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

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97–1

RESPONSE OF UNITED STATES POSTAL SERVICE
WITNESS DANIEL TO INTERROGATORIES OF
THE OFFICE OF THE CONSUMER ADVOCATE
(OCA/USPS–T29—4–5 AND 8-10)

The United States Postal Service hereby provides responses of witness Daniel to the following interrogatories of the Office of the Consumer Advocate: OCA/USPS–T29—4–5 and 8-10, filed on August 26, 1997. Interrogatories OCA/USPS-T29-6-7 were redirected to the Postal Service.

Each interrogatory is stated verbatim and is followed by the response, except that the interrogatory numbers preceding the questions are corrected to refer to witness Daniel's testimony number, i.e., T29.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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OCA/USPS-T29-4. Please refer to your direct testimony. At page 2 you state: "Exhibits USPS-29D and USPS-29C develop and summarize the mail processing and delivery costs of a subset of existing ECR and NPECR Basic letters that are projected to migrate to the RR and NP Automation 5-Digit categories." [footnote 5 omitted]

a. On what basis was the migration projection made? If the basis for the projection is a library reference or testimony of another witness, please give a specific citation along with your explanation.

b. You refer in footnote 5 to the models for migrating ECR and NPECR Basic developed on page 7 of Appendices I and III to your testimony Confirm that these are letters that would ordinarily be processed as Automation ECR and NPECR Basic but because they are processed at sites that do not have that capability they will be processed DBCS. If not confirmed, please explain.

c. Does the migration discussed above involve an additional sortation? If so, where are the costs for this sortation accounted for? And, if so, describe the actual operations that are performed.

RESPONSE:

a. The migration projection was made in USPS LR-H-172. It is my understanding that this migration is based on a price incentive for ECR Basic category mailers that would have the density to qualify for Regular Automation 5-Digit.

b. Not confirmed. Migrating letters are presently entered as ECR Basic and NPECR Basic categories, and are currently processed as other ECR Basic or NPECR Basic letters, not necessarily as Automation ECR, which is processed on CSBCSs or manually. The letters that would migrate presently have carrier route density and would need to be barcoded, but would not migrate to Automation ECR and Automation NPECR because they would destinate at sites where delivery point sequencing is performed on DBCS equipment.

c. The migrating mail will incur an incoming secondary sort on a DBCS as modeled in Appendices I and III pages 7 and 8.

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OCA/USPS-T29-5. At page 5 you state that "45 percent of RR letters found in non-OCR upgradable trays, which must be bundled, did not fail any [of] the physical characteristics required of OCR upgradability. For purposes of this testimony, these pieces are considered to be automation compatible . . . ." You also refer the reader to Appendix I, page 37.

a. What is the actual volume represented by this category? Please give specific references to Appendix I, page 37, or other sources.

b. Please describe in detail the actual operations that are performed with this mail. For example, does some sort of additional sortation take place to enable such mail to be made automation compatible? If so, please describe the costs involved.

c. Please refer to page 37 of Appendix I. Please spell out the acronyms MAADC, AADC, MADC and ADC, and describe the different operations involved.

RESPONSE:

a. According to USPS LR-H-105, the number of Standard A Regular letters in non-OCR upgradable trays which did not fail any of the physical characteristics of OCR upgradability is 1,674,402,834. The exact reference is filename "API_RR.XLS," worksheet name "RR Reclass," cell reference "L31."

b. Since this mail is bundled, it incurs bundle sorting costs as modeled in Appendix II. Otherwise, it is processed in the same manner as letters presented in upgradable trays.

c. MAADC is an acronym for Mixed Automated Area Distribution Center. Letters presented in trays at this level need to receive an outgoing primary sortation to sort the mail to a finer level, such as AADC, SCF, 3-Digit or 5-Digit. Since letters in MAADC trays are candidates for automated processing (either prebarcoded or upgradable) they are not bundled and therefore will not need bundle sorting. AADC is an acronym for Automated Area Distribution Center. Letters presented in trays at this level are sorted on an AADC sort scheme which is designed to sort mail to a finer level, such as SCF, 3-Digit or 5-Digit. Since letters in AADC trays are candidates for automated processing (either prebarcoded or upgradable) they are not bundled and will not need bundle sorting.

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MADC is an acronym for Mixed Area Distribution Center. Letters presented in trays at this level receive either an outgoing primary sortation or bundle sortation for a finer depth of sort, such as ADC, SCF, 3-Digit or 5-Digit.

ADC is an acronym for Area Distribution Center. Letters presented in trays at this level are sorted on an ADC sort scheme or receive bundle sortation for a finer depth of sort, such as SCF, 3-Digit or 5-Digit.

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OCA/USPS-T29-6. You state on page 5 that the average clerk and mail handler TY wage rate now has been deaveraged for Remote Encoding Center activities and non-REC activities.

a. Please describe in detail what you mean by Remote Encoding Center activities, and what they are comprised of.
b. Why was wage rate deaveraging chosen for such activities?
c. Within the scope of your testimony, what other activities have been deaveraged for wage rate purposes?
d. Does the Postal Service have plans for further deaveraging of wage rates in its cost analyses? To the extent such plans include areas outside your immediate testimony, please refer them to an appropriate witness, or to the Postal Service for an institutional response.
e. Within the scope of the operations relating to your testimony, what is the potential for obtaining deaveraged rates for all operations?
f. Within the scope of the operations relating to your testimony, are operations graded by difficulty, so that, for example, only employees within specific pay ranges and with specific job qualifications can perform those operations?

RESPONSE:

This question has been redirected to the Postal Service.

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OCA/USPS-T29-7. At page 3, final paragraph, you list various facilities (e.g., outgoing primary, automated area distribution center, etc.) in the mailstream. And at page 1 of Appendix I you use an average wage rate of $25.445 for all such facilities.

a. Does the capability exist for the Postal Service to obtain actual wage rate data for each of those facilities, and construct an average wage rate that may differ for each step in the mailstream?

b. If so, please describe how it would be obtained.

c. If not, why not?

RESPONSE:

This question has been redirected to the Postal Service.

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OCA/USPS-T29-8. Your testimony on pages 19-20 discusses the proposed rate initiative of a customer barcoding discount for Standard B machinable parcels bearing mailer-applied, postal certified barcodes. On page 22, you state that the Package Barcode System, which became fully operational in 1993, was designed with the capability to sort properly barcoded machinable parcels at rates in excess of 2800 pieces per hour. You further state:

> "Therefore, the savings generated by mailer-applied barcodes to nonpresorted machinable parcels are calculated as the cost of keying a parcel once, plus ribbon and label costs, less the cost of scanning a customer barcoded parcel once. This testimony compares the cost of pure keying and the cost of pure scanning to determine savings in connection with customer barcoding. [footnotes omitted] The costs summarized in Exhibit USPS-29E on page 6 assume that once the PBCS has applied a barcode to a keyed parcel in the primary, all other subsequent operations have the same costs regardless of whether the mailer or the Postal Service applied the barcode. The accuracy of postal-applied (keyer) barcodes versus the accuracy of mailer-applied barcodes could not be quantified at this time. It seems likely, however, that list-generated mailer-applied barcodes would be more accurate than keyer-generated barcodes, because the chance of human error is greater in the latter circumstance."

a. Where in Exhibit 29E or in your analysis generally do you account for any extra costs associated with barcoding-related errors occurring during the sortation process (e.g., inaccurately applied barcodes)? If you do take such costs into account, please describe your methodology and any quantification process you employ. If you do not, why not?

b. Confirm that in your savings analysis you assume non-barcoded parcels are keyed once. If not confirmed, please explain.

c. Upon what empirical basis is the assumption in (b) made? Is there any evidence that a certain percentage of non-barcoded parcels is keyed more than once? Describe any such evidence.

d. Confirm that you assume barcoded parcels are scanned once. If not confirmed, please explain.

e. Upon what basis is the assumption in (d) made? Is there any evidence that a certain percentage of barcoded parcels is scanned more than once? Describe any such evidence.

f. Footnote 60 on page 20 states that your testimony uses the average annual rate of 806 pieces per hour achieved in FY93 (before PBCS). Has any analysis been made of the rate under PBCS? If so, please supply it. If not, why not? And, if not, please give an estimate of the rate.

g. Your savings analysis includes "ribbon and label costs." See Table 4. Please describe the nature of the operation requiring ribbon and label costs to be considered. Also explain whether you include direct labor costs associated with ribbon and label costs, such as changing ribbons during operations, and indirect labor costs, such as procurement overhead costs, supply transportation costs, etc. Please also show how you derive ribbon/label costs of 0.5 cents.

h. Please describe all operations involved with parcels when a barcoding error occurs (e.g., an improperly applied mailer barcode, and an improperly keyed Postal Service barcode). For example, what happens to the parcels in the mailstream that are improperly barcoded?

i. How far into the mailstream do parcels go before errors are detected? Have any survey been conducted? If so, please supply them. If not, why not?

j. How many additional sortations occur with improperly barcoded parcels?

k. What are the costs of such extra sortations?

l. Is there "loop mail" in the parcel mailstream? If so, what are the causes and costs of such mail.

RESPONSE:

a. My testimony does not explicitly quantify costs associated with barcoding-related errors during the sortation process.

b. My models assume non-barcoded parcels are keyed once in the primary and are scanned in the secondary.

c. It is possible that some non-barcoded parcels are keyed more than once but this is the exception, not the rule. Specific empirical data are not available to quantify the frequency of this occurrence.

d. Not confirmed. My models assume barcoded parcels are scanned once in the primary, and many parcels are scanned at least once again in the secondary.

e. Most barcoded parcels are scanned more than once, as seen in the mail flow models in Appendix V. It is possible that some barcoded parcels are scanned more than once in the primary, but this is the exception, not the rule. Specific empirical data are not available to quantify the frequency of this occurrence.

f. There is no national average of a "keying only" rate under PBCS because the PIRS productivity for the Primary Parcel Sorting Machine includes parcels that are both keyed and scanned. Productivities for separate barcoded and nonbarcoded

mailstreams are not tracked because barcoded and non-barcoded parcels are not worked separately.

g. If a parcel does not already have a barcode, a keyer on the PSM at the BMC keys the 5-Digit ZIP Code. The Package Barcoding System (PBCS) then applies an adhesive label with the correct barcode applied. The ribbon/label cost is an estimate from engineering. Spindles of labels are normally changed at the end of a tour by maintenance and these costs are captured in the PSM piggyback factor Procurement overhead and supply transportation costs are institutional costs.

h. When detected, parcels which are improperly barcoded may be directed to a missort bin. The barcode is scratched out or the label is removed and the parcel is re-inducted to be keyed. If not detected at the BMC, the parcel will be sorted to the destination indicated by the barcode, and the the missort will likely be identified at that destination. If the missorted parcel is addressed to a delivery point outside the service area of the facility at which the missort is detected, the parcel may be sent back to the BMC. If the missorted parcel is addressed to a delivery point within the service area, it may be resorted manually.

i. Errors may be detected at any time from the first pass at the BMC to carrier distribution. To the best of my knowledge, no statistically representative survey has been conducted on missorts. BMCs are able to locally track how much mail is directed to the missort bin for diagnostic purposes.

j. The number of additional sortations can vary with improperly barcoded parcels.

k. The cost of such extra sortations would vary depending on when the missort was detected.

l. One example of how "loop mail" could occur is if the barcode is not completely obliterated and the parcel keeps being directed to the wrong address and sent back to the BMC. The costs of loop mail cannot be quantified because there are no data on the possible trails loop mail may follow.

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OCA/USPS-T29-9. *What is the error rate associated with improperly applied mailer* barcodes, and, separately, Postal Service applied barcodes?

a. You suggest that the comparative accuracies cannot be quantified at this time. See page 20, lines 13-14. Please confirm. If not confirmed, please explain.
b. In reference to (a), why cannot they be quantified at this time?
c. When was the most recent study of these error rates conducted?
d. What was the result of any such study?
e. Please supply all studies and reports relating to the error rates discussed herein. Include reports generated by the Postal Service internally, by its consultants, or by outside entities such as GAO.
f. Please supply all correspondence to mailers or groups of mailers (such as trade associations) relating to such error rates.

RESPONSE:

To the best of my knowledge, current data are not available on error rates associated with improperly applied mailer barcodes, and, separately, Postal Service applied barcodes on Standard B parcels.

a. Confirmed that relative accuracy of mailer-applied versus postal-applied barcodes cannot be quantified at this time.

b. Error rates are not usually tracked separately for mailer-applied versus postal-applied barcodes. Mechanisms exist to monitor keyer accuracy or to identify situations in which too many parcels are being directed to the missort bin. Tests of barcode accuracy are conducted at BMCs for diagnostic purposes only, and are not a routine function; data of this type are not tracked or rolled up.

c. To the best of my knowledge, nationally representative studies of error rates for mailer barcodes, and, separately, Postal Service applied barcodes on Standard B parcels have not conducted.

d. N/A

e. BMCs do not generate error reports to the level of detail requested in this question, *i.e.*, postal-applied versus mailer-applied barcodes.

f. I have called responsible personnel at two BMCs and at Headquarters and asked for responsive documents, and was advised that BMCs notify customers orally if

problems are detected reading those customers' prebarcoded Standard (B) parcels.

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OCA/USPS-T29-10. You state your assumption on page 20 that list-generated mailer-applied barcodes are more accurate than keyer-generated barcodes because the chance of human error is greater in the latter circumstance.

a. Please confirm. If not confirmed, please explain.
b. If confirmed, what empirical evidence do you have for such an assumption?

RESPONSE:

a.-b. In my testimony, I state that "*It seems likely, however,* that list-generated mailer applied barcodes would be more accurate than keyer-generated barcodes, because the chance of human error is greater in the latter circumstance" (emphasis added). Since no empirical evidence is available to prove this, I could not explicitly account for it in my analysis.

DECLARATION

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

SHARON DANIEL

Dated: September 9, 1997

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.

Anthony F. Alverno

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