

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

POSTAL RATE AND FEE CHANGES, 2006

Docket No. R2006-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA (NAA/USPS-T7-1 - 10)
(July 10, 2006)

The United States Postal Service hereby provides the response of witness Thress to the following interrogatories of NAA, filed on June 26, 2006: NAA/USPS-T7-1 - 10.

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

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2992, FAX -5402
July 10, 2006

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-1: Please refer to page 17, lines 2-5 of your testimony. Did you receive sub-category specific volume figures from the Revenue, Pieces, and Weight Report (RPW) (for example, volume figures for Standard Enhanced Carrier Route High Density or High Density flats)?

RESPONSE:

Yes. I received RPW data for at least as fine a level of detail as presented in Attachment A of my testimony. For example, Standard Enhanced Carrier Route (ECR) volume is sub-divided into seven sub-categories in Attachment A: Automation letters, Basic letters, Basic non-letters, High Density letters, High Density non-letters, Saturation letters, and Saturation non-letters. In some cases, RPW data is available at a level of detail even finer than that shown in Attachment A, although I made no use of such detail in this case.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-2: Please refer to page 18, lines 1-6 of your testimony, and to USPS-LR-L-63, pages 21-25.

- a. Which data did you use to calculate the own-price elasticities?
- b. For Standard Enhanced Carrier Route mail, you create a single average price index for the demand equation. Witness Kiefer (USPS-T-36) recommends different price increases for each sub-category, although your volume forecasts are based on average prices for each category.
 1. Did you account for possible future variation in the volume composition of each mail class (for example, less Standard Enhanced Carrier Route Saturation volume and more Standard Enhanced Carrier Route Basic volume), and thus to variations in average prices?
 2. If so, what changes in volume composition and relative subcategory prices (for example relative Standard Enhanced Carrier Route Basic and High Density prices) did you make before forecasting future volume?
 3. If you did not account for composition changes, why not?

RESPONSE:

- a. Own-price elasticities are estimated within an econometric equation which includes the total Standard ECR mail volume per adult per Postal delivery day as its dependent variable and a series of independent variables, which are listed on page 121 of my testimony, including a fixed-weight price index for Standard ECR mail, which is shown in Table 63-5 on pages 24 – 27 of Library Reference LR-L-63.
- b. I forecast Standard ECR mail volumes at the sub-category level, so that, for example, the volume of Saturation letters is forecasted by applying the own-price elasticity for Standard ECR mail to the price of Saturation letters. In this way, differences in proposed rate changes across sub-categories are therefore accounted for in my volume forecasts.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

Step-by-step volume forecasts for Standard ECR mail are described in detail
in section II of Library Reference LR-L-66.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-3: Please refer to page 24, lines 4-10 of your testimony.

- a. When was this part of your testimony prepared?
- b. When you discuss Internet use deepening, why do you cite data for the percentage of American households with Internet access rather than the household bill payment data presented by witness Bernstein in his Table 31?
- c. Did you consider using figures from the Household Diary Survey (reported in USPS-LR-L-105 and witness Bernstein, Table 31) which detail the percentage of bills paid online by method and household? If not, why not?

RESPONSE:

- a. I do not know exactly when any specific portion of my testimony was written, but it appears that I was given the numbers which I cite in that paragraph by witness Bernstein on March 31, 2006.
- b. I do not understand your question here. My point, at page 24, lines 4-10 referenced by you in this question, is that the percentage of bills paid online has grown far faster than the percentage of households with Internet access. The “deepening” Internet use here is the increasing use of the Internet to pay bills. The numbers which I cite at page 24, line 5 (“the percentage of bills paid via the Internet rose from 3.6 percent in 2001 to 12.6 percent in 2005”) are consistent with the data presented by witness Bernstein.
- c. On page 24 of my testimony, line 5, as quoted in my response to b. above, I specifically document “the percentage of bills paid online” using Household Diary Study data as my reference. In addition, Table 9 on page 48 of my testimony presents the share of regular household bills paid, by method, in the years 1995, 2000, and 2005. Again, the source of this data is the Household Diary Study.

Prior to R2005-1, I did experiment with the possibility of including household bill-payment data as an explanatory variable in the First-Class single-piece letters equation. The results of these experiments, which were generally unfavorable,

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

are discussed in my R2005-1 testimony (USPS-T-7) at page 32, and in Library Reference LR-K-65 at pages 52 – 56.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-4: Please refer to page 49, lines 12-18 of your testimony.

a. Please refer to Table 31, page 59, and page 60, lines 1-7 of witness Bernstein's testimony, where he discusses static depth within categories of households that use the Internet for bill payments. Please reconcile Mr. Bernstein's testimony with your testimony at page 24, lines 8-10, that "...it appears to be the case that the depth of the use of the Internet to pay bills has increased dramatically between 2001 and 2005."

b. In light of the Bernstein testimony cited in (a), why do you think it appropriate to include trend variables related to increasing Internet diversion depth?

c. Why did you interact a trending variable on the coefficient of the ISP Consumption variable to model Internet diversion deepening?

d. How did you determine the magnitude of this trending variable?

RESPONSE:

a. The basis for my statement that "it appears to be the case that the depth of the use of the Internet to pay bills has increased dramatically between 2001 and 2005" (page 24, ll. 8-10) is self-evidently the data presented on line 5 of the same page. What Mr. Bernstein describes on page 60 of his testimony is the observation that the percentage of bills paid online is relatively constant over time **within the subset of mailers who pay bills online**. The percentage of households which pay at least some bills online, however, has increased dramatically over this time period, from 7.6 percent in 2001 to 24.4 percent of all households in 2005, as documented by witness Bernstein in Table 29 on page 57 of his testimony.

b. I believe that it is appropriate to include trend variables related to increasing Internet diversion depth precisely because, as shown in Table 29 of witness Bernstein's testimony, the percentage of households which pay at least some of their bills online has increased by more than 220 percent from 2001 to 2005.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

- c. As I explained in my testimony at page 26 (see especially lines 3-15), the ISP consumption variable “represent[s] an estimate of the number of Internet users over time” (p. 26, ll. 4-5). “The increasing depth of Internet use is then modeled by allowing the coefficient on the ISP variable to change over time in the demand equations presented here. This allows the impact of ISP consumption on mail volume to increase over time even if the level of ISP consumption were to reach its peak.” (p. 26, ll. 11-15)
- d. The magnitude of the trending variable is estimated econometrically.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-5: Please refer to your volume forecasting workbook, "vf_ar.xls," provided in Library Reference USPS-LR-L-66. Please refer to the worksheet "NR Mult.," which calculates the "nonrate effect multipliers" that are used in your volume forecasts.

a. Please confirm that these non-rate effect multipliers are the anti-log of the dot-product of your non-rate data and the estimated parameters from the regression you ran for each particular class of mail.

b. Given that you are forecasting based on a log-log model, why did you not find it appropriate to correct for the lognormal distribution—that is, why did you not multiply the anti-logged dot product by the anti-log of one-half of the mean-squared error of the particular regression? If you did indeed make this correction, please advise where that correction can be found in your testimony.

RESPONSE:

a. Confirmed.

b. I did not make this adjustment because my forecasts are not straight regression-line forecasts, but instead are constructed using a base-volume forecasting methodology, as outlined in Chapter IV of my testimony.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-6: What costs are included in the "Producer price index for direct-mail advertising" in your demand equation for Standard Enhanced Carrier Route mail?

RESPONSE:

The producer price index for direct-mail advertising is compiled by the Bureau of Labor Statistics (which identifies it as WPI093705NS). It is my understanding that this index is constructed from a survey of businesses which provide direct-mail advertising printing services and includes all of the costs associated with printing and mailing a piece of direct-mail advertising except for postage costs.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-7: Is it your understanding that a portion of Standard Enhanced Carrier Route mail is sent by "shared" mailings in which advertising from more than one advertiser is included in a single mailed item (examples might be shared mailings by companies such as Advo, Val-Pak, and newspaper Total Marketing Coverage mailing programs)?

RESPONSE:

Yes.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-8: In your forecasting model for Standard Enhanced Carrier Route mail, do you take into account in any way the prices charged by ECR mailers to advertisers whose advertising is included in a shared mailing?

RESPONSE:

Not explicitly. To the extent that “the prices charged by ECR mailers to advertisers whose advertising is included in a shared mailing” are a function of the price of direct-mail advertising, as defined in my response to NAA/USPS-T7-7, and the price of Standard ECR mail, these prices should be implicitly captured through these variables.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-9: Does your forecasting model for Standard Enhanced Carrier Route mail specifically take into account newspapers' usage of Standard ECR mail as part of their Total Market Coverage programs? If not, in what variable would such usage be reflected?

RESPONSE:

My forecasting models do not distinguish between different users of a particular type of mail but instead reflect the aggregate responses across all mailers to changes in the various explanatory variables which are included in my equations. So, the behavior of newspapers in their use of Standard ECR mail will be reflected in all of the variables which are included in my demand equation associated with Standard ECR mail.

RESPONSE OF POSTAL SERVICE WITNESS THRESS
TO INTERROGATORIES OF NAA

NAA/USPS-T7-10: Please refer to the USPS RPW Survey for GY2004 and to LR-J-125 (sponsored by witness Tolley for docket R2001-1), workbook vf_ar, tab "Forecast Vols", cells AG38 to AM38. Note that Tolley's 2001 forecasting model, which is the basis of your 2006 model, overestimated total ECR volume by some 3.24 billion pieces for GY2004 (roughly 10% of total ECR volume). How did you account for previous overestimation in your revised 2006 forecasting model? Have you subsequently re-estimated the 2001 model and, in so doing, generated new forecast errors for that updated model? If so, were you able to reduce the forecast error for ECR volume?

RESPONSE:

The demand equation for Standard ECR mail volume which I use in this case includes a dummy variable beginning in 2001, which explains an inadequately explained decline in Standard ECR mail volume of 8.5 percent at that time. This variable is discussed briefly in my testimony between page 119, line 19, and page 120, line 11. I have not had occasion to re-estimate the 2001 model.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with Section 12 of the Rules of Practice and Procedure.

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2992, FAX: -5402
July 10, 2006