers? 25 Whether or not it's feasible to implement А Heritage Reporting Corporation (202) 628-4888

various parts of his proposal I'm really not in a
 position to say.

As I understood his proposal with respect to 3 quantity discounts, implementing the thresholds was 4 5 quite simple. It was based on -- at least in the basic case he discussed it was based on past quantity 6 and so every mailer would have sort of a natural 7 starting point for the quantity discount thresholds. 8 9 Ο All right. 10 А So that would seem easy to implement, but as you get more complicated than that and try to vary it 11 12 in various ways, it could be difficult to implement. Well, sir, are you in a position to tell us 13 Q what sort of information would be required to make the 14 15 kind of calculations to determine appropriate threshold amounts? 16 17 А No. 18 All right. Are you familiar with any Ο arrangements that provide for other optional tariffs 19 that provide different schedules to each customer? 20 21 In what context? Not in the Postal Service. А 22 Do you mean in other industries? In the Postal Service or in other 23 0 industries. 24 25 А No, I'm not.

MR. LUBY: All right. That's all I have for 1 2 now. 3 CHAIRMAN OMAS: Thank you, Mr. Luby. Mr. Baker, National Newspaper Association? 4 Newspaper Association of America, Mr. Baker? 5 6 MR. BAKER: Thank you, Mr. Chairman. 7 CROSS-EXAMINATION BY MR. BAKER: 8 Good morning, Professor Panzar. I'm Bill 9 0 10Baker, appearing today on behalf of the Newspaper Association of America. I believe we've met here 11 before, haven't we? 1213 А I believe we have. Your testimony addresses a number of 14Ο 15 theoretical issues that come up. I wanted to ask you. 16Have you ever yourself been involved in the actual 17 negotiation of an NSA in any industry? 18 А Not in the actual negotiation. As a consultant for AT&T. I was involved in the evaluation 19 of various NSAs that were under discussion. 2.021 0 And would those have been agreements between AT&T and business customers? 22 23 А Yes, large business or governmental --24 The kinds of things that became custom 0 tariffs at the Federal Communications Commission? 25 Heritage Reporting Corporation (202) 628-4888

1

A Yes, that sort of thing.

2 Q Okay. And in general what was your capacity 3 when you were advising AT&T?

A My role was essentially limited to the cost side; that is, it was working with the analysts and the costing department of AT&T attempting to develop methodologies for determining the incremental cost of implementing the -- they didn't call them NSAs, but implementing the NSA.

10 Q Custom tariff?

11 A Yes, custom tariff.

12 Q So as part of that would AT&T have been 13 making an effort to identify the particular costs of 14 serving that particular customer and the configuration 15 of services and quantities that that customer wanted?

16 A Yes, and this was sometimes quite a 17 complicated problem because the nature of those custom 18 tariffs applied to a wide range of telecommunications 19 services and differed based on the physical geographic 20 distribution of the customers' premises and a whole 21 bunch of variables.

Q And the factors would have included things such as the number of customer premises, the number of lines coming out, whether they wanted switch services or private line services?

1 A Exactly.

Q And AT&T felt it important to know what those costs were in order to understand what price it could offer? Is that correct?

5 A Yes. Yes, indeed. In part because there's 6 this natural tension between the marketing department, 7 who were trying to make sales, and the costing people, 8 who were trying to insure that the deals were 9 profitable.

10 Q Let's see. I take it all of the customers 11 in this situation had other options available to them, 12 did they not?

13 A Yes. That's what I was going to get to if 14 you hadn't. The main difference between -- well, 15 there are two main differences between my experience a 16 decade or so ago with AT&T and the current issue.

First, AT&T, though still regulated at that 17 time in these markets, was very much a profit seeking 18enterprise. Two, the custom tariffs under discussion 19 were usually in response to similar offerings made by 20 21 Sprint or MCI or one of AT&T's competitors. In each instance, Sprint or MCI would have offered some 22 contract that the customer would have been 23 24 considering.

25 Q Yes.

In each instance, AT&T, MCI and Sprint all 1 А also had a standard tariff in effect that the customer 2 could have taken service from if it had wanted to. 3 Usually, yes. 4 Ο 5 Okay. I understand. That's right. А Ι 6 suppose there might have been an issue whether MCI 7 actually had a standard tariff in effect. 8 Do you recall roughly what years you were 0 involved with this? 9 I'd say the early 1990s. 1990, 1991, maybe 10 А 1992. Something like that. 11 12 Ο I'm changing now. I'd like to go back to your chart on the bottom of page 12 that counsel for 13 APWU asked some questions about. You recall the 1415 discussion with him about the importance of knowing 16 Q, correct? I wouldn't characterize it in terms of 17 А 18 knowing Q° , but the important role played by Q° in 19 determining the threshold. 20 0 Well, Q vou always know. It's history. 21 That's one of the reasons it's a focal point for these 22 exercises. 23 If one part of a negotiation involves a 24 suggestion by the customer that if an NSA were agreed to and implemented that it would mail more volume, and 25 Heritage Reporting Corporation (202) 628-4888

I want you to assume that that's a consideration involved, would it be important to know in evaluating the NSA whether the contracting mailer would have produced the same additional volumes in the absence of an NSA?

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6 A Yes.
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Q And to understand that, would it be helpful to have an understanding of the process by which the mailer makes mailing decisions?

10 A Yes.

11 Q Okay. In your discussion of demand 12 interdependence to which you devote a large portion of 13 your testimony, you address the possible consequences 14 to other mailers of an optional tariff for a large 15 user.

At I think it's page 16 of your testimony around lines 6 to 10 or so you make a point that in an oligopolistic industry anyway that if the larger user obtains an input at a lower marginal price that can lead to a reduced market price of the final product. As a theoretical matter, what conditions have to exist for that to happen?

A The key factors that make the normal or expected outcome are that the input in question is what economists find as a normal input, one that you

use more of as you expand your output. That's what
 the laymen usually think of as normal.

3 The other condition in this oligopoly situation, which is more complicated than the basic 4 5 competitive situation, is that the reaction functions or response schedules of the individual firms are well 6 behaved -- I don't know -- in an economic sense; that 7 this market has the property, for example, that as you 8 9 increase the number of firms the price goes down and 10 the quantity goes up.

As you increase the cost of all firms, the price goes up. The quantity goes down. Those kinds of properties which are mathematically quite detailed and refer to the decision rules of all the firms.

15 Basically what I'm saying is if the 16 oligopoly you're modeling behaves normally or intuitively in those respects, the changes in cost or 17 18 demand, then the effect of a quantity discount to one firm for a normal input will result as I explain here. 19 20 The favored firm's output will expand. The other firms' output will decrease, and profits go down. 21 22 The reason I say well behaved is you can

23 conjure up oligopoly situations in which things go
24 backwards to intuition.

25 Q As a matter of economic theory, does the Heritage Reporting Corporation (202) 628-4888

1 large mailer have to reduce the price of its output, 2 or could it just decide to increase its profit and hold output constant? 3 4 А It certainly could, but it's unlikely for it 5 to be optimal to do that. At the bottom of that page 16 you mention 6 0 7 the term output contraction of users that do not avail 8 themselves of the discount. To what are you referring to by the term output? Is that the final product? 9 Ά 10 Yes. Okay. Not mail volume? 11 0 12А No, but mail volume, if it's a normal input, will tend to move in the same direction as their final 13 14product. 15, 0 And I suppose one consequence is the smaller 16 company may choose to mail less, and that would affect the Postal Service directly? 17 18 Yes. А 19 Or it may offer less of the final product, Q 20 whatever it is? 21 А Yes. 22 Could there be external effects from the 0 23 reduction in output from the small competitors? 24 А External effects on whom? 25 0 Externalities on the broader public other Heritage Reporting Corporation (202) 628-4888

than the customers of the final product or the Postal
 Service.

A Certainly. If the final product was something that was viewed as socially desirable, less of it is a bad thing from a public policy point of view. That's certainly possible.

Q Were you ever familiar with a phenomenoncalled Wal-Martization?

9 A Yes.

For instance, just hypothetically to 10 0 illustrate the point, if a small town bank were to 11 12 first exit the credit card business after an NSA such as this took effect because it couldn't keep pace, so 13 ultimately it reduced its output of credit cards or 14 maybe then ultimately found it needed to sell itself 15 to a larger North Carolina bank as happens in these 16 17 parts a lot, there could be other consequences of some public interest concern that would be unrelated to the 18Postal Service. Is that possible? 19

A Yes. I wouldn't say that the bank example you just made was unrelated to the issues that are raised in my testimony. That's a fairly close connection, but yes.

Q Are these types of public interest considerations, whatever they may be, kind of

expressed in the economic testimony that you have here 1 or in the tables and the diagrams, or is it kind of a 2 3 conversation that takes place kind of off of the 4 pages? 5 А It's not really addressed in my testimony. CHAIRMAN OMAS: Mr. Baker, would you speak a 6 little more directly into the mike? Thank you. 7 8 MR. BAKER: Thank you. BY MR. BAKER: 9 I would like to turn your attention to your 10 Ο 11 answer to Val-Pak Interrogatory I believe it's 8-D. 12 Have you had a chance to turn to that, please? 13 MR. BAKER: Mr. Corcoran, my understanding is that's been designated into the record previously. 14 15 BY MR. BAKER: 16 Have you had a chance to review that answer? 0 17 А Yes. And here Val-Pak had asked you a question 18 Ô 19 about whether it's appropriate to use declining block discounts as a means of inducing or rewarding mailers 20 21 for their agreement to change their mail in a way that 22 reduces cost to the Postal Service. 23 Your answer was generally they're used to improve the efficiency of the rate structure and not 24 to induce a particular behavior. Your last sentence 25 Heritage Reporting Corporation (202) 628-4888

1 was, "As a theoretical matter, they are generally not 2 as effective as rewarding the desired behavior 3 directly."

My question is can you spell out what you mean by as a theoretical matter they're less desirable?

7 A I think the easiest way to see it is in 8 terms of the context of some of the discussions 9 earlier I believe in Val-Pak interrogatories about the 10 choice of threshold where, to over summarize, it said 11 well, isn't the choice of thresholds lower than Q° a 12 means of making a rebate or transfer to the customer 13 in recognition of other changes it's going to make.

In that context, the reason I say it's generally not as effective is it gets back to discussions about whether you know where the initial demand curve is and whether it's changing.

18 If you had exact knowledge and prediction of the future position of the mailers' demand curve then 39 20 you could use guantity discounts that would have no 21 effect other than transferring money from the Postal 22 Service to the mailer. That is, the quantity 23 discounts wouldn't have any effect at the margin. That choice of threshold wouldn't have any effect at 24 25 the margin.

However, when you're uncertain about future 1 2 demand situations you run some risk that your choice of threshold that was designed to facilitate a 3 transfer between the Postal Service and the customer 4 5 also had an effect at the margin and either reduced or led to an unintended change in volume so that you're 6 mixing two effects. 7 That's what I meant by as a theoretical 8 9 It's more overall an over arching position. matter. You're always better off using an instrument directly 10 targeted to a particular goal rather than more diffuse 11 12 instruments, even though in many circumstances the 13 result can be the same. That's all I meant. MR. BAKER: Mr. Chairman, I believe that 1415 concludes my questions. CHAIRMAN OMAS: Thank you, Mr. Baker. 16 Mr. Olson, Val-Pak Direct Marketing System, 17 1.8Inc. and Val-Pak Dealers Association. Inc.? 19 CROSS-EXAMINATION BY MR. OLSON: 20 21Good morning, Dr. Panzar. William Olson for 0 Val-Pak. 22 23 I first want to begin, and I don't think it was in your testimony. I just want to recite and have 24 you confirm my research that this is I guess your 25 Heritage Reporting Corporation (202) 628-4888

sixth appearance before the Commission. I have that
 you appeared for American Newspaper Publishers
 Association in R84-1 and then for the Postal Service
 in R90-1, 94-1, MC95-1 and R97-1. Does that sound
 about right?

A Sounds right.

6

7 Ο Okay. So you are a veteran. I want to 8 start off with some questions that deal with how we 9 can analyze the Postal Service's proposal. We have 10you in this docket for this NSA. We may not have you 11 in another docket for another NSA, so having your answers to some of these questions may well be helpful 12 to the Commission. 13

14 The first question is in this particular NSA 15 there are two rate changes proposed. Is that not 16 correct? One is the declining block grants. Excuse 17 me. The declining block discounts. Grants would be 18 even better.

Declining block discounts, and the other being the reduction in the rate charge for the electronic return of information to the mailer for this undeliverable as addressed, non-forwardable mail. Is that correct?

24 A Yes.

Q Now, do you view that as a single tariff or Heritage Reporting Corporation (202) 628-4888 1 two separate tariffs?

Since it's an NSA,, you have to consider 2 Δ them in their totality so the nature in evaluating 3 this NSA they're inextricably joined. In principle 4 you could imagine these proposals being implemented 5 separately. 6 And certainly they are capable of being 7 0 analyzed separately, correct? 8 А Yes. 9 Okay. Would you please turn to page 5 of 100 your testimony and particularly the section beginning 11 at line 20? 12 The reason I want to ask you these questions 13 is that some of your testimony is expressed in general 14economic terms, and I want you to ask you if my 15 understanding of it as applied to the Postal Service, 16 as specifically applied to the Postal Service, is 17 correct, okay? 18 (Non-verbal response.) 19 А If you respond affirmatively, it helps the 20 О 21 reporter. 22 А Yes. 23 Okay. At the bottom of page 5 you say, 0 24 "However, this feedback effect works in the opposite way if the customer accepts an optional tariff that 25 Heritage Reporting Corporation (202) 628-4888

1 causes a reduction in the vendor's profits," correct?
2 A Yes.

Q Okay. Now, by reduction in the vendor's profits can we translate that to the Postal Service as being a situation where analyzing declining block discounts that they result in a decrease in the contribution of the Postal Service's overhead?

A Yes.

8

9 Q Okay. And then in the next sentence you 10 say, "Then the imposition of the break even constraint 11 necessitates an increase in the vendor's overall rate 12 structure which makes worse off customers not a party 13 to the optional tariff offering."

When you talk about the break even constraint, is it fair to say we can talk about that as applying to the Postal Service statutory constraint to break even?

A Well, yes, but in practice I would expect that these two effects would operate over time. For example, you could imagine doing the analysis in which an NSA was evaluated in the context of a larger rate making procedure in which total revenues had to balance total cost.

If, as I understand the situation here, the NSA is coming up for review outside of an omnibus rate Heritage Reporting Corporation (202) 628-4888 proceeding and then the impacts that I talk about on the break even constraint occur over time, if the NSA makes money for the Postal Service then presumably we go longer before the next rate case and vice versa if the NSA loses money.

6 Q Right. I didn't mean to imply that there 7 had to be a break even on the NSA.

8 A Right.

9 Q Okay. But if in fact the optional tariff 10 schedule, to use your terms, caused a reduction in the 11 contribution to the Postal Service's overhead, a 12 reduction now, then I guess as you go to the top of 13 page 26 you say it makes worse off customers not a 14 party to the optional tariff offering, correct?

15 A What page?

Q Page 6. It's a continuation of the sentence we were reading before, which began at page 5, line 21, and now we're on page 6, lines 1 and 2.

19 A Right.

20 Q Do you see that?

21 A Yes.

Q And so the reduction in the Postal Service's contribution, the reduction in the contribution of the Postal Service's institutional cost then makes other customers not a party to the optional tariff offering

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1 worse off, correct?

2 A Yes.

Q Okay. Now let's just continue in that paragraph again on page 6, lines 2 through 4 this time or 2 through 3 where you say, "Thus, the automatic presumption of the desirability of optional tariffs relies heavily on the assumption that the vendor is a profit seeker."

9 I do want to ask you to again apply this to 10 this case. Are you saying that we know in this case 11 that the Postal Service is not a profit seeker?

I've no particular sense of what the 12 Δ 13 objective of the Postal Service is in its overall 14strategic plan. It's not a profit seeker in the sense that other regulated firms are profit seekers owned by 15 shareholders and pay dividends, et cetera. 16 That's all I meant by that. I don't know what objective the 17 Postal Service may have in offering NSAs. 18

19 Q As a matter of fact, in offering and 20 negotiating a particular NSA it could well have a 21 motivation to make a profit on that NSA, for example?

A Certainly. As I was about to add, I don't know that the Postal Service is not a profit seeker. It's just that if I were discussing an NSA offered by AT&T or some other private firm I would presume that

the purpose was to make profits unless evidence convinced me to the contrary. You can't make that automatic presumption in the case of a government entity such as the Postal Service.

Q As a matter of fact, there are specific reasons to question that presumption in the case of a government agency like the Postal Service, are there not? Let me just suggest a few. I mean, one is the statutory break even requirement, correct?

10 A That could be one aspect affecting their 11 objectives, yes.

Q And how about the fact that, as you mentioned a few moments ago, there are no stockholders to which the Postal Service accounts for losing money in a given venture, for example? That would be another reason why the Postal Service could be considered a vendor who is not a profit seeker, correct?

19 A Correct.

Q Okay. And in a for-profit company would you not expect that failure is frequently punished in the sense of people losing jobs or having some economic reward withheld from them more often in the private sector than in the Postal Service?

25 A I'm really not in a position to comment on Heritage Reporting Corporation (202) 628-4888

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1 that. It sounds plausible, but I don't know the 2 details of any particular private company's 3 compensation schemes, nor of the Postal Service's 4 compensation schemes.

5 Q Well, at AT&T, for example, do you know that 6 if people negotiated contracts that lost them great 7 amounts of money they may get in trouble for it?

8 A That was my understanding, but I don't have 9 any direct knowledge of that.

10 I quess I need to clarify, though. Are you 0 not saying that in this situation with respect to the 11 Postal Service that because of the reasons we've 12 13 discussed, you know, such as there being no shareholders and statutory break even requirements and 14 such that there should be no automatic presumption of 15 desirability of optional tariffs on the assumption 16 that the vendor is a profit seeker? 17

18 A I would state it slightly differently.
19 There should be no automatic presumption that the NSA
20 will improve the profit position of the Postal
21 Service.

Q Is yet another factor that just occurs to me the fact that the Postal Service is accountable to Congress in a rather direct way and occasionally receives appropriations from Congress subject to

accountability to Congress in hearings and such? 1 2 Is that another factor that affects Postal Service decision making that might not affect a 3 private company in the same way? 4 5 I suppose that's possible, but I haven't А 6 seen that in my experience. You haven't seen any evidence of influence 7 0 by Congress on the Postal Service? 8 9 А No, no, no. That's not what I meant. In 10 terms of its operational decisions and costing I won't argue that Congress has an 11 activities. 12 influence on the Postal Service that it doesn't have 13 on AT&T. 14 Q Right. That's all I was asking. Let me ask 15 you to look at your response to Val-Pak No. 4, 16 specifically subsection A. You start off with the 17 response to that inquiry with the language, "The contribution earned on any output expansion stimulated 18 by the discount would need to exceed the amount lost 19 20 on discounted units, " correct? 21 А Correct. 22 Ο Then you go into your simple formula, which

I will pass on the algebra for and just deal with the terms. Let me ask you to make two assumptions. One, that the discounted rate, which I think is P^d? Is

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1 that correct?

2 А Yes. Okay. That the discounted rate reduces the 3 0 Postal Service's unit contribution by about 30 4 percent. That's assumption number one. 5 6 А Okay. There are only two, so --7 0 Α I know. 8 -- it won't be too hard. 9 0 It sounds like you're going to ask me to do 10 А some arithmetic. 11 12Ο I'm going to ask you to draw a word conclusion for us. 13 Okay. 14 А If the discounted rate, P^d, reduces the 15 0 16 Postal Service unit contribution by 30 percent, then I also want you to assume that the threshold quantity, 17 18 which is Q^1 , correct? 19 А Correct. Okay. That that is set 10 percent below the 20 Q 21 initial quantity, Q. 22 А Okay. 23 Ο Okay. Now, given those two assumptions, can 24 you draw any conclusions about how elastic demand would have to be in order for the quantity discount to 25 Heritage Reporting Corporation

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increase, to actually increase the Postal Service's
 contribution to overhead?

A Not mathematically. Just in words. You're asking me to solve an equation, which I'd be happy to do over the break, but I'm not going to attempt right here.

Q Let me just suggest an answer and see if you8 disagree.

9 A Okay.

Q Would you not conclude that with those two assumptions that the customers' demand would have to be pretty elastic in order for the contribution earned on the output expansion to exceed the amount lost on the discount? The contribution lost on the discount.

15 A Well, I mean, you have to define what you 16 mean by pretty elastic, and then as soon as you do 17 that I'd have to do the calculation.

Yes, there would have to be some. Any time you choose a threshold below Q' when demand curves are stable you're presuming that there's a noticeable elasticity of demand in order to come out ahead on the arrangement. That's certainly true.

Q I'll take noticeable. That's good enoughfor these purposes.

25 Let me ask you then suppose it appeared Heritage Reporting Corporation (202) 628-4888 1 likely that the Postal Service was going to suffer a 2 reduction in contribution to overhead because of the 3 quantity discount that was in the optional tariff 4 offering of the NSA. I just want to ask you to focus 5 on the quantity discount. Would that be advisable or 6 beneficial to other mailers?

7 A Which other mailers? Do you mean mailers8 generally?

9 Q Well, we actually have an interrogatory 10 where we go through and ask you about who has -- I 11 don't need to turn to that, but who's an aggrieved 12 party that should be heard.

13 A If the Postal Service does something 14 relative to the status quo that causes it to lose 15 money, you know, eventually all mailers will be worse 16 off as a result.

17 Q I think your testimony at page 20 says that 18 it's a legitimate concern of all mailers, correct?

19 A Yes.

Q Okay. How about just looking at it from the Postal Service's perspective? Would you say that it was advisable from the perspective of the Postal Service?

24AWhat was advisable?To lose money?25QRight.Right.

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1 A No, and I doubt that that's their intent. 2 Q Okay, but in fact, remember in the beginning 3 I said for analytical purposes let's focus on the 4 declining block grants rather than the other portion 5 of the NSA which has to do with the rate change for 6 UAA mail.

7 Focusing on the declining block grant, did 8 you see anything in the Postal Service's case in chief 9 before the Commission or any of the testimony you've 10 read that alleges that the Postal Service can expect 11 to increase the contribution to overhead from the 12 declining block discounts that it's offering to Cap 13 One?

A My recollection was that the Postal Service witnesses calculated something like an 8.2 million gain from the entire package, but I don't recall the breakdown of that portion from the declining block tariff.

I recall they made an explicit calculation of one of the areas, an estimate of one of the areas that I have in my response about -- I can't remember the term they use -- leakage or something to that effect; namely revenues that would be expected to -contribution that would be expected to be lost because a certain quantity or value received a discount rate

rather than the standard rate, but I don't recall the
 net of the solicitation.

Q If I were to suggest to you that the Postal Service was intending to lose money on this part of the NSA and that it would save on the other part of the NSA, you can't speak to that?

7 A You know, my recollection isn't sufficient 8 to --

9 MR. MAY: Mr. Chairman, I object to the form 10 of the question. There is no evidence in this record 11 that the Postal Service intended to lose money, so 12 there's no basis for the question.

13 If he wants to ask the witness to assume, if 14 one assumes they want to lose money, then he can ask a 15 question about that, but there is nothing in this 16 record to suggest the Postal Service intended to lose 17 money on this deal.

18 CHAIRMAN OMAS: Mr. Olson, could you
19 rephrase that, please?

20 BY MR. OLSON:

21 Q Actually, I think unless something else 22 comes to mind, you've already said you don't know the 23 numbers on each part of --

A I don't recall them right offhand.

25 Q Right.

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1 A I should point out that, as I said earlier, 2 in looking at the NSA and its contribution you have to 3 look at the whole package.

Q Of course. Of course. I'm just focusing
for analytical purposes on the declining block
discounts at the moment.

7 A Right.

8 Q Now let me focus on the other part of the 9 NSA, the address correction component. I know you say 10 in your testimony you're not an expert on mail 11 handling and all, but this is a question about pricing 12 Postal Service services, so I think I can ask this.

13 A Right.

Q Suffice it to say that the Postal Service has first class bulk mail that is undeliverable as addressed, UAA mail, and that some of it is forwardable because the person who is receiving it left a forwarding address, and some of it is not forwardable.

If it's not forwardable then there's two ways they can handle that. They can either return the piece physically to the mailer, or they can return the information electronically and destroy the piece of mail, correct?

A Correct.

25

Q Okay. Now let's call returning the piece physically as Method A and destroying the mail and returning the information electronically as Method B, okay?

5

A Okay.

Q We're talking only about first class bulk
mail for Method B. As I understand, that's not
available to individual first class mail. We're just
focusing on bulk first class mail, correct?

10 A That's my understanding.

Q Okay. Now let's assume that all mailers would want to have information about these mail pieces that are not deliverable and not forwardable in some way. In other words, they would want to either get the piece of mail, or they would want to have the information electronically.

17 A Okay.

18 Q That's an assumption I'm asking you to make.19 A Okay.

Q Then let's also assume that there's some mailers who would prefer to have the piece of mail back. Maybe there's some intrinsic value it has or just their systems are designed that way, so they would prefer A, all things being equal. Others would prefer B. We're not talking about pricing here.

1 A Right.

We're just talking about operations. 2 0 3 А Well, you have to be careful when you --I'll get to pricing in a second. 4 Q 5 Α Okay. That's the last assumption I'm going to ask 6 Q you to make. 7 8 А All right. Other mailers would prefer to have the 9 0 information electronically and don't care about the 10 inside part of the mail being returned to them. 11 Lastly, there are other mailers who don't 12 13 care. They could live with either system, and, depending on pricing, if one were cheaper they'd 14 probably prefer the cheaper way. Is that a safe 15 assumption? 16 17 А I wouldn't think so based on the last part of that because it suggests that the first two 18 categories you talked about would prefer either 19 20 physical or electronic receipt at any price difference, and I doubt that that's a plausible way to 21 think about. 22 23 Actually, I was --С 24 You could say if it were free --А 25 Q Right.

-- they would prefer one or the other.] Α 2 0 Right. I'd certainly go along with that. 3 А Okay. Or the same price? 4 0 5 А Yes. That's what I was asking you to 6 Okav. Ο 7 assume, putting aside price in just the way you have Thank you for that. 8 now done. 9 Let's assume that mailers would not want 10 both. In other words, if they got the piece back they wouldn't want it electronically. If they got it 11 12 electronically, they wouldn't want the piece back, 13 okay? 14 Okay. А Now, all that leads up to a couple of 15 Ο questions. Let me first postulate some costs for you. 16 17 Let's assume that Method A has a unit cost 18 of 30 cents, and Method B has a unit cost of 15 cents. In other words, Method A costs twice as much. Method 19 20 A is the high cost approach to handling this UAA, non-forwardable mail. Can you keep that in mind? 21 Method A, which is the physical return, 22 А 23 costs 30 cents. Yes. 24 Okay. And the electronic is 15 cents in 0 25 this example.

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1 A Okay.

Now I want to posit three different pricing 2 Ο 3 scenarios. We're going to get now to the pricing and ask you as an economist what you think of these 4 5 pricing schemes. The first pricing scheme is charging a price б of zero for high cost Method A and charging 20 cents 7 8 for low cost Method B. Twenty cents would be 15 cents cost and five cents profit. Do you have that in mind? 9 10 Zero for A, 20 for B. A Right. They're giving it away for A and 11 Ο charging 20 cents for B, which is 15 cents cost 12 13 reimbursement and five cents profit. As an economist, what do you think of that 14 pricing scheme? 15 Well, that's not an appealing pricing scheme 16 А 17 from an economic point of view. However, I think it's a little starkly stated in that the nature of the 18 return is sort of bundled with the overall price of 19 first class mail. 20 21 I think most economists' objections to the pricing scheme that you have described here is that 22 23 the bundle, which includes regular first class service 24 and the free return of physical pieces of mail, may be 25 inappropriately priced in the sense that it might be Heritage Reporting Corporation

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1 more efficient to unbundle it.

2	Q Okay. Assuming they are bundled and
3	assuming that the high cost Method A is given away and
4	the low cost Method B is charged for at 20 cents, do
5	you think that gives we're postulating that these
6	are substitutes in the minds of most consumers. Is
7	that sending proper pricing signals to mailers?
8	A No, it doesn't appear to be.
9	Q Okay. Let me go to Scenario B where we
10	charge the same price for A and B. In other words,
11	we'll charge 20 cents for high cost Method A and 20
12	cents for low cost Method B, so we'll lose 10 cents
13	apiece on A based on the cost assumption I asked you
14	to make before and make a profit of 5 cents each on
15	Method B.
16	As an economist, what do you think of that
17	pricing scheme?
18	A Better than the previous one, but still out
19	of line with underlying costs. Again, presumably
20	there's some averaging going on. If you could set
21	separate prices without other considerations, you
22	wouldn't want to do it this way.
23	Q Because it really wouldn't give the right
24	pricing incentives to mailers, correct?
25	A Correct.
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Q And then the last scenario is a scenario where we charge more for the higher cost product. We'll charge a price of 40 cents for high cost Method A, so we're going to get the 30 cent cost back and a 10 cent profit, and we'll charge 20 cents for Method B, a 15 cent cost and a five cent profit.

7 What do you think of that pricing scheme as8 an economist?

9 A Well, that's a scheme which appears to 10 generate equal mark-ups on the two special services 11 and covers their cost, so it would not raise a red 12 flag to object to it as the other ones would.

13 Q Isn't it true it would also have the 14 additional benefit of encouraging mailers not to use 15 the high cost scenario, the high cost method?

A Well, at the margin it overly discourages mailers from using both types because the price is greater than the marginal cost. I think which one is discouraged more would depend on relative demand elasticity, so I couldn't really say and compare a relative incentive.

Q Well, don't we know it gives better pricing signals than charging zero for the high cost method, for example?

25 A It's very likely that it does. You can't Heritage Reporting Corporation (202) 628-4888

1 say for sure because it's not -- if you were to say 30 cents I would say yes, that gives a better signal than 2 zero. It's certainly likely that 40 cents gives a 3 better signal than zero, but --4 5 0 If it were priced at cost then it would give better pricing signals, too? 6 7 А Yes. Okay. Could you turn to page 6 of your 8 0 9 testimony? I do want to just ask a simple question about understanding the difference you draw between at 10 the bottom of page 6 beginning on line 19, the 11 12 independence of user demands and the interdependence of user demands. 13 14This comes up also in Cap One's Interrogatory No. 1 where you're asked to assume 15 16 independent user demands. 17 А Right. Do you recall that? 18 0 19 А Yes. 20 Okay. Why is that assumption important in 0 that interrogatory? 21 22 А In the interrogatory? 23 Yes. Let's focus on that first. 0 24 А Okay. 25 Just for the record, I'm referring to the 0 Heritage Reporting Corporation

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last sentence before the three bullets.

2 (Pause.)

A Okay. Repeat your question, please.

Q Well, let me first ask you. I'll back up one step and just ask you to give us a simple explanation of independent versus interdependent user demand.

A Well, independent means what one would think intuitively; that the schedule of demand for one customer is not affected by actions of another customer. My schedule of demand for first class mail doesn't depend upon your purchases of first class mail, which is the natural assumption to make when you're talking about two final consumers.

You can think of exceptions, but those would be the exceptions rather than the norm, so most micro economic analysis proceeds on the assumption that demands of users are independent.

19 Interdependence can arise for many reasons. 20 Maybe you and I mail things to each other, and then 21 the number of letters and, hence, my demand for first 22 class mail depends on the number of letters you sent 23 to me.

24 One of the main purposes in my testimony is 25 to explain how interdependence can arise as a result

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1 of the final market interactions between two or more 2 mailers. That means that some other credit card company's demand schedule for first class or third 3 class mail would depend upon what Capital One does or 4 5 what discounts it receives through the effect of that discount on the marketplace for credit card services. 6 7 That's the interdependence I focus on here, but there are many kinds of interdependence, many 8 stories you could concoct to generate interdependence 9 between the demand curves of various users. 10 And indeed your testimony on page 7 11 0 12 discusses how the issue of demand being independent is 13 an important consideration. I'm at lines 9 through 14 11. 15An important consideration in the case of 16 the postal services since the vast majority of mail is 17 sent by businesses that use postal services as an input for the production of final products or 18 services, correct? 19 2.0 I'm sorry. Which page? А I'm sorry. It's page 7, lines 9 through 11. 21 Q 22 А Yes. The end of that paragraph. 23 Q 24 А Yes. 25 0 Ckay. So you would say that in other Heritage Reporting Corporation

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1 markets you may think first that independent demand is 2 more likely than in the postal market? Is that what 3 you're --

A Yes. My recollection is that say in an electric utility maybe 30, 40, 50 percent of the revenues are generated from industrial customers, whereas postal the percentage is probably on the order of twice that. In that sense it's more of an issue in postal markets than in even other regulated markets.

10 Q Okay. Well, then let's go back to where we 11 started with COS Interrogatory 1 to you --

12 A Okay.

13 Q -- where they ask you to assume independent 14 user demands. You make your response based on that 15 assumption, correct?

16 A Correct.

17 Q I take it then that your answer would change18 if the assumption changed?

19 A Most likely, yes. There would be another 20 effect to consider, and you couldn't make the strong, 21 simple conclusion made in this response when you had 22 to consider that other effect.

Q Is there some way that economists measure how independent or interdependent demand is? Is there a test? A formula?

A There would be a test based on the cross elasticity demand. You would in principle do an econometric test of the impact of the price facing Capital One say on the demand curve for mail services of another credit card user and attempt to detect it, the interdependence, that way.

Q Let me ask you to turn to Cap One's Interrogatory No. 3. In this answer I think you confirm that if an input price for one competitor decreases and the market price decreases then consumers benefit from that lower price. Is that correct?

13 A Yes.

Q As a consumer, that appeals to anyone. Let's assume that there are multiple competitors that are all making normal economic profits, and one of them not advantaged by the new tariff is so disadvantaged that they leave the market, go out of business or close down the product line.

Isn't there a sort of ripple effect on consumers there, an adverse effect that hadn't been considered in your response?

A Not as you've stated the hypothetical. If there are a bunch of identical firms all making normal profits, then their entry and exit from the market is

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a matter of indifference to consumers, shareholders. 1 Well, if the incentive or if the tariff paid 2 0 3 by one competitor is reduced to the point where they achieve some type of market dominance that would be 4 5 adverse to --А Yes. 6 Let me just finish the question. That would 7 0 8 be adverse to the interest of consumers, correct? 9 А Yes. MR. OLSON: That's all I have. Thank you so 10 11 much, Dr. Panzar. 12 Thank you, Mr. Chairman. 13 CHAIRMAN OMAS: Thank you, Mr. Olson. Before we make a decision on a lunch break, 14 Mr. May, could you give me an approximation of how 15 long you need with this witness? 16 17 MR. MAY: Probably 45 minutes. I think no more than that. 18 19 CHAIRMAN OMAS: No more than 45. And Mr. 20 Koetting? MR. KOETTING: Ball park guess is an hour to 21 22 two hours. 23 CHAIRMAN OMAS: Well, why don't we take about a 30 minute break? Why don't we come back at 24 1:15? How's that? 25

l	(Whereupon, at 12:43 p.m. the hearing in the
2	above-entitled matter was recessed, to reconvene at
3	1:15 p.m. this same day, Friday, February 7, 2003.)
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SESSION AFTERNOON 1 (1:27 p.m.) 2 CHAIRMAN OMAS: First of all, let me 3 4 apologize for being late. 5 Mr. May, you may proceed. 6 Whereupon, JOHN C. PANZAR 7 having been previously duly sworn, was 8 recalled as a witness herein and was examined and 9 testified further as follows: 10 CROSS-EXAMINATION 11 BY MR. MAY: 12 If a letter is sent to Nome, Alaska, from 0 13 Washington for the same price as sending a letter 14 across town, does that also send funny pricing 15 signals? 16 Yes, it does. That's a provision of the 17 А substitute, I believe, the uniform rate, but it's, 1.8again, a case where prices and costs are not lined up. 19 And free return of undeliverable first-class 20 Ο mail is also part of that package, is it not. 21 Yes. I'm not aware of whether or not it's a 22 А statutory requirement as the uniform price is, but 23 24 it's certainly part of the bundle we call first-class 25 service.

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Would it be an effective solution for the 1 Ο Postal Service to rid itself of this obligation with a 2 huge mailer, such as Capital One, of having to return 3 so many of their mail undeliverable, would it be an 4 effective solution for the Postal Service to simply 5 tell Capital One, why don't you mail standard rate, 6 what used to be called third class, because then we 7 8 don't have any obligation to return? Would that be an effective solution for the Postal Service? 9

10 A Well, it would, by assumption, eliminate the 11 cost of returned mail, but, of course, the markups on 12 standard mail are less than on first class, so without 13 doing a calculation, I couldn't tell what the impact 14 of that proposal would be on --

Q Let me give you a hypothetical. Assume that the Postal Service would lose \$50 million in contribution in institutional costs through that solution. Would an economist advocate that solution? A Probably not.

Q I would like to talk just a bit about offering quantity discounts in general before we talk about credit cards. I would like you to refer to pages 15 and 16 of your testimony, and on those pages you describe the basic mechanics of how quantity discounts work when applied to an input good, and on

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page 15, line 13, you say that a quantity discount for 1 a normal input offered to one firm in an industry with 2 no change in the price offered to its competitors in 3 the industry will result in a "reduction in the market 4 price of the final product." Right? 5

А Correct.

7 Ο Now, this is the paragraph where you discuss the results of a perfectly competitive industry. 8

9 Correct?

б

10 А Yes.

Now, on page 16, you discuss the case for an 11 Ο 12 imperfectly competitive industry, and you note at line 13 19 that the result of a quantity discount for a normal input offered to one firm in the industry, only one, 1415 will result in a new market equilibrium in which "the market price of output falls." Is that correct? 16 17

А Correct.

So if I put these two cases together, is it 18 Q 19 reasonable to conclude that you believe that the 20 market price of the final good for the industry will 21 qo down?

22 А Yes.

23 Ο Now, according to economic theory -somebody just told me this -- I really don't 24 25 understand economic theory, but according to economic

theory, is it not the case that if the market price of 1 the final good goes down, and the final good is itself 2 a normal good as economists use "normal," then demand 3 for the final goodwill increase, and if we assume if 4 5 the different competitors in the industry require about the same amount of the particular input, that's 6 7 a concern, for each unit of the final output, then an increase in the demand for the final goodwill 8 translate into an increase in the demand for the 9 10 input; isn't that correct?

A Under the fixed proportions assumption you
 assume, yes.

13 Now, if we look at the specific example of Ο First-Class Mail as an input, and as an input to the 14 15 credit card industry, is it reasonable to conclude that a quantity discount for First-Class Mail for just 16 17 one credit card company will lead to an increase in 18 the demand for the input of First-Class Mail for the credit card industry as a whole, assuming that the 19 20 different credit card companies each use First-Class 21 Mail with about the same efficiency?

A In a perfectly competitive model, that wouldbe correct.

24 Q Now let me switch the focus to the impact on 25 the industry as a whole to the impact on individual

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1 companies.

2	For the perfectly competitive case, you note
3	on page 15 of your testimony that the firm receiving
4	the quantity discount will increase its supply of
5	output?
6	A Yes.
7	Q And then at line 16 on that page you note
8	that the other firms in the industry respond to the
9	lower market price by reducing their quantity cells,
10	correct?
11	A Correct.
12	Q And then for the imperfectly competitive
13	case on page 16 you note at line 9 that, "The output
14	of the favored firm increases," and on the next line
15	you say, "and the output of firms not receiving the
16	discount decreases."
17	A Correct.
18	Q So for both cases we end up with the output
19	of the firm receiving the discount, increasing their
20	output?
21	A Yes.
22	Q And that of the other firms decreasing?
23	A Yes.
24	Q But you have agreed, I believe, that the
25	total demand for the good in the market would
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1 increase?

2 A In most cases, yes; particularly the case of 3 roughly fixed proportions that you, yes.

Q So in those circumstances in the increase in output sold by the firm receiving the discount would have to be larger than the decrease in the output sold by the other firms in order for the net output sold in the industry to increase, correct?

9 A Correct.

17

Q And if we assume that the different competitors in the industry require the same amount of the input for each unit of the final output, which has increased, then it's also going to be the case that the increase input demand by the firm receiving the discount will have to be larger than the decrease in input demand by the other firms; is that correct?

A That's correct.

Q So for the case of First-Class Mail used as an input by the credit card industry, a quantity discount to one firm in the industry will result in a larger increase in First-Class Mail by the firm receiving the discount, an amount larger than the size of the decrease in First-Class Mail by the firms not receiving the discount; is that correct?

A That will usually be the case, yes.

So taking it a step further, in the case of 1 0 2 providing a quantity discount to Capital One, my client, if Capital One increases its First-Class Mail 3 volume by let's say 15 million pieces, and perhaps you 4 haven't read their testimony, but that's -- Dr. 5 Elliott has forecasted --6 Right. 7 А -- that might be the result of the 8 Ο 9 inducements from the discount, if they did increase it by 15 million pieces, it is unlikely that its 10 competitors would decrease their First-Class Mail by 11 12 more than 15 million, is it not? 13 Д Yes 14 0 In fact, the reduction in their use of First-Class Mail by the competitors would probably be 15 much less than the 15 million increase, would it not? 16 I couldn't -- the extent of that comparison 17 А would depend on the details of the various firms' 18 costs and market demand things. 19 20 Now, what if Capital One uses more First-0 21 Class Mail per unit of output than its competitors do, 22 would that make the reduction in competitors' First-Class Mail volume even less than it would otherwise 23 24 be? Otherwise -- by otherwise, you mean --25 А Heritage Reporting Corporation (202) 628-4888

1 Otherwise being if --0 2 А -- people use the same proportion? 3 Yes, if they use -- yes. Ο 4 А Presumably. Of course, they may be using 5 standard mail and all that --6 Of course. 0 7 А -- would also have to be taken into account. 8 With respect to first-class, I agree with 9 you. All right, thank you. 10 0 So if I told you that even if Capital One's 11 12 competitors did reduce their First-Class Mail volume, if they did reduce it by 15 million pieces, that the 13 NSA that we are looking at here would still increase 14 contribution significantly. I ask you to assume that. 15 16 Α I'm sorry. It would --17 If Capital One's competitors actually did, Ο 18 Capital One increases their use of first mail by 15 19 million, and suppose their competitors actually did, 20 which you would think is not likely. 21 А But possible, yes. 22 0 Actually a decrease by 15 million, and so 23 I'm asking you to assume that nevertheless this 24 agreement would still increase the contribution to 25 overhead significantly. Heritage Reporting Corporation

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Now, if you will permit me to use the word 1 2 "profit" as substitute for "contribution to overhead," is that acceptable? 3 4 Α Yes. So if told that despite this volume 5 0 Right. loss the Postal Service would still increase 6 7 significantly their profits, I take it that would make you a little more comfortable about the NSA, would it 8 9 not? Yes, it would. I want to be clear about 10 Α where the source of increased contribution is coming 11 from in your hypothetical, because the volumes of 12 First-Class Mail by hypothesis aren't changing. 13 14 0 Yes. So are you referring to a change from the --15 Α 16 Yes. 0 17 -- different treatment of returned mail? А 18 Q Yes. 19 А Okay. 20 Q As you know, it is the contention of the Postal Service and Capital One that the savings from 21 22 avoiding that would be significantly greater than the 23 costs of --24 Α Right, yes. 25 Now, just for purposes of calculation, and Q Heritage Reporting Corporation (202) 628-4888

if you will accept that, that First-Class letter mail 1 on average makes a contribution to institutional costs 2 of about 18 cents. I mean, let's assume that that's 3 4 the case. 5 Α Okay. And assume that Capital One's competitors 6 0 7 also make an 18-cent per piece contribution or profit when they mail First-Class Mail. 8 So losing 15 million pieces of mail would 9 10 then reduce contribution just 15 million times 18 cents, I promise the math won't get any more difficult 11 than this. 12 13 А Okay. So 18 cents, or .18 times 15 million gives 14 0 15 you \$2.7 million, would you agree? Subject to my arithmetic, yeah. 16 Α Thank you. Well, yours is better than ours. 17 0 18 By the way, suppose the competitors did not use much, if any, First-Class Mail, but used standard 19 20 mail for their solicitations, and their standard mail declined, would it not be the case that indeed the net 21 22 profit of the Postal Service would be even greater because of the lesser contribution that standard mail 23 makes to institutional costs? 24 25 Α Yes, I believe that was one of the Heritage Reporting Corporation (202) 628-4888

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hypotheticals in the interrogatories.

2 0 All right. Something like that. А 3 0 Now, as used -- and now the Postal Service 4 5 in this case estimates that the test year contribution from the NSA will be \$8.2 million. 6 So even in a worst-case scenario where 7 Capital One's competitors in first class mail reduce 8 9 their volume by 15 million because Capital One increased their by 15 million, the test year 10 contribution from the NSA would what, be reduced from 11 8.2 million according to the Postal Service by the 2.7 12 million, so they would still have a contribution, that 13 14 contribution or profit of \$5.5 million from the deal; is that right? 15 If their contentions. 16А 17 Ο Right. 18 А That's a very useful way of putting the bound on the offset that I discussed --19 20 Right. Q -- in abstract terms in my testimony. 21 Α Now, if you could look at your answer to the 22 0 Postal Service's question 5(e), and there you state --23 24 actually you characterize the Postal Service hypothetical question they ask. You say, "This is an 25 Heritage Reporting Corporation (202) 628-4888

1 extremely unlikely hypothetical."

2 5(e)? А Yes. And I don't wish to challenge your 3 0 characterization of that. I simply want to follow up. 4 Just as you did in your response to that 5 б interrogatory, I want to talk you through some other 7 hypothetical example. А Okay. 8 9 0 And ask you about whether particular results are likely, not certainly, but likely. So if you will 10 please answer in those terms, is it likely or not 11 likely. And I would start by referring you to the 12 13 hypothetical discussed in Capital One's question No. 14 1. Now, in that scenario, in this scenario 15 there, an NSA includes both a change in operations and 16 a quantity discount. That's the scenario laid out. 17 18 А Yes. 19 0 And you agreed that if demands are 20 independent, independent, then the agreement will increase the monopolist profits, right? 21 22 Α In this hypothetical. Yes, I mean, that (e) is a --23 Q 24 MR. CORCORAN: Excuse me. That's stated on 25 the last line before the bullets on Capital One's No. Heritage Reporting Corporation (202) 628-4888

1 1. BY MR. MAY: 2 Q Do you see that? 3 4 MR. CORCORAN: The last sentence before the 5 three bullets. THE WITNESS: Oh. "Please assume 6 independent user demands." Okay. 7 8 Yes. BY MR. MAY: 9 So in that scenario we read that the NSA in 0 10 that scenario includes both a change in operations and 11 a quantity discount, and you agreed in your response 12 that if demands are independent, then the agreement 13 will increase the monopolist profits. 14 Α Right. 15 Now let's talk about the scenario with 16 0 17 interdependent demands. Assume that the large users 18 demand curve is vertical. In other words, the business user does not increase its purchase of the 19 20 input due to the client discount because the demand 21 curve is straight up. 22 I'm hesitating because that's difficult to Α assume in the context of an input in which two or more 23 24 firms are competing in a downstream market, because the effects in the downstream market will cause output 25 Heritage Reporting Corporation (202) 628-4888

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to change, which means that in most cases the quantity 1 of demand for the input also has to change. 2 So I'm uncomfortable with positing a 3 vertical demand curve in the case of interdependent 4 5 demands. Well, if you grant me however --0 6 Α Yeah. 7 -- difficult it is. I mean, most 8 0 hypotheticals are absurd. We all know that. 9 Well, but there is a difference between Α 10 absurd and impossible. 11 12 (Laughter.) THE WITNESS: And this one may be 13 impossible. 14 15 MR. MAY: Okay. THE WITNESS: That's why I am --16 BY MR. MAY: 17 Well, what I wanted to ask you was whether 18 0 you agreed that the total surplus in the market is 19 likely to increase under these circumstances because 20 the deal increases efficiency. 21 Yes, it's likely to; yeah. 22 Α Now, would you also agree that the NSA that 23 Ο we have asked you to posit increases the monopolist 24 profitability? 25

As you postulated the situation. 1 А 2 Okay. Now would you also agree that an 0 elasticity of demand for the monopolist services of 3 4 minus 0.071, which by the way happens to be the Postal Service's elasticity for First-Class Mail which Dr. 5 Elliott used for projecting increased volume, so no б surprises there, but back to that would you also agree 7 that such an elasticity of demand would describe a 8 9 demand curve that is very close to vertical? It's not vertical, but it's very close to vertical? 10 А There are a lot of demand elasticities that 11 12 are less than that. 13 0 But it's close? 14 А Well, it depends on the scale which you draw it, it would look close to vertical, yeah. 15 16 (Laughter.) BY MR. MAY: 17 Well, is it likely that the total surplus 18 0 19 would increase in this scenario of the elasticity of 20 demand was, although not vertical, was close to being, 21 close or near close by being the minus .071, in that circumstance is it likely that the NSA would increase 22 23 the monopolist profitability as well? 24 А Well, two issues. Monopolist profitability, 25 I agree, yes. The total surplus, it's a little more

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1 complicated because you have got these other

2 competitive firms who are being affected that aren't 3 included in these balancing calculations you have 4 here.

Q Okay. I just want to clarify another point. In response to the Postal Service interrogatories you note in several places that even if certain conditions hold, then it would not affect your testimony, and I specifically reference you to the Postal Service's question 4(d) and 7(a).

11 A 4(d).

12 O Yes.

13 (Witness reviews document.)

14 BY MR. MAY:

Q You see in 4(d) they said hypothetically -A Yeah. Right.

17 Q -- you know, if the moon crashes into the 18 earth and whatever, would this change your testimony, 19 and you said no.

20 A No.

21 Q And so the same thing for seven.

In any event, when you said that, when you responded to those interrogatories, did you mean that the conditions described in the interrogatories in the hypothetical would not affect your theoretical

1 analysis?

2 Α Yes. So you didn't mean that these Yes. 3 0 conditions wouldn't affect the magnitude? 4 5 Α No, not at all. Thank you. 6 Q I've got a few questions on the section of 7 your testimony where you discuss your economic 8 analysis of quantity discounts for inputs. Page 16 of 9 10 your testimony specifically where you state, "When the price that a particular firm pays for a normal input 11 decreases, that firm's reaction function shifts out." 12 And previous counsel have adverted to this. 13 14 А Right. And you even are kind enough in your 15 0 testimony to explain what "shifts out" means for those 16 of us who are economically illiterate, and it means 17 the firm would choose a larger quality -- excuse me --18 a large quantity, lower price, right? 19 20 А Yeah. In the new market equilibrium when the 21 0 market price of output falls --22 23 Α Right. 24 -- the output of the favored firm increases. Q 25 Ά Correct. Heritage Reporting Corporation

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And the output/input purchases and profits 1 Q of firms not receiving the discount decrease. 2 3 Α That's the expected outcome, yes. So I gather what you are saying is that 0 4 providing a quantity discount to a Capital One could 5 potentially have ripple effects throughout the credit 6 7 card industry? 8 Α Yes. You don't know because you're not an 9 Q expert --10 Right. 11 Α -- but you think potentially it could? 12 Q 13 Ά Yes. But I think we agreed earlier that these 14 0 indirect ripple effects might be attenuated, that the 15 reduction in competitors' mail volume would likely be 16 less than the increase in Capital One's mail volume? 17 That's a likely outcome under the 18 А similarities --19 20 Q Yes. 21 Α -- proviso, yes. Now, it is the case, isn't it, the market 22 0 price of output falls because you are assuming that 23 24 the favored firm reduces the price of its output, 25 riqht?

1 A Yes, primarily.

2	Q Yes. Let's take an example. Assume that a
3	firm receives a discount of \$10 million under an NSA
4	deal on an input, and further this firm produces one
5	million units in output, so the discount translates
6	into \$10 per unit of output, correct?
7	You have gotten \$10 million, they produce a
8	million units.
9	A Yes, but correct, but it's very important
10	that you're talking about a discount of \$10 per unit
11	rather than a lump sum discount of \$10 million in
12	terms of the effect on the firm's choice of output.
13	If you just give a firm \$10 million, it
14	won't necessarily
15	Q You don't know they are going to do with it.
16	A have an effect on it.
17	Q You don't know what they are going to do
18	with it, do you?
19	A Okay, right.
20	Q But in general would you expect that the
21	favored firm would not use the whole 10 million to
22	reduce the price of its output, would it? Not likely?
23	A I would restate the question slightly. It
24	would not expect to pass through in its price the full
25	impact of the discount. Yes, that's true.
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1 0 Now, I have done a few calculations. These are not hard. Capital One has, and I think the record 2 3 discloses that, about 50 million credit card accounts. And the Postal Service has calculated that it expects 4 Capital One to provide -- to give to Capital One about 5 \$6.7 million in discounts in the test year. 6 That's 7 their estimate. I mean those facts -- I mean there is disputes about all of this, but at least that's our 8 9 sense. Now, the Postal Service has calculated --10 the amounts, I believe, if you do the arithmetic, that 11 if you divide the 50 million credit card accounts into 12 13 the 6.7 million in discounts that they are going to get, that comes to about 14 cents per account. 14 15 Is my math okay so far? 16 А \$61 million --6.75. Excuse me. 17 0 18 А 6.75. 19 0 Yes.

20 A And 50 million the count.

21 Q Fifty million.

A Fifty. So that would be -- I keep coming up with something like 32 -- well, whatever, some number of cents.

25 Q Yes, I think 50 into 67 is one --

Oh, right, I'm sorry. 1 Α 2 0 One thirty-five is four. А Yes, one point --3 Fourteen cents. 0 4 I was multiplying by a half. Yes. 5 А Riaht. That's the end of my math --6 0 Α Right. 7 -- expertise, by the way. 8 0 Now, you have agreed that a firm is not 9 likely to reduce the price of the output by the whole 10 discount, you know, which in this case would be per 11 account 14 cents, probably less than 14 cents. 12 13 Well, let me ask you, if Capital One asked me to offer you a deal on a credit card and said they 14 will give you a credit, exactly the same terms and 15 conditions of your current credit card, and in 16 17 addition to that we'll give you 15 cents, do you think they would change? 18 And actually I was going to -- I forgot the 19 15 cents. I was going to come up and give it to you, 20 but I forgot it. 21 Well, if there were no --22 Α Do you think that you would change your 23 0 credit card for 15 cents? 24 If there were no cost of switching credit 25 Α Heritage Reporting Corporation (202) 628-4888

BY MR. MAY: 4 5 Q A lawyer couldn't be bothered. Right. No, of course not. А 6 7 But economists, yeah. 0 А Yeah. 8 9 (Laughter.) I would like to add that the 10 THE WITNESS: kind of quantitative exercise you are doing in this 11 12 example is the way to address these balancing issues that I raised in my testimony. 13 MR. MAY: Yes, appreciate that. 1415 No, it's helpful. Thank you. BY MR. MAY: 16 Just a couple more. In your response to the 17 Q 1.8Postal Service's question 2, you state that "If Capital One receives a discount, its credit card 19 20 competitors may still be harmed even if Capital One is 21 the only one using First-Class Mail," right? Α Correct. 22 23 Ο Yes. 'Because they would still tend to

Well, that is how economists --

cards, I might consider it.

(Laughter.)

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reduce their purchases of other mail services,
adversely affecting the profits of the Postal

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1 Service."

2	Would it follow from that then that if
3	Capital One is able to get in the next general
4	rating case is able to get introduced and
5	accepted a new lower automation rate for first-class,
6	so that it's going to actually reduce the amount they
7	pay for first-class, if that happened would their
8	competitors who are only using standard A, would they
9	also be harmed by that?
10	A They might be, yes. By the same logic, they
11	might be.
12	Q Because they will reduce their purchases of
13	standard airmail?
14	A Well, they will be harmed because it will
15	make Capital One a more effective competitor which
16	would lower their profits.
17	Q Which then comes around to since they
18	will reduce their purchases of postal goods
19	A Right.
20	Q as I understand the interdependence
21	theory.
22	A Yes.
23	Q Now, of course, you know full well that this
24	Commission over 30 years has recommended innumerable
25	rate discounts
	Heritage Reporting Corporation

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Yes.

Q -- of various classes of mail, which many of them as a practical matter are available only to, you know, rather large mailers because the kind of work sharing you have to do only large mailers so far have been able to do.

But do I understand the implications of your 7 testimony correctly that when the Postal Service 8 grants new work-sharing, or the Rate Commission 9 recommends new work-sharing discounts in the future, 10 even if the amount of the discount provided is less 11 12 than the cost savings for the work-share, that the Postal Service is still going to be reducing profits 13 because there are others who are not eligible for 14 15 those discounts who will reduce their -- who ultimately will reduce their consumption of postal 16 17 product?

18 A No, that's not the thrust of my testimony. 19 There may well be an effect on the change in profits 20 because of that feedback effect that we talked about 21 that one would like to attempt to offset against the 22 direct gains calculated through the work-sharing 23 discount issue.

Another aspect of the work-sharing discounts is that there -- my understanding is that they are Heritage Reporting Corporation (202) 628-4888

typically available to consolidators as well which may 1 2 mitigate the effects on competitors of the large firm 3 in the sense that even if one of them was able to take advantage of it. 4 Granted that, but there is still --5 0 The effect is still there. 6 А 7 The effect is still there, is it not? 0 8 А No. Is the Commission -- do you the Commission 9 0

10 in the future is going to have to take this factor 11 into account when they are weighing whether to give a 12 rate discount?

13 A It's one of the -- the impact on all mailers 14 is something that has to be taken into account. They 15 may not have quantitative evidence in the record to --

16 0 Well, I mean, to rephrase it another way because we're -- I mean, let me use Capital One, who 17 18 is such a giant that anything they do, when they sneeze everybody else catches cold, it's kind of real 19 20 world application of your theories, your interdependence theory that if a credit card 21 22 competitor of Capital One were to increase their 23 solicitation mailing by using for the first time a subclass, the enhanced carrier route subclass in 24 25 standard A, which has got all kinds of requirements in

order to -- you have to be very large, but they manage 1 2 to get it together and were able to do it. And suddenly they have got a significant rate discount. 3 Now that rate discount that they are getting 4 5 Capital One isn't getting it. Does that mean that Capital One will inevitably under your interdependence 6 theory end up mailing less First-Class Mail? 7 8 Α Other things equal that would be the direction of the effect. 9 10 Now just one final question. If the person Α 11 in charge of mailing at Capital One were to make --12 suppose there were such a person, I don't even know if 13 there is. But if she were to say that she does not intend to alter one bit the volume of First-Class Mail 14 solicitations Capital One will send, and she doesn't 15 care at all whether her competitor has increased its 16 17 standard mail solicitations, the ECR solicitations, what would be your response? 18 19 Would you say that, well, she is simply 20 unaware of the fact that Capital One will reduce their 21 First-Class Mail solicitations because my theory says

- 22 it must happen?
- 23 A No.

Q And therefore she is wrong. Or she is right, she will not decrease her First-Class Mail

1 solicitations, but that's because she is a bad businesswoman? 2 No, I wouldn't say neither of those. 3 Α Neither of those, huh? 4 0 5 Α I would say neither of those. Well, what would be your response? 6 Q One. I wouldn't be much concerned with what 7 Α 8 the hypothetical person said but what the company 9 actually did. 1.0Two, the effect might be there, but quantitatively so small that you couldn't detect it 11 with available econometric data. 12 13 0 So because of the levels of these discounts, 14 we're talking about pennies --15 А Right. 16 0 -- there is this impact issue. I mean, the 17 interdependence theory taken to its extremely, 18 "illiductory absurdum", when I spill my drink tonight, which I'm going to have, in about 10 years it will be 19 20 felt on the moon. I mean, there is this continuous 21 change reaction of action/reaction to almost 22 everything. 23 But there is this very real question for the Commission is how near-term, or on the other hand, how 24 25 remote are the impacts that result from the Heritage Reporting Corporation (202) 628-4888

interdependence theory? Does it take a really large, 1 significant break to the favored firm for it to really 2 be felt in the industry or not? 3 And I gather you are not able, particularly 4 for the credit card industry, to opine on that, are 5 6 vou? I'm not able to make a quantitative 7 А I agree that the quantitative impact is assessment. 8 the key question, but that would have to be addressed. 9 That's all. 10 Thank you, Dr. Panzar. I wish all MR. MAY: 11 witnesses were as forthcoming as you. You are a great 12 witness. Thank you. 13 CHAIRMAN OMAS: Thank you, Mr. May. 14 Mr. Koetting. 15 Thank you, Mr. Chairman. 16 MR. KOETTING: CHAIRMAN OMAS: With that cross-examine, I 17 think we will go to 15 minutes; is that correct? 18 19 (Laughter.) There was some potential MR. KOETTING: 20 overlap and I may at some point ask the Commission's 21 indulgence so I can remove questions. 22 CHAIRMAN OMAS: I was just teasing. Just 23 24 trying to wake everybody up. MR. KOETTING: Fifteen minutes would be an 25 Heritage Reporting Corporation (202) 628-4888

unduly optimistic estimate at this point. I think it 1 2 would take Mr. Panzar 15 minutes to figure out the significance of Mr. May's last comments. 3 (Laughter.) 4 5 CROSS-EXAMINATION 6 BY MR. KOETTING: 7 Good afternoon, Professor Panzar. 0 The concepts of Parado optimality, Parado 8 9 superiority, Parado improvements, those play a prominent role in your testimony, correct? 10 11 А I wouldn't say prominent role, but a 12 significant role. The term is scattered throughout, correct? 13 0 It occurs several times. 14 Α I won't bother to go through the testimony. 15 Q 16 It will speak for itself. Α All right. 17 But I would like to make sure we all 18 0 understand what that term is intended to convey. 19 20 Isn't the essence of a Parado improvement a change from the status quo which makes at least one person 21 22 better off and nobody else worse off? 23 А Yes. And when we say "nobody," we mean nobody, 24 0 25 correct?

That's the usual theoretical definition, 1 А 2 yes. 3 So if many, many people saw great benefit 0 from the improvement but only one person saw a small 4 5 disadvantage from the change, it would not be Parado 6 optimal, correct? 7 It would not be a Parado improvement. Α Right, Parado improvement. 8 Ο When the Postal Service in its normal course 9 10 of business comes over to the Rate Commission for a general rate increase which it has been known to do 11 12 from time to time, and it proposes rate increases and the Commission recommends them, would that generally 13 be viewed as a Parado improvement? 14 15 Α No. Despite the fact that the Commission is 16 0 likely to find that the rate changes that it has 17 recommended are in the public interest? 18 Yes, despite that fact. There will be some 19 А 20 mailers who will be harmed by any rate change. 21 Let's talk about when the Postal Service 0 22 comes over here less frequently and with a revenue 23 neutral case, a reclassification a few years back in 24 which it's not seeking to increase the revenue, but in essence, some of what's going on is where there had 25

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1 been averaging before there is de-averaging, but the overall effect is revenue neutral. 2 3 Would that like to be a Parado improvement? 4 Α No. 5 0 And the reason is because when you de-6 average somebody gets hurt? 7 Α Right. 8 0 All right. Well, let's talk about another 9 case that I suppose happens even less frequently, when the Postal Service comes over and seeks a general rate 10 decrease, and let's have one of the moon hits the 11 earth hypothetical that Mr. May is so fond of. 12 13 (Laughter.) BY MR. KOETTING: 14 15 0 And let's say that the Postal Service, it 16 proposes a 10 percent reduction for all rates with the 17 important caveat, of course, that no rate -- that the 18 revenues from no subclass fall below the incremental 19 cost for that subclass or the rate for the subclass 20 fall below the marginal cost for subclass since you have previous testimony that those are the relevant 21 22 costing concepts, correct? 23 Do you understand my hypothetical? 24 Α Yes. 25 Q Would that be a Parado improvement? Heritage Reporting Corporation

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1 Α In that situation it's possible that a 2 Parado improvement might result. From your description it sounds like it's possible that all 3 4 rates for all mailers might decrease. 5 0 And that's a Parado improvement? б А Looking at -- looking at just the set of 7 mailers, that would be a Parado improvement. Looking 8 at a larger set that included competitors of mailers 9 who were not mailers, that would -- might not be a 10 Parado improvement. If all the competitors of mailers were also mailers, you could probably construct a 11 blanket price change that was a Parado improvement. 12 13 In the examples we have been discussing and discussed in my testimony the unfavored firm wasn't 14 15 receiving any discount at all. 16 Well, if you are making money from the NSA 17 and you have a rate case coming up, you can improve that mailer's -- you can sometimes improve that 18 mailer's welfare by decreasing the rates he pays as 19 well. 20 21 So in a world where all rates are going down 22 it's likely to be possible to make Parado improvements. 23 24 I'm sorry. When you were talking about 0 25 competitors, you were talking about all competitors of Heritage Reporting Corporation (202) 628-4888

1 mailers?

2	A Yes.
3	Q But if we don't want to make if we don't
4	want our hypothetical to be too extreme, if you can
5	identify one industry in which some subset of the
6	firms uses mailing as an input and another subset of
7	the members of that firm that compete with those
8	members of the first subset don't use mail as an
9	input, then that fact in and of itself would keep this
10	across-the-board rate reduction from being Parado
11	optimal, correct?
12	A Correct, because there is no mechanism for
13	the Postal Service to make these parties better off
14	because they don't consume mail.
15	Now, you could think of just sending them a
16	check, but that's more that's more fanciful than
17	the earth hitting the moon.
18	Q Right. Well, let's not even focus on the
19	competitors of the purchasers of mail. Let's focus on
20	some other people that generally have a pretty
21	prominent seat in this hearing room; for example, the
22	people like United Parcel Service, perhaps the
23	newspapers.
24	Would they view an across-the-board
25	reduction in postal rates to be a Parado improvement?
	Heritage Reporting Corporation

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- A No, I doubt that.

2 Q And when we said nobody, we meant nobody, 3 correct?

4 A Correct.

Q So it's potential harm to some of those parties that are in the hearing room in rate cases day-in and day-out, competitors, that's some of the people that we would have to think about, correct?

9 A Correct.

Q And would you agree that anybody who offers a service trying to meet a customer need that otherwise could be met by the Postal Service is somebody that's unlikely to view a reduction in the rate for the competing Postal Service as a Parado improvement?

A Yes.

16

Q So, for example, if I am publisher of a newspaper or a magazine and I find out that a credit card company that been running a regular full-page ad advertising its credit card features had instead switched its business to direct mail because of lower rates, I wouldn't view that reduction in postal rates as a Parado improvement, would I?

24 A No.

25 Q And the same with a network television

executive who sees a drop in the amount of time
 purchased on his network by the credit card company,
 not a Parado improvement for him, is it?

4 A No.

5 Q And let's hypothesize a small businessman 6 who is trying to negotiate a contract with a credit 7 card company to execute a promotion in which this 8 businessman's small firm would use the internet to 9 send e-mails to individuals identified as potential 10 credit card customers. He might not view that as a 11 Parado improvement, would he?

12 A No.

Q And there is the guy who has his second job in the evening doing telemarketing. He shows up for work and finds out that his shift has been cancelled because the credit card company had switched its new pitch for customers from telemarketing to direct mail.

18 If we are going to think about whether or 19 not this is a Parado improvement, we would have to 20 take his interest into account, correct?

A Whenever you're talking about a Parado improvement in precise terms you always have a set of economic agents in mind, or defined. And the larger you make the set of economic agents under consideration, the less likely any change will result

1 in a Parado improvement.

2	So if you said, and we mean everyone, then
3	that makes it very unlikely that any policy change
4	will result in a Parado improvement.
5	Q So what I am wondering specifically is can
б	you identify any Postal Service for which there does
7	not somewhere exist somebody who offers some
8	commercial service trying to meet a customer needs
9	that otherwise could be met by that Postal Service?
10	And before you answer that question let me
11	add that "free for the blind" does not count.
12	A What do you mean it doesn't count?
13	(Laughter.)
14	THE WITNESS: You should say "other than
15	free for the blind," I think.
16	BY MR. KOETTING:
17	Q Okay. Other than free for the blind for
18	which it would be difficult for the Postal Service to
19	reduce their rates.
20	A No, I would agree that all of the services
21	offered by the Postal Service have at least imperfect
22	substitutes provided by other entities.
23	Q Would you agree that all the markets in
24	which the Postal Service operations therefore are
25	contested, or is that
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1 A No, I wouldn't.

Okay, we won't go any further with that. 2 Ο But because of what we just agreed, that all 3 the markets somebody is out there, would you agree 4 5 that when you get right down to it, it's probably pretty futile to think about any postal rate reduction 6 7 in terms of parado superiority or parado improvement 8 because there is always going to be somebody who stands behind to some degree if postal rates go down? 9 10 Α Yes, but what does that have to do with my testimony? Sorry. 11 (Laughter.) 12 BY MR. KOETTING: 13 14 Well, we can -- we will address that later. Q 15Α Okay. But you will agree your testimony is the 16 0 testimony that introduced the concept of parado 17 optimality, superiority and improvements into this 18 proceeding, correct? 19 20 А Yes. 21 I mean, you did look at the testimony filed 0 22 in this case in support of the proposal, I believe. 23 That was established earlier? 24 Α Yes. 25 Q In that testimony do you see any claims by Heritage Reporting Corporation (202) 628-4888

1 any of the Postal Service witnesses that the agreement 2 would be parado optimal?

3 A No.

7

Q So I guess my question back to you is what's
the point of your testimony about parado optimality?
A Ah, well, now.

(Laughter.)

8 THE WITNESS: The reason I raised parado optimality in my testimony was to explain the standard 9 economic analysis of quantity discounts offered --10 developed over the last 25 years or so, largely in the 11 case of independent user demands where if you are 12 13 looking at a universe consisting of the monopoly firm and its customers, and not the larger society or 14 15 Bangladesh or anything else, that much to the surprise 16 of everyone, mainstream economists included, the offering of a quantity discount with threshold at the 17 18 initial output purchase of a large user can make possible parado improvement. 19

20 As your list of examples points out, that's 21 a really extraordinary achievement in any economic 22 policy setting.

23 And for a long time economists, myself 24 included, promote the use of quantity discounts and 25 nonlinear pricing because of this exciting

possibility. So my testimony brings up that basic analysis to point out that what we're dealing with here is, unfortunately, not a situation like that, where you appeal to making a parado improvement. But unfortunately, you must look at the details of the case, who gains by how much, who loses and by how much.

8 And I went to the basic example because at 9 first, and I must admit that's my instinctive reaction 10 as well, and you say, oh, there is an NSA, a large 11 user and the Postal Service agree on a mutually 12 beneficial efficiency improving agreement. Why isn't 13 that something akin to a parado improvement?

Well, you know, basically that would superficially shift the analysis I presented. But when you recognize there are other parties, third parties involved, and you can't presume that the Postal Service is a profit-seeking firm, the thing becomes more complicated. That's the context in which I introduced the notion of parado optimality.

I don't -- I have never said in my testimony that the Commission should reject NSAs in general or this one in particular because they don't make possible a parado improvement. That's the furthest thing from my intent. NSAs are potentially powerful Heritage Reporting Corporation

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1 tools for improving economic efficiency, but their 2 total effects have to be evaluated in the usual 3 adversarial way.

Let's shift gears a little bit and focus on 4 0 5 the word I think you used in that answer, it works as If you didn't, it appears on page 2 of your 6 well. testimony. I'm looking at item three, and this is the 7 -- page 2 is where you present the questions that you 8 9 were asked to present, and item three specifies that "The effected service is provided under monopoly 10 established by federal statute." 11

12 Was the statement in the question in one in 13 which participated or was that language drafted by 14 somebody else and presented to you without any input 15 from you?

16 A That was drafted by staff at the Commission. 17 I did not -- we did not discuss its input. I mean, I 18 did not offer suggestions and they said is this accept 19 to you, and I said yes, so I didn't have any part in 20 drafting this particular thing.

21 Obviously, I was informed about the nature22 of the case going on.

Q Well, with regard to that language that I just quoted, did you consider that language regarding what some would refer to as a legal monopoly as

dictating the economic assumptions that you were required a part of your analysis or as simply describing a legal construction, the economic consequences of which would be subject to your interpretation?

A I think the former in the sense that I developed my analysis to focus on primarily, almost exclusively on the case of where the firm operated a monopoly service. I didn't sort of bring in the source of the monopoly, whether it was de factor or de jure, but we're talking about a monopolist.

My analysis would be quite a bit different if we were talking about NSAs for a competitive service like Parcel Post or Express Mail or something like that.

16 Q Well, I would like to look at your response 17 to Postal Service question 4, please.

18 A Okay.

19 Q In your response to subpart (a), you agree 20 that advertising is one of the inputs that credit card 21 companies obtain from the Postal Service, correct?

22 A Yes.

Q But in subpart (b), you note that while
alternatives exist, the Postal Service has a statutory
monopoly in providing "this particular input."

Where is that? Ah, the term "input" is a 1 2 bit vaque. It doesn't correspond to what the interrogatory said in (b). 3 Well, in (a) we asked you if advertising is 0 4 5 the input, and you agreed; and in (b) we were talking about this input. 6 7 А Yes. But I think it's clear from your -- if you 0 8 look at subpart (c), I'm not trying to play a game 9 here, you make it clear in subpart (c) that what you 10 are saying is that you're talking about a monopoly 11 over letter mail. 12 13 А Right. I want to talk about advertising as the 14 0 15 input. Okay. All right. 16 А If the input is advertising, the Postal 17 0 18 Service does not have a monopoly on advertising, does it? 19 20 Α No. 21 So what is the import of your analysis in 0 the context of advertising input? 22 23 А As you pointed out in an earlier question, for most postal services there is some alternative out 24 the degree of substitutability varies 25 there. Heritage Reporting Corporation (202) 628-4888

considerably and become a largely empirical question. When I say I am analyzing a monopoly provider, I am thinking about a monopolist over letters. Now it's true that there advertising is one use of letters, and a relevant factor in this proceeding, and that there are other advertising media.

When I say -- I wanted to distinguish 8 9 monopoly in this context from competitive in the context of say Parcel Post or Express Mail in the 10 11 sense that those services are almost identical to what 12 the competitors -- to put it another way, I'm sorry -competitors offer services which are almost identical 13 14 to what the Postal Service offers. They are only 15 slightly differentiated, whereas in the advertising 16 example you raise, it's a highly differentiated alternative that we are talking about. 17

18 So of course it's a matter of degree than 19 kind but I think it's a useful distinction to call the 20 present context monopoly and the Parcel Post, Express 21 Mail context competitive, but you know, I did not mean 22 to suggest the Postal Service have no competitors in 23 the provision of -- indirect provision of advertising 24 services to its customers.

Q Well, in the earlier question you alluded Heritage Reporting Corporation (202) 628-4888

to, we did touch on several of the other alternative 7 advertising channels available to credit cards. Do 2 3 you recall those? TV and radio? Α 4 Yes. 5 Ο Newspaper, magazines. А Yes. 6 Fax advertising, telemarketing, e-mail 7 0 advertising, other advertising like banners or 8 whatnot? 9 Α Yes. 10 Do you agree that credit card companies are 11 0 free to move their advertising business back and forth 12 13 between these other advertising channels and direct mail? 14 15 Α Certainly. 16 0 Do you have any idea whether credit card 17 companies in fact do move their advertising business 18 back and forth between these other advertising channels and direct mail? 19 20 А I have no direct knowledge that they do. It's seems plausible. 21 22 I would like to focus on you response to our 0 23 questions 4(d) and 4(f). I would like to use as a 24 baseline for the discussion the analysis in your 25 testimony in which you don't explicitly make any Heritage Reporting Corporation

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allowance for substitute inputs but you postulate
certain reactions in the credit car market to a single
company negotiated service agreement, and those market
reactions are premised on an increase in output by the
NSA credit card company, correct?

A Yes.

6

Q In the hypothetical in 4(d), we posited the sufficient availability of substitute advertising channels that the NSA partner could adjust, such that the NSA partner could adjust other advertising expenditures to exactly offset the increase in direct mail following implementation of the NSA.

13 So at the end of the deal, as you correctly 14 interpreted our hypothetical, the NSA partner did not 15 increase output. You agreed under this hypothetical 16 there would be no effect on market condition or the 17 firm's competitors.

18 That was your answer, correct?

19 A Yes.

Q Here is the question I'm asking now. Would you agree that if we were still considering -- if we are now considering the explicit presence of advertising substitutes and we further posit reductions by the NSA partner in other advertising media that are not quite as extensive as were

specified in the 4(e) hypothetical, and consequently there is a slight expansion in output, but less expansion in output there would be if there were no advertising substitutes, would you agree that under that circumstance the market effect would be less pronounced than in the baseline situation?

A Remind me what the baseline situation is.
Q The baseline situation was your testimony
where we were talking about a monopoly and you're not
making any allowance for explicit -- '

A Right, yes. Right.

12 Yes. To the extent that there are imperfect 13 substitutes available, it's going to reduce the 14 quantitative impact of what you call the baseline 15 analysis. Because you think of the baseline analysis 16 not as excluding the existence of all substitutes, as 17 being -- diagrams and discussion as being conducted 18 under a caderas paribus assumption in which both things -- the prices of those substitutes are not 19 20 changing in the course of my analysis. 21 0 Well, actually isn't it possible that you

_..

22

11

Q Well, actually isn't it possible that yo could see some change in the --

23 A Sure.

24 Q -- cost of substitute advertising?

25 A Yes.

1 0 So basically, I think we are getting to the 2 point that I am trying to get at, you are getting to the point, which is that it's a function of the 3 quantity -- the intensity of the effect. The effects 4 5 are there but the intensity is likely to be less the 6 more the NSA partner in this instance can substitute postal for non-postal inputs and therefore expand 7 8 output less?

A Yes, that's true.

9

Q And a very similar question with respect to 4(f). That hypothetical, it was the competitors who were making the adjustments, making their adjustment in non-postal channels.

And once again, the greater the extent that they can -- the adjustment in input comes in something other than postal products, the smaller the effect?

17 Α Yes. Once you introduce better and better 18 substitutes, the quantitative nature of these effects 19 decreases. That's why I said if I were talking about 2.0 competitive cases, what I defined as competitive 21 cases, it would be entire different, and I think that 22 will help clarify the continuum or gualitative points 23 you are trying to make.

24 Suppose that we were talking about a
25 quantity discount for some large user of parcel post,
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and the postal services, as I was describing this morning, akin to situation AT&T would find itself in in telecommunications, it's trying to win a large customer away from UPS.

5 Well, my concerns about whether the Postal 6 Service is making a profit on the NSA it offers to a 7 large customer remain, but I would no longer be 8 worried about the impact on the competitors of the 9 favored customer.

10 Why? Because that favored customer has a 11 roughly equivalent offer on the table from a firm 12 offering of essentially the same service.

13 So the Postal Service can't be damaging 14 these guys as a result of their officer, and that's 15 the extreme end of your continuum. The things that 16 arise in Parcel Post and Express Mail you see quite 17 clearly what the extreme position is, and letter mail, 18 since nobody else can send letter mail, all the 19 substitutes are imperfect.

But the end result, I would agree with your -- to the extent that there are better and better substitutes for what the Postal Service is offering, these adverse effects on competitors of the NSA firm diminish, and in the limit vanish.

25 Q I would like to look at your answer to Heritage Reporting Corporation (202) 628-4888 1 Postal Service question No. 6.

2 A Okay.

Q The first question I have there, which is very similar to this line we just finished, and I don't know whether it's covered in your answer or not so we will go through it.

7 Again, in that hypothetical we were 8 stipulating that all of the increase in the NSA 9 partner use is directed at a new market of people who 10 aren't being targeted by any credit card company, it 11 would be any advertising media at all.

And your response was, well, if it's all going into that new market, then competitors wouldn't be harmed by the NSA partners use of the discount.

Again, to the extent that what we have is something less stark than that, but some of it's going into new markets, some of it isn't, the effect is still there, but the effect is diminished, correct?

19 A Correct.

Q Let's talk about something else, and I'll use the term and you can disagree with it or not, I'm starting to think of these as second order effects, these effects on the volumes of other competitors. I would like to talk about -- throw in another second order effect.

1

A I would prefer the term "indirect".

2

25

Q Indirect.

A It may be second order. Second order is a quantitative presumption. They may well be second order on a quantitative level. But yes, go on.

Okay, let's use your term then, "indirect." 6 0 7 To the extent that some of the results of the NSA, of a discount provided by the NSA are new 8 9 customers that otherwise without the NSA getting 10 credit card accounts, wouldn't one of the indirect effects on the Postal Service likely be statement mail 11 12 coming from the credit card company and then payments going back to the credit card company? 13

A Yes, but how is this different than any of the additional demands stimulated under the NSA? Wouldn't that be a byproduct of Capital One's -- I agree but I'm just trying to understand how this is related to the -- particularly related to this hypothetical.

Q Oh, its' related to the hypothetical because to the extent that there are new customers, it's new mail flowing back and forth whereas if it's simply a Capital One taking a customer that otherwise would have gone to one of Capital One's rivals.

A Okay, yes. Thank you.

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Q Your analysis doesn't encompass any effect
 of that type of indirect effect, does it?

A I don't think so because I didn't posit any particular -- you know, a new market segment. And in general, I didn't posit any feedback effects from demand expansion on other, increasing the demand for other services nor in my recollection did the other witnesses in the case. I might have missed something.

9 Q Let's talk about advertising as an input, 10 and let's look at your response to Postal Service 11 Interrogatory 5(e); another one of Mr. May's 12 favorites.

13 A You notice he didn't ask me a question about 14 it. He just referred to the first sentence. He 15 didn't force me to go through the convoluted steps 16 involved.

17 Q I'm not necessarily going to ask you to do 18 that either.

19 A Okay.

Q We asked you how your analysis changes if more advertising by the NSA partner causes more advertisings by its competitors. And you suggested that this situation is extremely unlikely.

I note on page 6 that you recite, as many witnesses have done over the years, that you are not a Heritage Reporting Corporation

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2 that perhaps pertains more to the practice of law than 3 the principles of law. The legal maxim goes something along the lines of if you put one lawyer in a small $\mathbf{4}$ town, he starves; if you put two lawyers in a small 5 town, they do guite nicely. б 7 Have you ever heard that particular maxim? 8 А Yes, I have. 9 Does it make any sense to you? Ο 10 А Yes. 11 And why would that particular situation 0 12 pertain? Because they can generate business for one 13 А 14 another by encouraging, shall we say, people to bring 15 lawsuits. If we can leave the realm of the law, and 16 0 move back into economics. 17 А 18 Okav. 19 If I'm the advertising manager of Pepsi and 0 20 Coca-Cola launches a new advertising campaign, would you expect that I would simply inform the operation 21 managers to prepare to cut back their production 22 output? Or would you think it more likely that I 23 24 would, in turn, launch my own advertising campaign? 25 А I'm sorry. I am beginning to think I Heritage Reporting Corporation (202) 628-4888

lawyer. But I would ask you to consider a legal maxim

1

1 misinterpreted this hypothetical.

2 MR. CORCORAN: Could I ask a question? Does your hypothetical in that case assume that Coke has 3 some form of NSA? 4 5 MR. KOETTING: Not necessarily. Okay, thank you. 6 MR. CORCORAN: So you are saying as a result 7 THE WITNESS: of -- could you repeat that last question again? 8 MR. KOETTING: Sure. 9 BY MR. KOETTING: 10 11 If I am the advertising manager of Pepsi, 0 and Coca-Cola launches an advertising campaign, am I 12 more likely to simply inform the operation managers to 13 prepare to cut back on their production output, or am 14 15 I more likely to launch my own advertising campaign? I would expect that you would be more likely 16 А to launch your own advertising campaign; at least 17 18 that's the way industrial economics textbooks would 19 treat that thing. Let's try to move a little closer to the 20 Ο situation in the NSA that's proposed. With a credit 21 card company, would you agree that one rational reason 22 23 to increase advertising by a credit card company in the face of increased advertising from my competitors 24 would be to protect my customer base? 25

- 1
- A Yes.

2	Q So, for example, if the competitor
3	advertises lower interest rates to attract my
4	customers, my response could very well be to lower my
5	interest rates in order to keep my customers and
6	attract his customers, and wouldn't I need to
7	advertise to let customers know that this is going on?
8	A Yes, I think that's true.
9	Q And isn't another logical reason why overall
10	direct mail advertising might increase in response to
11	an increase by one competitor by one credit card
12	company would be an imitation effect in which credit
13	card companies would note that the credit card company
14	that had increased their direct mail advertising was
15	attracting new business, and they think that therefore
16	maybe that they should pursue that strategy as well.
17	Is that another rational response to an
18	increase in advertising?
19	A Yes, I think that's I mean, in terms of

19 A res, I think that's -- I mean, in terms of 20 the economics of this kind of advertising rivalry, 21 you're saying that the best response to an increase in 22 advertising of a rival is more increased advertising 23 yourself, and I agree with that.

Q Does that make our hypothetical perhaps less extremely likely than you originally thought?

Yes. Yes, it does. 1 А 2 Do you have any empirical basis to conclude 0 that an increase in direct mail credit card 3 solicitation by one competitor causes a reduction in 4 5 overall direct mail credit card solicitation? 6 А No. Do you know if there is anything, to your 7 0 knowledge, in the volume trends of credit card direct 8 mail solicitation over the last five years that would 9 support the theory that gains in mail volume from one 10 11 competitor are likely are likely to be offset by losses in volume from another? 12 The gains in volume -- by which competitor? 13 Α 14 I'm sorry. Well, if we look at any particular credit 15 0 card company that has increased its direct mail 16 solicitation over the last five years --17 А Right. 18 19 Ο -- that those gains have caused a reduction -- are offset by losses from other credit 20 21 card companies? I have no direct knowledge of that. That's 22 Α the way the usual economic story would go. 23 24 0 The economic story of advertising or? Modeling advertising rivalry. Under 25 А Heritage Reporting Corporation (202) 628-4888

advertising rivalry where one side increased, he would both expand the market and steal some customers from his rivals unless advertising were totally ineffective at expanding the market, in which case it would just be a wash.

6 Q In terms of the analysis you presented in 7 your testimony, is there any way to reconcile that 8 analysis with circumstances in which the increased 9 direct mail solicitation by the NSA credit card 10 company actually led to increased direct mail 11 solicitation by the credit card companies?

12 A Let's see, you mean can I make this analysis13 apply to that situation?

Q That's correct.

15

14

(Pause,)

A Well, the basic competitive story relies on the usual competitive market model which does not have a place for advertising. Our oligopoly model, which I think would lie behind the story you are telling, should continue to apply, but I'm having a little difficulty lining it up with the story about spiraling advertising rivalry.

23 So I wouldn't want to answer that I can't 24 line it up, but I am unable to do it at the moment. 25 Q Next I think -- I think this topic was Heritage Reporting Corporation (202) 628-4888 pretty well covered by Mr. May. Let me just cut to
 the chase and see if I understood where the record was
 left, is consistent with your understanding.

This relates to our response to Interrogatory No. 7, but only tangentially in that the fundamental point being made here is that the NSA is for First-Class Mail, which is an advertising channel used extensively by Capital One than many other credit card companies, and they tend to use standard mail.

And if I understand what you agree with Mr. May, that while the forces continue to operate that you specified, the intensity of that effect would be less when we're substituting, if at all, changes between high contribution First-Class Mail and lower contribution standard mail; is that correct?

16

A Correct.

Q And those effects would be the exact same, I think you also agree with Mr. May, whether the firstclass discount that Capital One were to get was based on a discount available to all other first-first mailers through a general rate case or an NSA, if they're not using First-Class Mail the effects are the same regardless, correct?

24 A Correct.

25 Q Okay.

1 CHAIRMAN OMAS: Excuse me. Dr. Panzar, I am told that you're fading on our feed-up, our website, 2 3 so if you could stay close to the microphone. You are fading in and out. 4 5 THE WITNESS: Okay. Thank you. Sorry for the CHAIRMAN OMAS: 6 7 interruption. Mr. Koetting. 8 MR. KOETTING: Thank you. BY MR. KOETTING: 9 A few more points. There was a fair amount 10 0 of discussion regarding page 6 of your testimony, 11 lines 2 to 3, and this portion of your testimony, 12 13 within the section about the fact that the Postal Service operates under break-even requirement rather 14 than under the profit incentive of an out fit like 15 16 AT&T. What you say on lines 2 and 3 at page 6 is 17 "The automatic presumption of the desirability of 18 optional tariffs relies heavily on the assumption that 19 the vendor is a profit seeker." 20 21 Would you agree that as presented in its proposal in this case that the individuals 22 23 representing the Postal Service that negotiated this 24 NSA, at least as they viewed it, expected that the Postal Service would be getting an increased 25 Heritage Reporting Corporation (202) 628-4888

1 contribution from this NSA?

2 A My reading of the testimony revealed that 3 that's certainly their expectation.

Q So in terms of whether or not there is an automatic presumption, is that a point -- would you agree that the Commission need not concern itself about that particular point in the context of its evaluation of this NSA when the Postal Service was assuming the role of a profit seeker?

10 A No, I wouldn't agree with that at all.11 Q Okay.

The Postal Service is not a private company 12 Α with shareholders, so that the expectation of profits 13 14 is only, or is less perfectly enforced than it would be in the private company. I mean, the context of 15 this sentence is that if AT&T or if UPS had to go to 16 the Commission to get its NSAs approved, I wouldn't 17 recommend that the Commission spend much time trying 18 to calculate whether or not this was going to make 19 20 money for UPS.

Under the current system, I can't give the Commission that same sort of easy advice in the case of the Postal Service.

24 Q Well, the fact of the matter is the 25 Commission is going to evaluate the financial

1 consequences of the NSA, correct?

A Correct.

2

So therefore whether or not there is an 3 0 automatic presumption or not is really not a 4 particularly compelling point one way or the other if 5 that's -- the Postal Service has presented it as a 6 proposal where it anticipates to receive a 7 contribution, and the Commission will be evaluating 8 9 that. And therefore whether or not there is an automatic presumption or not is really sort or beside 10 the point? 11

Well, I don't think it's beside the point in 12 А the sense that, you know, again, if they were looking 13 at a proposal -- suppose the Postal Service were 14 privatized, but was still regulated by the Commission. 15 Then I would say that the Commission needs to spend 16 17 very little time and resources trying to ascertain 18 whether or not any proposed NSA was profitable to the Postal Service. Let the shareholders worry about 19 20 that. That's all I meant by that.

In that case there would be an automatic presumption, and there is not in this case. That's all I meant by that.

Q In your response to Val-Pak 8(d), and I'm not even sure that it's necessary for you to refer to

that, but that's where I am starting from, you state 1 2 that "Declining block rates are an established policy in many industries to improve the efficiency of rate 3 structure." 4 5 А Yes, that's my answer you're going from? 6 0 Yes. 7 Yes, okay. А And my question is, is this true in 8 Ο regulated industries? 9 Yes. 10 А 11 0 Which industries? Can you think of any 12 examples? Local telephone service, electricity 13 Α service, water, almost any sort of monopoly utility 14 15 you can name. 16 0 Do you consider that these industries have work-share discounts, something analogous to the 17 Postal Service concept of work-share discounts? 18 19 А They have access pricing rules in some instances which are in many ways analogous to work-20 sharing discounts in the sense that someone who buys a 21 work-share tariff from you is accessing your delivery 22 23 network rather than delivering it themselves; here it would be illegal to deliver it themselves in many 24 circumstances, but prefer to utilize -- even if they 25 Heritage Reporting Corporation (202) 628-4888

could deliver legally, they prefer to utilize the
 Postal Service's ubiquitous network to do that.

3 Such access arrangements are quite common in
4 telecommunications, electricity and other industries.

5 Q Just as an aside, it's not illegal for them 6 to deliver it. It's just illegal if they deliver it 7 without paying us the postage.

8

A Well, yeah, okay.

One final matter. I understand that when 9 Ο the Postal Service yesterday inquire of the OCA's 10 witness, Dr. Smith, as to when the Postal Service was 11 contemplating an NSA of the type proposed with Capital 12 One in this instance the inquirv was exactly how 13 14 should the Postal Service go about attempting to calculate the contribution it should expect to lose 15 from credit card firms competing with Capital One by 16 17 virtue of the series of market reactions identified in your testimony, which he endorses as being worthy of 18 consideration. 19

His response, in terms of how the Postal Service should attempt to go about making that calculation was to indicate that you would be able to explain for how to do that.

 Can you give us any help there?
 A I'm sure Lyle Christianson would be happy to Heritage Reporting Corporation (202) 628-4888

1 conduct such studies for you.

2 (Laughter.) BY MR. KOETTING: 3 And that's the extent of your guidance? Or 4 0 we can take all the money we get from the postage of 5 those people doing their own delivery pass and use 6 7 that. 8 MR. KOETTING: I have no further questions, Thank you, Professor Panzar. 9 Mr. Chairman. CHAIRMAN OMAS: Thank you, Mr. Koetting. 10 Are there any follow-up guestion? Mr. 11 Costich? 12 Thank you, Mr. Chairman. 13 MR. COSTICH: 14 CROSS-EXAMINATION BY MR. COSTICH: 15 Good afternoon, Dr. Panzar. 16 Q 17 А Good afternoon. I would like to go back to a topic that 18 0 counsel for the Postal Service was guite recently 19 discussing with you, whether it matters whether the 20 Postal Service is a profit seeker. And I would ask 21 22 you to consider a hypothetical negotiation or bargaining session over the division of some spoils 23 between a profit seeker and a break-even entity. 24 Do you have an opinion on which of those two 25 Heritage Reporting Corporation (202) 628-4888

bargainers might have the greater incentive to
 negotiate harder?

Not necessarily. I think the question would А 3 be more appropriately posed if we compare two 4 5 negotiation session: one between Capital One or some outside from and a profit-seeking Postal Service, and 6 a break-even Postal Service. then there is -- in that 7 situation there is reason to expect that incentives 8 would be reduced, and that the nonprofit-seeking 9 entity would be easier to negotiate than the profit 10 seeking one, other things equal. 11

But to compare two negotiators, I can't really say because they are obviously not -- one is a buyer, one is a seller. They are not similarly comparable.

16 Q Counsel for the Postal Service also was 17 discussing with you Coca-Cola initiating an 18 advertising war with Pepsi.

19 Do you recall that?

20 A Yes.

Q Is there a difference between starting an advertising war and increasing one's use of advertising in response to a marginal price decrease? A Yes, but I interpreted Mr. Koetting question as the reaction of a rival to an increase in

advertising expenditures of another firm for whatever 1 2 reason. So I was trying to answer in that context. 3 Counsel for the Postal Service also asked 0 4 you some questions about parado improvement. Do you 5 recall that? 6 А Yes. 7 Ο Is there also a concept called parado 8 optimality? 9 А Yes. 10 Can you explain the difference between 0 11 parado optimal state of the world and parado 12 improvement? 13 А Yes, I can. 14 (Laughter.) 15 THE WITNESS: Are you sure you would like me 16 to? 17 (Laughter.) 18 BY MR. COSTICH: 19 Well, let me get at it a different way. 0 20 Would you agree that a state of the world is parado 21 optimal if it is not possible to make anyone better anyone better off without making someone else worse 22 23 off? 24 А Yes. 25 0 And would you agree that a parado Heritage Reporting Corporation (202) 628-4888

- 1 improvement occurs when you do make someone better off 2 without making anyone worse off?
 - A Yes.

That's much better than I would have done.

5 Q Is there also an economic concept similar to 6 a parado improvement in which there are gainers and 7 losers but the gainers could, at least in principle. 8 compensate the losers?

9 A Yes.

3

4

10 Q I don't know if there is a name for that.

11 A I think there are several names.

12 Q Is that concept more useful to the 13 Commission in terms of evaluating the public interest 14 aspects of this NSA?

15 A Yes.

16 Q And why is that?

A Well, because, as Mr. Koetting's questions quickly revealed, the opportunities to make parado improvements in the policy arena are rather limited; say nonexistent. Whereas making improvements of the type you just mentioned is in economist view the main purpose or objective of rate-making process.

The Commission's statutory instructions require, you know, some more general considerations be taken into account. But from an economist's point of

view you want to maximize the net gain to all parties 1 2 or the gains from some offsetting the losses to others, and that's the useful criteria for rate-3 setting. That's what I mean in my analysis when I 4 talk about economic efficiency and most economists do. 5 It's not to mean that there aren't other 6 considerations, but that's sort of the starting point. 7 Counsel for Capital One asked you about a 0 8 demand curve with an elasticity of negative 0.071. Do 9 you recall that? 10 11 А Yes. 12 Ο If that demand curve were a straight line everywhere --13 It couldn't be. Again, you know, you can 14 А postulate unlikely but not impossible, because a 15 straight line demand curve has a different elasticity 16 17 every point. Well, that was my next question. 18 0 Oh, okay. 19 Α 20 Would it be true that there would be only Q one point on that demand curve that would have the 21 22 specified elasticity? 23 А Yes. If we were to look at a demand curve that 24 Ο was not a straight line but rather displayed constant 25 Heritage Reporting Corporation (202) 628-4888

elasticity of negative 0.071, could you describe what shape that curve would take?

A It would be a curved line, not straight, decreasing, and it would never hit either axis. That's sort of the main difference between that one and the one you see, the straight line you see drawn in my testimony.

8 Q Would the curvature be toward the origin or9 away from the origin?

10 A I think it would be toward the origin, 11 pretty sure, but I would have to actually -- it's been 12 awhile since I plotted these things.

Q A curve like that with that shape would at low quantities appear to be almost vertical; is that correct?

16

A I believe so.

17 Q And at low prices would appear to be almost 18 horizontal; is that correct?

19 A At very low prices because, as I said, it 20 never cuts the horizontal access. So as the price 21 gets very low, it becomes flatter and flatter.

Q So counsel's suggestion that a demand curve with an elasticity of negative 0.071 would look almost like a vertical line is not necessarily the case? A Well, it would resemble a vertical line, as Heritage Reporting Corporation

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you point out, over certain regions. Yeah, I agree. 1 I wasn't interpreting his hypothetical to means you 2 3 pointed out, that constant elasticity everywhere, because the point you raise are correct. 4 5 But in the relevant region it's quite 6 possible that it would be very close to vertical. 7 You indicated a moment ago that a straight 0 line demand curve changes its elasticity at every 8 point; is that correct? 9 10 А Yes. Is it also the case that if a demand curve 11 0 12 reaches an elasticity of negative 0.071 on a straight 13 line curve, that the slope through that point can be almost anything? 14 I think it depends on the units, so I quess 15 А I would say yes, but there is an intimate relationship 16 between slope and elasticity so you can't bury them 17 18 independently. 19 Straight line demand curves cut the axes, 0 correct? 20 А Yes. 21 Does the elasticity between the two axes on 22 0 the demand curve, a straight line demand curve vary 23 from infinity to zero? 24 25 А Yes. Heritage Reporting Corporation

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Does that mean that every straight line 1 0 2 demand curve has a point on it where the elasticity is 3 never 0.071? I believe so. 4 Δ MR. COSTICH: Thank you. I have no further 5 questions, Mr. Chairman. 6 7 CHAIRMAN OMAS: Thank you. Are there any -- Mr. Koetting? 8 MR. KOETTING: Thank you, Mr. Chairman. 9 CROSS-EXAMINATION 10 BY MR. KOETTING: 11 12 0 Professor Panzar, in your exchange with Mr. Costich you talked about the -- perhaps infeasibility 13 of parado improvements. But what the Commission 14should focus on would be to maximize net gains? 15 The objective of an economist would be to 16 А 17 focus on the net gains. The Commission has broader concerns due to the statute, but that would be my 18 starting point. I mean, I essentially agreed that I 19 wouldn't spend a lot of time trying to find parado 20 improvements. 21 If the economist's objective, to the 22 0 Okav. extent that the Commission is interested in maximizing 23 net gains, do you think that the Commission would want 24 to focus more on the net gains that can be gained by 25 Heritage Reporting Corporation

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1 the Postal Service, moving some of its rates in the direction of marginal cost in order to be more 2 competitive in some of the markets in which it can 3 compete versus focusing on the effects on the 4 5 competitors of those mailers in the industries in 6 which the mailers operate? I think that's beyond the scope -- sorry. I 7 Α think that's beyond the scope of my testimony in this 8 case. I several times testified that allowing the 9 flexibilities of pricing close to cost for making the 10 Postal Service effectively competitive should be a 11 12 major goal. I've never been --13 But my point is, is in your testimony you 14Ο talk about the effects on competitors within the 15 16 markets --17 А Yes. -- which the mailers compete, and --18 0 19 А Right. -- absent from your testimony was a 20 0 discussion of the effects on competition, the Postal 21 Service's competition with competing advertising 22 medium, for example. 23 Well, because there is nothing in the case 24 А that involves rate -- you know, normal rate setting. 25 Heritage Reporting Corporation (202) 628-4888

But to the extent that an NSA improves the economic 1 2 position of the Postal Service, it could be useful in 3 that regard as well, I suppose. MR. KOETTING: That's all I have, Mr. 4 Thank you, Professor Panzar. 5 Chairman. CHAIRMAN OMAS: Thank you, Mr. Koetting. 6 7 Commissioner Covington? COMMISSIONER COVINGTON: Good afternoon, Dr. 8 9 Panzar. I want to kind of move quickly around what I 10 would consider not some technical issues, but just some things that we would probably like some 11 clarification on here in light of the fact that we are 12 looking at this mail classification request from the 13 14 United States Postal Service, and you have had an integral role in providing us with some guidance and 15 some leadership on that matter. 16 With regard to the first question, I just 17say that I wasn't aware that you had had six prior 18 19 appearances here, and I'm assuming that the last one 20 was in R97-1. I believe that's -- yes. 21 THE WITNESS: 22 COMMISSIONER COVINGTON: And I understand you have also collaborated with Dr. Willick and done 23 24 work jointly with Dr. Coose and Dr. Kleindorffer who

25 are pretty renounced in the fields of economics and

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econometrics, and so that gave me a lot of insight into your expertise and the illustrious career you have led up to this point.

On page 20 of your testimony, I think you stated that an NSA may be in the public's interest even if competitors are damaged.

7 And what I would like to ask is that in what 8 you know with the request that's before the Commission 9 now, are there any pluses or is there an upside to 10 Capital One and the United States Postal Service if 11 this mail classification is approved, or has anything 12 along that line become apparent to you since your 13 involvement?

I haven't examined the numbers THE WITNESS: 14 in the case closely enough to form a recommendation up 15 or down. As you know from the testimony, the Postal 16 Service presents estimates about how much money it's 17 going to make. Other witnesses present estimates that 18 this will lose the Postal Service money. And not 19 having conducted any quantitative analysis myself I 20 21 can't really make a recommendation.

I, in general, support NSAs to a regulatory policy, more so in the competitive arena than in the monopoly arena, but they can have useful effects there.

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1 There are aspects of this NSA that I find 2 appealing at a theoretical level and there are aspects 3 that cause me some concern. I think that creating 4 incentives for lowering costs of handing mail is in 5 general a good idea. I think quantity discounts, 6 subject to all the qualifications that go through, are 7 in principle a good idea. They have to be evaluated.

8 My cause for concern is the threshold being 9 less than the initial quantity. It doesn't mean there 10 aren't good reason for that, but as I think I said 11 earlier, the burden of proof should be on those who 12 depart from that readily verifiable historical 13 benchmark.

So as I said, while I can't give you an informed recommendation on this particular -- the details of this particular NSA, I am quite pleased to see the issue of NSAs in general being considered by the Commission and evaluated.

19 COMMISSIONER COVINGTON: Okay, as a follow 20 up to that, Professor Panzar, well, one could say that 21 the NSA under consideration now for Capital One, in 22 other words you are saying, you know, it wouldn't be 23 too far-fetched if you look at it as neither being 24 positive nor negative.

25 And then which would you bring me to the Heritage Reporting Corporation (202) 628-4888

next question would be, well, what type of position 1 2 would we at the Postal Rate Commission be in if there is not a balance between the two and if we can't 3 4 clearly figure out what would be applicable to a 5 single mailer or what would be applicable to a 6 competitor or what would be practical as far as this 7 entire concept is concerned because in one of your 8 requests -- I mean, one of your response to Capital 9 One you agreed that consumers would benefit if the market price falls in response to discounts offered to 10 11 Capital One.

12 And then to take it a step further, I would 13 like for you to discuss, based on your knowledge of 14 this case, whether the experiment can be justified 15 economically if the benefits to postal rate payers are 16 greater than the harm it is to a competitor of Capital 17 One.

18 THE WITNESS: Well, from an economist's 19 point of view the answer to the last part of your 20 question is certainly yes. Because as we were 21 discussing with Mr. Costich, the starting point for an 22 economist making these calculations is precisely that; 23 whether the gains to the winners are greater in dollar 24 terms than the losses to the users.

25 The other issue in terms of -- you are Heritage Reporting Corporation (202) 628-4888

1 saying weighing and evaluating, I think the -- as I 2 mentioned earlier, the line of questioning or 3 hypothetical exercises put forth by Mr. May is a useful strategy to in more detail, but plotting out 4 the dollar amounts of these unmeasurable effects, but 5 putting bounds on them based on reasonable and clearly 6 spelled-out assumptions could be a useful exercise by 7 8 the staff for giving the Commission some quantitative 9 evidence on which to weigh the benefits. It would certainly be more practical than hiring Lyle 10 11 Christianson to do a study because that would take him years, not weeks and months. 12

13 COMMISSIONER COVINGTON: You know, you see
14 which way I'm heading with this because you just
15 touched on my next question.

Now, we are familiar with what it is that Mr. May was saying, and ironically Mr. Koetting stole a little of my thunder with the Parado optimality concept, and then along came Mr. Costich with further clarified matters. But I have got a take on what I think that we as a Commission should be looking at as it applies to parado.

And I did a little bit of research on it, and I know that he started out an Italian economist and ended up as a sociologist from Switzerland.

THE WITNESS: Well, ves, he has buried 1 2 somewhere in Lizanne, although I have never been able to find his grave and I have tried two or three times. 3 COMMISSIONER COVINGTON: That's correct. 4 And I know as Mr. Koetting asked you, you know, you 5 referred to him guite a bit in your testimony, and -б COMMISSIONER GOLDWAY: He's alive here 7 8 today. 9 COMMISSIONER COVINGTON: Yes, he's been alive here today, I would second that, what Commission 10 Goldway just said. 11 12 But is it true that you can best say that a Parado optimality can be achieved without 13 disadvantaging at least one group or one person? 1415 THE WITNESS: I'm sorry, that's the 16 definition. COMMISSIONER COVINGTON: Right. Is that the 17 definition? 18 THE WITNESS: Yes. 19 COMMISSIONER COVINGTON: Okay, now in 20 previous testimony before the Commission, I don't know 21 22 whether you are familiar with Witness Smith who is with the Office Consumer Advocacy, but he used the 23 term -- he brought up the issue of "free riding. 24 Okay, and I'm a firm believer that you cannot make 25 Heritage Reporting Corporation

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anybody better off without making someone else worse 1 2 off, and let me give you analogy, Dr. Panzar. 3 I have an airline company, I mean, since 4 everybody is going to use Coke and Pepsi, I'm going the aviation route. I have an airline copy, and I 5 6 have oversold my plane. I have got 100 ticket-holders 7 to fill 100 seats, but I have sold 110 tickets. 8 Okay, so could you logically, or would you 9 logically say that I could make any of those 10 standby passengers better off by offering them 10 11 something else? Sure. I mean, you could -- I 12 THE WITNESS: mean, this is a rationing scheme sometimes tried. 13 I 14 don't know if it's currently in effect. It's sort of 15 auctioning off the right to stay behind. 16 COMMISSIONER COVINGTON: Okay. THE WITNESS: And that leads to a Parado 17 improvement, as Mr. Costich defined it, relative to 18 19 the situation where the airplane just takes off with 20 the first 100 people who got on. 21 COMMISSIONER COVINGTON: Okay. Well, in this particular case, even if I offer something else, 22 does that still make what I'm doing fair? 23 24 THE WITNESS: Not necessarily, no. 25 COMMISSIONER COVINGTON: Okay. All right, Heritage Reporting Corporation (202) 628-4888

which means if I want to continue to function as an 1 airliner, what does that say about my overall 2 3 efficiency if I always sell more tickets than I have seats for? 4 I mean, in other words, I would say it says 5 nothing. It doesn't even say anything about my 6 7 efficiency, correct? THE WITNESS: Right, because in some 8 circumstance when there is randomness in the number of 9 people who show up, it may be necessary or desirable 10 11 or even efficient to overbook the planes. It depends 12 on the circumstances. 13 COMMISSIONER COVINGTON: Okav. Then how would this tie in with equilibrium? 14 THE WITNESS: Equil? 15 16 COMMISSIONER GOLDWAY: Equilibrium. COMMISSIONER COVINGTON: Equilibrium. 17 THE WITNESS: Oh, equilibrium. 18 19 Well, that could be -- you could have many airlines who were all doing that in peak periods, in 20 21 other words, I hope I don't discover tonight. 22 COMMISSIONER COVINGTON: Okay. 23 (Laughter.) COMMISSIONER COVINGTON: All right. I 24 25 understand. Now listen to this. Economists have said Heritage Reporting Corporation (202) 628-4888

1 that improved efficiency without requiring significant 2 regulatory scrutiny can be -- I guess it would be 3 synonymous with shooting your ownself in the foot.

So to take that a step further, do you think in the future that the United States Postal Service, if granted this NSA, if they should present each person or each company that comes in heretofore deal with it on a case-by-case basis or should they take a blanket approach?

10 THE WITNESS: Well, by definition, NSA is on 11 a case-by-case basis. One of the benefits of that is 12 that they can be individually tailored to achieve the 13 most gains and efficiency.

On the other side, they by their nature limit their availability to companies that are large enough to incur the negotiation and litigation costs associated with getting it implemented.

18 So you could trade off against that and 19 approach somewhat similar to that put out by Witness 20 Callo where there is a certain set of parameters laid 21 out which any mailer can take advantage of.

Now, whether or not that's at all practical, I have no idea. But my sense is that the Postal Service doesn't think it's practical, but I don't know the details of it. But there is a trade-off between

the cost of negotiating NSA and the efficiency gains
 that can come out of an individually tailored NSA.

3 COMMISSIONER COVINGTON: Okay. Well, from a 4 more practical standpoint of view, Mr. Koetting just 5 pointed out that in your testimony you stated that the 6 United States Postal Service is not a profit-seeking 7 enterprise. I guess you also realize that the reason 8 the Postal Rate Commission is here is because we deal 9 with revenue.

Now, if the United States Postal Service are going to look at NSAs, and when you start looking at NSAs in relations to cost, and if they are not profitgenerators, that is not their overall goal, what ultimately do you think the United States Postal Service is going to end up with?

16 THE WITNESS: That's a question I have been 17 pondering for years. To try to answer a little bit, 18 because they have to cover their costs they have to be 19 profit seekers to a certain extent. It's just they 20 are not likely to be as aggressively profit seeking as 21 -- you know, as a corporate entity.

22 COMMISSIONER COVINGTON: Okay. To go 23 further then, since profit is fresh on my mind, if the 24 United States Postal Service does continue or are 25 allowed to enter into negotiated service agreements,

and if there are not that many companies or mailers that they can readily identify that can actually stimulate the revenue base, what would they end up facing?

5 THE WITNESS: Well, that calls for more 6 knowledge of overall postal finances than I have at 7 the moment since it's been a few years since I was 8 involved in a rate case.

9 My understanding that this NSA and many like 10 it are not -- wouldn't constitute much of an increment 11 in the Postal Service's bottom line. We're talking a 12 few million on 70 billion, something like that.

And I also recall that, you know, compared to the 30 -- some number of billion dollars found in the pension account, so I have been assuming that the Postal Service is in great financial shape, but I could be -- you know, I could be wrong about that.

18 (Laughter.)

19 COMMISSIONER COVINGTON: Well, one final 20 area I wanted you to touch on. If the Commission 21 should recommend this experience, which is the reason 22 why we are conducting these hearings in the first 23 place, I would like you to discuss, if you know, the 24 data you would advise the Commission to ask the Postal 25 Service to collect that might help us to determine

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whether this proposed experiment is going to be
 successful.

THE WITNESS: Well, I can come up --3 CHAIRMAN OMAS: If I could add something 4 5 that. If you are not in a position to make those recommendations now, could you recommend to the 6 Commission -- you mentioned several times parameters 7 that one must -- you know, that must be looked at in 8 9 NSAs. In your testimony, you refer to several times 10 that this particular case is no different than a 11 regular rate case, and then you go on to say that each 12 and every NSA, I think, some of the problems have is that maybe this would be a precedent-setting thing. 13

But I think you made it very clear that when you are a monopolist, that anytime you enter into any type of a negotiated service agreement it would have to be -- I forgot the word now again -- it would have to be unique, and because of its uniqueness it would have to come to the Commission.

And so could you, or if you are not prepared to do it now, could you offer to the Commission, and I'm sorry, Commissioner Covington, but it was so close, and I was going to ask that question.

24 THE WITNESS: I am not really one that gets 25 too close to the numbers as a general rule. When I Paritage Reporting Corporation

have been involved in rate cases, my testimony has
 been on a level about as abstract as this.

3 But I found reading over the testimony that the focus on trying to get data or at least estimates 4 on the experiences of the cost savings not on average, 5 but that come from the experience of the NSA 6 recipients is a useful thing to have in terms of 7 evaluating the success of the experiment. 8 How feasible it is to do that I don't really have any 9 10 idea, but that kind of data.

11 There are many numbers guoted in various testimonies which are average for the system as a 12 whole as opposed to based on the experience of Capital 13 One. At this point, you know, the numbers for 14individual mailers aren't typically collected so it's 15 16 not surprising that they are average numbers now. However, as a means of evaluating the experiment more 17 precise, closely tied to Capital One would be 18 19 desirable, if feasible, because, remember, one of the reasons driving this thing is the particular 20 characteristics of Capital One's mainstream. 21 22 And so the success and impact of the experiment has ultimately got to be judged on the 23 basis of Capital One's specific numbers. 24 25 COMMISSIONER COVINGTON: Okay. Well, you

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1 know, here, if this were a rate case we have always 2 taken the position, and I say this on quite a few 3 occasions, the former Chairman Ed Geiman said that one 4 of our jobs here was to do the least amount of damage 5 to the most people.

(Laughter.)

6

7 COMMISSIONER COVINGTON: And when you're 8 looking at all classes of mail you try to spread it around. So what we were looking at was that we -- we 9 10 are trying to actually get a grasp on what the overall benefits are going to be to the consumer and whether 11 or not they are greater than the potential harm to 12 13 competitors. I think that would be the bottom line on what Chairman Omas and I just covered. 14

15 THE WITNESS:

16 COMMISSIONER COVINGTON: That's all I have, 17 Mr. Chairman.

Yes.

18 CHAIRMAN OMAS: Thank you, Mr. Covington.19 Commissioner Goldway.

20 COMMISSIONER GOLDWAY: Well, this is a 21 specific question but I think goes to the same issue 22 of how we are going to evaluate either a decision in 23 advance of allowing the NSA or if we allow the NSA how 24 to measure a ten-pack.

25 Mr. May asked you a series of questions Heritage Reporting Corporation (202) 628-4888

about the relative set of the increases of volume by a 1 2 favored firm, and then the reductions in volume by the 3 competitors. But in light of that the favored firm's marginal price is discounted, and the competitors are 4 paying full fare, shouldn't one focus on the relative 5 sizes of the increases and reductions in contributions 6 7 8 THE WITNESS: Certainly. COMMISSIONER GOLDWAY: -- rather than the 9 10 volume changes? THE WITNESS: Certainly. 11 COMMISSIONER GOLDWAY: And the dilemma is 12 13 how do we get that information? THE WITNESS: You can't get the information 14 at this point. But you could envision -- but you 15 16 might want to try and collect it over the course of --COMMISSIONER GOLDWAY: As a condition of 17 18 this experiment? THE WITNESS: Perhaps. I don't know the ins 19 and outs of the attaching conditions to rate approval. 20 21 But Mr. May created various scenarios which you could -- which could be used to get estimates, not 22 econometric or statistical estimates, but benchmark 23 estimates of what the effect on contributions and 24 volumes are if you plug in, you know, the similarity 25 Heritage Reporting Corporation (202) 628-4888

assumptions and the fixed proportion assumptions and elasticity of demand, and you know, these are things that wouldn't be precise, and you would hope to do better after collecting some data. But I think it would be useful in making a decision.

I must admit if I had thought -- if I had talked to him earlier, I would have tried to put in some examples like that in my testimony. They would have been --

10 COMMISSIONER GOLDWAY: Now, Mr. Olson 11 brought up the issue of the address correction 12 service, and what seems to be at least counter-13 intuitive marketing incentives or cost incentives for 14 making people pay for the cheap service and get the 15 expensive service for free.

I don't think that we discussed that in great detail with you. Do you think that that portion of the NSA is something that we should look at more carefully; that we seem to have contradictory market incentive, pricing incentives on that aspect of the NSA?

THE WITNESS: Well, I think the improper -the unfortunate pricing structure has to do with the bundling nature of the first-class tariffs. I don't know the full history, but I suspect that the physical

return property long predated the option of electronic return, because that wasn't an issue until fairly recently.

And so I think the --

4

5 COMMISSIONER GOLDWAY: The nature of a 6 monopoly is to stick with the old way, isn't it?

THE WITNESS: Well, I don't know if -- yeah,
I don't know whether the Postal Service has asked to
revisit this in a rate hearing or not.

But in terms of the NSA, I wouldn't try to ask whether the return procedures they agreed to are the best that one could think of for dealing with this issue, but rather whether they are an improvement over what would happen in the absence of the NSA if they had to follow existing tariffs and rules with respect to returns.

At the next rate hearing or classification hearing or whatever the appropriate venue would be it might be time to address the distorted pricing structures that's built into return policies.

So the question is does the NSA provisions improve upon the postal situations. Without commenting on the numbers, the logic of it seems to generate an improvement by avoiding sending returned material that Capital One doesn't want. But you know,

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I think -- well, I would think if you designed the 1 2 rate structure and return policy from scratch you could do better. But that's really not relevant in 3 4 evaluating the NSA. 5 COMMISSIONER GOLDWAY: Okay. Well, thank you for your thoughtful approach. 6 7 CHAIRMAN OMAS: Thank you. Mr. Corcoran, would you like an opportunity 8 to discuss the need for redirect with your witness? 9 10 MR. CORCORAN: Maybe one minute. Yes, just very brief. 11 12 CHAIRMAN OMAS: One. Fine. (Pause.) 13 CHAIRMAN OMAS: Mr. Corcoran? 14 MR. CORCORAN: Thank you, Mr. Chairman. 15 REDIRECT EXAMINATION 16 BY MR. CORCORAN: 17 Professor Panzar, you had a discussion with 18 0 Mr. Koetting about advertising generally and in 19 particular advertising spiraling. Do you recall that? 20 21 А Yes. Have you had a chance to consider that topic 22 Ο and reflect on how it might relate to your testimony? 23 Yes. I have. 24 А You all recall I sort of drew a blank trying 25 Heritage Reporting Corporation (202) 628-4888

to answer Mr. Koetting's question on that relating my
 analysis to the very plausible story he outlined.

To analyze the situation he posed, you recall that was when the discount offered the favored firm, as I would predict, stimulated advertising, the reaction of the rival was also to do more advertising, and how to reconcile that with my basic model.

And the answer is you would have to extend 8 the basic model to allow for the case in which the 9 input at issue was something that final consumers 10 cared about, that influenced final demand. The basic 11 12 story I told is more like the use of mail as a statement and payment methods where people don't 13 particularly decide how much credit card services to 14 buy on the basis of that as opposed to advertising. 15

Advertising, it's well known, to have an 16 effect -- that's why marketers study it so much, so 17 the analysis would have to be extended, and I 18 obviously haven't done so formally, but intuitively as 19 20 Mr. Koetting got me to admit the hypothetical in part (e) is not so far-fetched for those kinds of inputs. 21 You could imagine the situation where as a result of 22 the rivalry between the NSA firm and its competitors 23 more postal services were consumed by both parties. 24 So obviously that modifies my conclusions 25

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because in those cases then one doesn't need to worry about the profitability of the -- profitability loss from the impact on competitors. It would actually reenforce the main contribution effect.

5 You would still have to worry about the 6 negative impact on competitors because they would 7 still -- yes, the discount has triggered an 8 advertising war, if you will, and they are competing 9 on unfavorable terms, so you would expect that they 10 will still be disadvantaged, and you would want to 11 take those effects into account.

But this was a case where the indirect 12 effects would reenforce the direct effects, and it's -13 - if the Commission was convinced that that was the 14 nature of this particular thing, it would make it 15 easier to form the bounds of, you know, advisability, 16 or actually more specifically, it would be easier to 17 be confident that the Postal Service was going to make 18 a profit because these effects would sort of reenforce 19 the other effects. 20

But I couldn't -- I am actually quite pleased I came up with it while sitting here, but I couldn't come up with it on the spot and sort of sputtered around incoherently for awhile.

25 MR. CORCORAN: Thank you, Professor Panzar. Heritage Reporting Corporation (202) 628-4888 1 That's all I have.

2 CHAIRMAN OMAS: Professor Panzar, that 3 concludes your testimony here today, and we thank you very much for your appearance and your contribution to 4 5 your record, and you are now excused. THE WITNESS: Thank you. 6 CHAIRMAN OMAS: Thank you. 7 8 (Witness excused.) CHAIRMAN OMAS: That concludes today's 9 hearing. The remaining procedural dates for this case 10 are set forth in the Presiding Officer's Ruling No. 11 18, Appendix A. The next scheduled hearing date is 12 13 February 27. Before I adjourn the hearing, I would like 14 to take this opportunity to compliment counsels today, 15 all who are represented here, for the quality of their 16 17 questions and the high standards, and you are all to 18 be commended, and I thank you very much. 19 This meeting is adjourned. (Whereupon, at 3:54 p.m., the hearing in the 2.0 above-entitled matter was adjourned.) 21 22 11 11 23 11 24 25 11

1		REPORTER'S CERTIFICATE	
2			
3	DOCKET NO.	MC2002-2	
4	CASE TITLE:	Experimental Rate and Service Changes	
5		to Implement Negotiated Service	
6		Agreements with Capital One Services,	
7		Inc.	
8	HEARING DATE:	February 7, 2003	
9	LOCATION:	Washington, D.C.	
10			
11	I hereby certify that the proceedings and		
12	evidence are contained fully and accurately on the		
13	tapes and notes reported by me at the hearing in the		
14	above case before the Postal Rate Commission.		
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