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Before The POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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

RESPONSE OF WITNESS JOHN C. PANZAR
TO INTERROGATORIES OF VALPAK DIRECT MARKETING SYSTEMS, INC.
AND VALPAK DEALERS' ASSOCIATION, INC.
(VP/JCP-T1-1-10)

The response of John C. Panzar to interrogatories of Valpak Direct Marketing Systems, Inc. and Valpak Dealers' Association, Inc., dated January 29, 2003, is attached. Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

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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.
- 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:
 - (1) 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, Q⁰] 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.

Yes.
Yes.
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.
The list of firms with "economic standing" may sometimes include all mailers.
Yes.
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 thatCompany 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?
- b. 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.
- 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.