

DOCKET SECTION

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

RECEIVED
SEP 30 4 56 PM '97
POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE
WITNESS MAYES TO INTERROGATORIES OF
CTC DISTRIBUTION SERVICES, L.L.C.
(CTC/USPS-T37-1-7)

The United States Postal Service hereby provides responses of witness Mayes to the following interrogatories of CTC Distribution Services, L.L.C.: CTC/USPS-T37-1-7, filed on September 16, 1997.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking



Scott L. Reiter

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2999; Fax -5402
September 30, 1997

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-1. Please refer to your response to UPS/USPS-T37-24(c), in which you refer to "narrowly-defined cost savings," and to your response to UPS/USPS-T37-27, in which you refer to "narrowly-measured cost savings."

- a. Please explain what you mean by "narrowly-defined" and "narrowly-measured" cost savings in these responses.
- b. Are you aware of any examples of cost savings presented in any testimony in this docket that are not narrowly-defined or narrowly-measured? Please provide a citation to each example of which you are aware.

Response:

- a. By "narrowly-defined" and "narrowly-measured," I meant that the analyses of the cost differences focused on the points at which the two (or more) types of mail being compared clearly diverged in the mail processing models, and not on the full range of cost differences possible. There may be cost differences experienced prior to the functions measured in the costing models, or after such functions. In addition, there may be some differences in characteristics associated with the two (or more) types of mail for which costs are being compared that are not incorporated into the cost models.
- b. I am not familiar with all of the cost studies performed in preparation of this docket. One example of cost differences that are not as narrowly defined as in the past would be the treatment of transportation costs in determining the costs underlying the rates for inter-BMC, intra-BMC and DBMC. The cost approach used in the past for determining the differences between inter-BMC and intra-BMC costs and rates only included the mail processing cost differences. In this docket, the transportation costs have been independently

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

distributed for the two categories of mail. Similarly, the costing approach used for establishing the transportation cost difference between intra-BMC and DBMC in the past was more narrowly measured than in this docket in which the full range of transportation costs was examined.

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-2. Witness Crum, at page 3 of his testimony (11. 3-6), concluded that DBMC dropshipment saves the Postal Service 46.9 cents per piece in mail processing plus window and acceptance costs, when compared with non-DBMC intra-BMC mail. Your proposed rates for zones 4 and 5 DBMC parcel post do not reflect any of this cost differential. Please explain your rationale for not recognizing any DBMC cost differentials in your rates for zones 4 and 5, in light of witness Crum's cost data.

Response:

Witness Crum's analysis examined mail processing and window acceptance costs, but did not include analysis of transportation costs. Witness Hatfield (USPS-T-16) studied the costs associated with transportation. His analysis showed that the costs for intra-BMC are not distance-related, whereas the DBMC costs are distance-related. The results of witness Hatfield's analysis include the conclusion that the DBMC transportation costs are higher than those for intra-BMC for parcels with Zone 4 and 5 origin/destination pairs. The preliminary rates shown at pages 1-6 of my workpaper WP I.K. incorporate both the transportation and nontransportation savings estimated for DBMC relative to intra-BMC. As can be seen, the unconstrained rates for Zones 4 and 5 for DBMC are higher than the unconstrained rates for intra-BMC at every weight increment. Had I not constrained rates, the rates for DBMC Zones 4 and 5 would have been higher than those for intra-BMC.

RESPONSE OF POSTAL SERVICE WITNESS MAYES' TO CTC INTERROGATORIES

CTC/USPS-T37-3. Please refer to witness Bradley's response to UPS/USPS-T13-24, where he states that some purchased highway contracts include the cost of loading and unloading in the contract cost.

- a. In your opinion, is the time and cost of time spent waiting for loading and/or unloading a distance-related or non-distance related cost in such contracts? Please explain the basis for your answer.
- b. Has any effort been made to distinguish driving time costs from loading and unloading costs?
- c. Please explain why certain nondistance-related costs, such as time spent loading and unloading, are treated as distance-related costs in parcel post rate design.

Response:

- a. As I have not studied purchased highway contracts, I have little basis upon which to respond to this question. It is my understanding that the Postal Service is paying for a contract to transport mail for a given distance, and that should loading or unloading en route be required, the costs for such activities are implicit in the contract. It is reasonable to consider that the number of stops could increase with distance, in which case the costs associated with loading and unloading would increase. However, it is not clear that the distance traveled is directly related to the cost of loading and unloading.
- b. I am aware of no such effort. I am informed that in the majority of the highway contracts, such costs are not explicitly identified.
- c. First of all, I would note that there is not yet agreement that the costs in question are, in fact, non-distance related. Secondly, I would note that in the transportation cost analysis developed and presented by witness Hatfield

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

(USPS-T-16), the majority of highway transportation costs are classified as non-distance related. Thus, attempting to isolate the loading and unloading costs from the costs that have already been categorized as non-distance related would yield no change in result. For those highway contracts categorized by witness Hatfield as distance-related, it is reasonable to expect that the loading and unloading costs are a small portion of the total contract costs.

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-4. Please refer to your response to UPS/USPS-T37-31.

- a. Would you agree that the forecast for test year volumes before rates is predicated on existing rates, *i.e.*, no rate change? Please explain any disagreement.
- b. In the absence of any information about specific rate cells, or specific sets of rate cells (e.g., price competition directed at heavier weight packages), would you agree that using the distribution of base year volumes to distribute TYBR volumes to individual rate cells is a reasonable procedure? Please explain any disagreement.
- c. Assume that rates for all cells within a subclass such as parcel post were increased an equal percentage amount. Would you agree that (i) adjusting the TYBR volume in each cell to take account of the subclass elasticity and the proposed rate change would give the same result as (ii) adjusting the TYBR aggregate volume to take account of the uniform price change and the elasticity (*i.e.*, deriving TYAR aggregate volume) and then distributing the TYAR aggregate volume to individual cells on the basis of the base year distribution? Please explain any disagreement.
- d. Assume that rates for individual cells within a subclass such as parcel post are changed by varying percentages, ranging from a small decrease or no increase in some rate cells to substantial increases in other rate cells. Would you agree that (i) adjusting the TYBR volume in each rate cell by the subclass elasticity and the percentage price change for that rate cell would NOT necessarily give the same results as (ii) adjusting the TYBR aggregate volume to take account of the average price change and the elasticity (*i.e.*, deriving TYAR aggregate volume) and distributing the TYAR aggregate volume to individual rate cells on the basis of the base year distribution? Please explain any disagreement.
- e. Assuming you agree that the alternative procedure described in preceding subpart d does not necessarily result in the same distribution of volume by individual rate cell, would you also agree that different distributions of TYAR volumes will also be likely to result in different estimates of TYAR revenues? Please explain any disagreement.
- f. Please comment on the merits of each of the above-described alternative methodologies for projecting TYAR volumes by individual rate cell, and explain all reasons why you prefer the alternative that you selected for your testimony.

Response:

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

- a. It is my understanding that the forecasts for the test year before rates volumes are predicated on the assumption of no change in the rates charged by the Postal Service. Please refer to the testimonies and workpapers of witnesses Thress (USPS-T-7) and Tolley (USPS-T-6) for detailed descriptions of the volume forecasting process.
- b. Yes.
- c. If there is an individual rate for each cell, then I believe that the results would be comparable. However, it is my understanding that if there are discounts or surcharges that are constant and external to the individual rates for each cell for which there is a volume, the result may not be the same. For example, the rates faced by nonmachinable inter-BMC pieces are the applicable machinable rates with a constant surcharge appended. Under your scenario, if the rates for all cells increased by an equal percentage amount, either the surcharge would cease to be a constant, or the rate paid by the nonmachinable pieces would not increase by the same percentage. In either case, the results of the two revenue estimation procedures may not be the same.
- d. I agree.
- e. Yes.
- f. As I stated in my response to FGFS/USPS-T37-13(c), I do not have separate elasticities or forecasting models for individual weight and zone combinations. Thus, I cannot say what the volume response associated with any particular rate cell will be. Nor do I have market research that would

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

allow me to map particular mailers to particular rate cells and forecast their individual responses to rate changes. The volume figures appearing in each cell for revenue estimation purposes are not volume forecasts, per se, for each cell. They simply represent the distributions of the aggregate forecasted volumes according to the base year distribution. In the absence of independent calculations of a unique elasticity for each rate cell based on more than the one-time change in price and the estimated one-time change in volume for that cell, the application of the aggregate elasticity to individual rate cells may lead to a false sense of precision as well as improper and unsupported conclusions.

Furthermore, it is difficult to determine from the historical volume and rate histories for Parcel Post that there is a systematic behavioral response on a cell-by-cell basis to rate changes of different sizes.

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-5. Please refer to CTC/USPS-T37-4 and your response to UPS/USPS-T37-31, where you state that:

It seems to be beyond the realm of possibility and plausibility to consider independently calculating, establishing and defending a unique elasticity estimate for every rate element in every subclass of mail.

- a. Would you agree that in order to have an alternative procedure for projecting TYAR volumes by rate cell for purposes of revenue estimation, it is not necessary "to consider independently calculating, establishing, and defending a unique elasticity estimate for every rate element in every subclass of mail"? That is, would you agree that other alternatives exist to the rather extreme alternative which you posited in your interrogatory response? Please explain any disagreement.
- b. Consider a subclass such as parcel post, where the proposed rate changes very significantly between rate cells, and vary in some systematic (*i.e.*, non-random) way, such as a substantial percentage rate increase for all lighter weight packages (to all zones) and tapering off to little or no rate increase for heavier weight packages (to all zones), or vice versa. For purposes of revenue estimation, please state whether under the circumstances described here you would prefer to have TYAR volumes distributed (i) exactly as in the base year, or (ii) distributed in a manner that is reflective of the elasticity estimate and the varying price changes proposed for individual rate cells. Please explain the reasons for your answer.

Response:

- a. There may be other, less "extreme" alternatives. For instance, the forecasting methodology used in this docket separately develops elasticities for DBMC, intra-BMC and inter-BMC Parcel Post, whereas in previous dockets, the forecast merged intra-BMC and DBMC. As further information is available, allowing for the development of time-series data for subgroups of mail, it may be possible to develop finer estimates.
- b. I would prefer to use the methodology that I used for revenue estimation purposes, that is your method (i). Use of method (ii) falsely assumes that the

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

elasticities for individual rate cells are the same. It may very well be the case that the cells for which the rates were increased the most are the least elastic cells. Please refer to my response to CTC/USPS-T37-4f.

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-6.

- a. As an economist, would you agree that as the price of something (such as a postal product) increases, the quantity demanded would generally be expected to decrease? Please explain any disagreement.
- b. If a product, such as a postal product, is offered in a competitive market, would you agree that the elasticity of demand for that product will generally be greater than it would be if the offeror had a monopoly over the product? Please explain any disagreement.

Response:

- a. Yes, assuming other variables do not overwhelm the own-price effect.
- b. Yes, although I note that many postal products are not monopoly products.

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

CTC/USPS-T37-7. For your response to this interrogatory, assume the following scenario, or sequence of events.

- A. For a subclass such as parcel post, there is a projection of test year volume before rates, and that projection of TYBR volume is distributed to rate cells in proportion to the distribution of base year volume.
 - B. TYAR volume is projected on the basis of a weighted average rate increase of X percent that results from an across-the-board rate increase of the same amount.
 - C. TYAR volume is subsequently projected on the basis of a weighted average rate increase of X/3 percent; *i.e.*, the average rate increase (weighted by volume) under C is one-third the average rate increase under B. In this case, however, the average rate increase results from a substantial increase in rates for all parcels that weigh 8-70 pounds, and no increase in rates for parcels under 8 pounds.
 - D. Using your methodology to distribute test year volumes (which you describe as "the approved and generally accepted methodology"), the total volume of parcels in the rate cells for 8-70 pounds is somewhat greater under C than B. That is, comparing C to B, substantially higher rates for parcels 8-70 pounds results in higher volume and a corresponding higher estimate of revenue, despite the sharply higher rates proposed for such parcels in C.
- a. Please refer to your response to CTC/USPS-T37-6 and explain whether such a result, higher volume resulting from higher rates, strikes you as counter-intuitive, or perhaps even as anomalous.
 - b. Under circumstances such as those described here, please explain whether you would recommend reviewing and possibly changing "the accepted and approved methodology" in favor of an alternative methodology that does not yield results such as those described here.

Response:

- a. Please refer to my response to FGFS/USPS-T37-13c, in which I discuss the difficulty of knowing the mailing patterns associated with any particular group of mailers, and the factors – both price and non-price – that inform their decision to continue using the Postal Service's Parcel Post service for each of their individual weight and zone combinations. I lack information regarding the nature of customers who ship *only* parcels within the range of 8-70

RESPONSE OF POSTAL SERVICE WITNESS MAYES TO CTC INTERROGATORIES

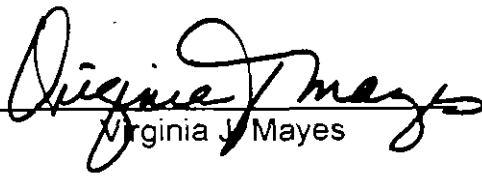
pounds, including the available alternative services and the prices of those services.

What may seem "counter-intuitive, or perhaps even ... anomalous" when viewed as a piece-by-piece shipping decision may very well be quite logical when viewed in the context of the decisions made regarding the transport of the full range of parcels shipped by that mailer given the market conditions facing the full range of parcel sizes and destinations.

- b. No. I do not believe that sufficient information has been produced to warrant such a change.

DECLARATION

I, Virginia J. Mayes, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.


Virginia J. Mayes

Dated:

9-30-97

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

A handwritten signature in cursive script, appearing to read "Scott L. Reiter", is written over a horizontal line.

Scott L. Reiter

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
September 30, 1997