Exhibit KE-T-1

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

Postal Rate and Fee Changes **Docket No. R2000-1**

TESTIMONY OF RICHARD E. BENTLEY ON BEHALF OF KEYSPAN ENERGY

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On Behalf of
KeySpan Energy

I. INTRODUCTION

A. Statement Of Qualifications

My name is Richard E. Bentley. I am President of Marketing Designs, Inc., a marketing and consulting firm. My business address is 9133 Ermantrude Court, Vienna VA 22182.

I began my career as a market research analyst for the Postal Rate Commission in 1973 and remained there until 1979. As a member of the Officer of the Commission's technical staff (now the Office of Consumer Advocate), I testified before the Postal Rate Commission in four separate proceedings. Since leaving the Commission, I have testified before the Commission as a private consultant in every major rate case, most recently in Docket No. R97-1, and the most recent major reclassification case, Docket No. MC95-1. A more detailed account of my 20-plus years of experience as an expert witness on postal ratemaking and classification is provided as Attachment I to this testimony.

I have been President of Marketing Designs, Inc. since 1982. Marketing Designs provides specialized marketing services to retail, commercial, and industrial concerns, as well as consulting services to a select group of private clients.

I received a Bachelor of Science degree in Industrial Engineering/Operations Research from Cornell University in 1972. The following year I was awarded a Master's degree In Business Administration from Cornell's Graduate School of Business and Public Administration. I am a member of Tau Beta Pi and Alpha Pi Mu engineering honor societies.

B. Purpose and Summary Of Testimony

The purpose of my testimony on behalf of KeySpan Energy ("KeySpan") is to analyze and critique the Postal Service's proposal to disaggregate the costs of counting, rating, and billing for Qualified Business Reply Mail ("QBRM") received in high volumes,

to develop independent costs of QBRM received in high and low volumes, and to present KeySpan's alternative rate proposals for those services. In addition, I develop the appropriate rate for the First-Class delivery service that QBRM recipients receive.

This is the third time in as many cases that the Postal Service has come to the Commission with a proposal to establish fair and equitable fees for business reply mail (BRM). In Docket Nos. R94-1 and R97-1, the Postal Service's proposals were either ill prepared, improperly supported, or untenable. The results in both those cases have caused some well-deserved embarrassment to the Postal Service. First, its proposal in Docket No. R94-1 to triple the BRM per piece fee, from 2 to 6 cents, was thrown out by the Commission because the underlying cost study was so tenuous that it was stricken from the record. In R97-1, the Board of Governors ultimately rejected the Postal Service's own Prepaid Reply Mail (PRM) proposal after the Commission had recommended approval of PRM *exactly as the Service had proposed it*. As a result of the Governors' action, the per piece fee paid by potential high volume PRM recipients such as KeySpan was increased from zero to 5 cents.

Unfortunately, the Postal Service's Qualified Business Reply Mail (QBRM) fee presentation in this case continues its recent pattern. In June 1998, when the Board of Governors rejected PRM, the Governors directed the Postal Service to "explore further such matters as the extent to which reply mail volume should influence fees charged to different recipients."[1] The Service had some 18-months before its filing in this case during which to study and deliberate the issues raised by the Governors' directive. While the Service has presented an appropriate *framework* for a rate structure that is unquestionably fairer to high volume QBRM recipients, the 3-cent per piece fee proposed by the Service is much higher than this very efficient, low cost QBRM reply mail should pay.

Despite knowing that it was necessary to find out how volume levels affected QBRM counting costs, USPS witness Campbell "was unable to conduct" such a study. *See* TR 14/6014-15. Without the benefit of reliable, relevant data on the cost of counting QBRM received in high volumes, he made unreasonable assumptions about

[1] Decision of the Governors Of The United States Postal Service On The Recommended Decisions Of The Postal Rate Commission On Prepaid Reply Mail And Courtesy Envelope Mail, Docket No. R97-1, issued June 29, 1998, at 3.

the counting methods for QBRM received in high versus low volumes. These unsupported assumptions led him to calculate a high volume per piece fee cost which, simply put, makes no sense. For example, the Postal Service's cost presentation here suggests that it costs almost four *times* as much to count uniform, prebarcoded automation-compatible letters, as it does to count non-uniform, bulky, small packages. I submit that such a result is illogical on its face and should not be accepted by the Commission.[2]

USPS witness Campbell's basic idea of establishing separate QBRM fee structures for high and low volume recipients is an excellent starting point for improving the relationship between the fees charged and the costs incurred for high and low volume QBRM recipients. This rate structure is very similar to the rate structure recently approved by the Commission for nonletter-size BRM.

Using Mr. Campbell's basic rate structure, I have developed fees for high and low volume QBRM that make more sense and are based on highly relevant new information about the QBRM market and QBRM counting methods that witnesses Campbell and Mayo apparently did not consider at the time their testimonies were prepared.

In this case, the Postal Service proposes per piece fees of 3 cents for high volume QBRM and 6 cents for low volume QBRM. In my opinion, these fees are much too high because they are based on a flawed cost analysis. My cost analyses indicate that the high volume and low volume QBRM per piece fees should be .5 cents and 4.5 cents, respectively.

I also examined the Postal Service's analysis of the cost savings attributable to the prebarcode feature of QBRM letters. USPS witness Mayo recommends a 1-ounce First-Class rate of 31 cents for QBRM based on Mr. Campbell's reported cost savings of 3.4 cents. My derived 5.2-cent QBRM unit cost savings is significantly higher. As a result, I propose a slightly lower QBRM First-Class rate of 30.5 cents.

[2] I also find it remarkable that such a result did not "concern" Ms. Mayo, the Postal Service's pricing witness. See TR 14/5566-68, 5653.

Table 1 compares KeySpan's recommended QBRM fees with those proposed by the Postal Service.

Table 1

Comparison Of USPS And KeySpan Proposed QBRM Fees
(Cents)

Fee Category	USPS	KeySpan
QBRM First-Class Rate	31.0	30.5
QBRM High Volume		
Per Piece Fee	3.0	0.5
Annual Fixed Fee	$3,400	$12,000
QBRM Low Volume		
Per Piece Fee	6.0	4.5

I should note that the Postal Service's fixed accounting fee for high volume recipients would be collected in quarterly installments of $850. In contrast, KeySpan proposes to collect the accounting fee in monthly installments of $1,000.

The final section of my testimony focuses upon the Postal Service's QBRM volume estimates as well as its projection for the total number of QBRM recipients likely to take advantage of the newly proposed QBRM fee category. The Postal Service failed to perform any market studies. However, data available to, but not used by, USPS witness Mayo clearly indicates that she has significantly understated QBRM volumes that are likely to be received by high volume recipients, and artificially overstated the potential number of high volume QBRM recipients.

II. THE CURRENT QBRM FEE NEEDS TO BE OVERHAULED

QBRM recipients pay for the processing of QBRM through distribution, transportation and final delivery in the QBRM First-Class rate. The additional QBRM fees are intended to recover the costs associated with counting, rating, and billing this mail. Currently, the 5-cent QBRM per piece fee recovers the cost of all these functions, even though these costs generally do not vary with volume.

A. QBRM Received In High Volumes Deserves A Rate That Better Reflects Relevant Costs

There no longer is any serious question whether the current, one-rate-fits-all approach to QBRM per piece fee is inequitable and needs fixing. In Docket No. R97-1, the Service attempted, through its PRM proposal, to eliminate the per piece fee for high volume Business Reply Mail Accounting System (BRMAS) BRM recipients who could perform their own counting, rating and billing functions efficiently, subject to appropriate audit procedures. Although the Governors took the unprecedented step of rejecting the Postal Service's own PRM proposal after the Commission approved it,[3] they recognized that a single QBRM rate was not equitable and directed the Service to study the matter further. The final result of the Governors' rejection of PRM was very damaging to QBRM mailers who would have qualified for the PRM service.[4]

In sum, the time for reform of the BRM fee structure is long overdue.

B. The Basic QBRM Fee Structure Proposed By The Postal Service Provides An Appropriate Framework For Revising QBRM Rates

The functions of counting, rating, and billing QBRM can be performed using various manual and automated processing techniques. The current QBRM fee structure lumps all of these functions together and recoups the costs by means of a per piece fee that is the same regardless of the volume of QBRM recipients receive. Such a fee structure implies that all QBRM processing costs are variable in nature, a notion that USPS witness Campbell convincingly rejects. For example, while the costs of counting QBRM *can* be variable in nature, the costs for performing the accounting functions of rating and billing are not. Once a final count is completed, the QBRM accounting costs, largely clerical in nature, are essentially the same whether an account receives 1 piece, 1,000 pieces, or 10,000 pieces at a time. *See* USPS-T-29 at 14.

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[3] When the Governors took this extraordinary step, they also accepted the Commission's 5-cent QBRM fee for BRM recipients who did not want to avail themselves of PRM service. The 5-cent fee was based on a cost analysis that immediately became outdated as soon as PRM was rejected. That is, the underlying 4.5-cent cost upon which the 5-cent fee was based excluded the low-cost 287 million pieces that the Commission assumed would shift to the PRM category. As a result, the 4.5-Cent unit cost is overstated, notwithstanding USPS witness Fronk's misinformed testimony to the contrary. See TR 12/4837-40.

[4] Instead of paying 30 cents for each QBRM reply letter received plus a fixed monthly fee, companies like KeySpan were forced to pay 35 cents, a full 5 cents more. The additional 5-cent fee amounts to well over half a million dollars of additional postage per year for KeySpan.

Counting QBRM is necessary to accommodate the rating and billing function, but the procedures employed and resulting costs vary depending on volumes of reply pieces counted. When volumes received by a particular recipient are low, postal clerks might simply hand count each piece in order to obtain the count. When a recipient receives high volumes, however, there are several other methods of counting QBRM that can significantly reduce the cost of counting. These other methods include use of weight conversion techniques, special counting machines, BRMAS[5] counts, and end-of-run (EOR) counts from barcode sorters.

Recognizing that there are differences between processing QBRM received in high and low volumes,[6] USPS witness Campbell correctly concluded that the key to developing an equitable rate structure lay in establishing separate per piece charges for high volume and low volume recipients. For recipients who receive smaller volumes, he proposed to retain the current QBRM per piece fee structure that recovers costs, both variable and fixed, associated with all the counting, rating, and billing functions in one fee. For recipients who receive high volumes, he proposed to establish two fees. The first, a fixed quarterly fee, is intended to recover the fixed costs associated with the rating and billing functions. The second, separate per piece fee should be established to recover the variable costs of counting QBRM in high volumes.

The fee structure for high volume QBRM enables the Postal Service to meet two important goals. First, it allows the Postal Service to offer a per piece fee that better reflects the more efficient methodologies for counting QBRM. Second, the new fee structure allows total fee revenues to track more closely the costs that are incurred. Such a rate structure is inherently more equitable because it reduces the forced cross subsidization of low volume recipients by high volume recipients that occurs under the current one-fee-fits-all structure.

I fully agree with this proposal and urge the Commission to provide high volume QBRM recipients the option of paying a fixed fee to cover the non-volume variable costs

[5] The Business Reply Mail Accounting System (BRMAS) also automates all of the QBRM functions, i.e., counting, rating and billing.

[6] Mr. Campbell proposes two separate per piece fees for "high" volume and "low" volume QBRM, but then did not attempt to study the possible differences in the manner in which each is counted. The absurdity of this shortcoming is discussed in further detail in Section IV of my testimony, as well as Exhibit KE-1E.

of rating and billing. Variable counting costs can then be collected through a QBRM per piece fee that reflects the efficient operating characteristics of high volume recipients.

C. The Per Piece Fee For High Volume QBRM Should Reflect Only The Function Of Counting

Once the accounting costs of rating and billing are recovered through a periodic fixed fee, the only remaining special QBRM function is counting. All other upstream and downstream operations, up to final distribution to the recipient and delivery, are included in the First-Class QBRM postage rate paid.[7]

But the Postal Service's costing analysis for high volume QBRM includes more than just the cost of counting. The Service's cost presentation does so because USPS witness Campbell used a 951 pieces per hour ("PPH") productivity factor from R90-1 to derive his costs for manual counting. That productivity factor combined both manual counting and manual sortation costs. To avoid double counting of sortation costs, witness Campbell attempted to subtract out the sorting costs of an automated operation for a portion of those pieces. *See* TR 14/5959-60, USPS-T-29 at 16. What he is left with is not a cost for counting, but the cost for "counting and sorting above and beyond" that which is required for First-Class Basic Automation letters. In sum, using the old 951 PPH productivity factor unnecessarily overcomplicates what should have been a simple disaggregation of functions.

The Postal Service's Commission-approved rate structure for nonletter-sized BRM provides guidance on the proper design of the rates for high volume QBRM. As the Postal Service has proposed here for high volume QBRM, there are two fees for high volume nonletter-size BRM. The first fee recovers the fixed costs of rating and billing. The second fee, 1 cent per piece, reflects only the cost of *counting* pieces. *See* TR 14/5973, TR 14/6149. Thus, in determining the appropriate per piece fee for QBRM received in high volumes, the Commission need only look to the newly established category for nonletter-size BRM for guidance. The per piece fee should recover just the costs for counting (and not sorting) high volume QBRM.

[7] Past PRC opinions consistently maintain that BRM service includes counting, rating and billing. There is no mention of any sorting that is included as part of this service. *See* TR 14/6124, 6128.

D. The Monthly Fixed Fees Should Recover Relevant Accounting Costs And Establish An Appropriate "Breakeven" Volume.

USPS Witness Campbell provides witness Mayo with a $232 per month per account cost estimate for performing QBRM accounting functions. USPS witness Mayo applies a 2.5% contingency factor and marks up this cost figure by $45 to arrive at a quarterly fixed fee of $850. *See* TR 14/5569-70.

The relationship between the per piece fee for low volume QBRM and the per piece fee and the fixed quarterly accounting fee for high volume QBRM establishes the implicit breakeven volume. In the Postal Service's proposal, that volume is 113,000 pieces per year. Ideally, the breakeven volume should be set at a level where the Postal Service is reasonably confident that anticipated cost savings will in fact be achieved.

I accept witness Campbell's analysis of the accounting costs associated with high volume QBRM. However, for reasons stated below, I disagree with the quarterly fee proposed by witness Mayo.

III. KEYSPAN'S PROPOSED QBRM FEES

A. Per Piece Fee for QBRM Received in High Volumes

USPS witness Campbell identifies five methods that are used for counting QBRM:

- BRMAS
- end-of-run (EOR)
- special counting machines (SCM)
- weighing techniques
- manual counts

Mr. Campbell correctly excludes costs associated with obtaining BRMAS and EOR counts because QBRM pieces are counted automatically as part of the sortation process, the cost of which is recovered by the First-Class rate. However, he inexplicably lumps together the percentages of QBRM letters counted by special counting machines (10.4%) and weight conversion techniques (8.9%) with the percentage he believes are counted by hand (47.2%). For manual counts, Mr. Campbell does not know the productivity. *See* TR 14/5971-72. Therefore, he resorts to

use of the 951 PPH manual combined productivity for counting **and sorting** BRM developed in connection with the Docket No. R90-1 BRMAS BRM study. Utilizing the 951 PPH, he then computes the unit cost for counting **and sorting** QBRM but subtracts out only a portion of those sorting costs. The result is a unit cost for counting and "premium sorting" QBRM.[8]

In contrast to Mr. Campbell's cost presentation, my method for deriving the unit cost for high volume QBRM is much more straightforward. First, I derived an estimated cost for hand counting QBRM by performing my own study with the assistance of some KeySpan employees. *See* Exhibit KE-1C. I derived a productivity factor for counting QBRM by weighing techniques in the same manner. Finally, since the volume counted by special counting machines (SCM) is so small (about 1%), I combined SCM volumes with the volumes counted using weighing techniques.

The second step for deriving the unit counting cost for high volume QBRM is to estimate the percent of volumes that are counted by each of the five methods used. The Postal Service provided me with the necessary information for the highest volume accounts. Using that data, I projected the volumes and percentages that would be counted by each of the five counting methods for all high volume QBRM pieces.[9] *See* Exhibit KE-1B. The unit cost to count high volume QBRM is only .17 cents per piece as shown in Table 2.

Table 2

Derivation Of Unit Counting Cost
For High Volume QBRM
(Cents)

Counting Method	Percent	Unit Cost
BRMAS	51.6%	0.00
EOR	28.1%	0.00
Manual	11.2%	1.50
Weighing/SCM	9.2%	0.06
Total	100%	0.17

[8] *See* TR 14/6132. As discussed above, the concept of premium sortation is contrary to previous Commission statements regarding the appropriate design of the BRM per piece fee.
[9] The percentages I derive for high volume QBRM are very different from those assumed by USPS witness Campbell.

As a check for reasonableness, I have compared my .17 cents unit cost for counting high volume QBRM to that derived by USPS witness Campbell for nonletter-size BRM also received in high volumes (.57 cents). The QBRM unit cost of .17 cents implies that QBRM letters can be counted for approximately 1/3 the unit cost of counting non letter-size BRM packages. QBRM letters are much more uniform and compact than nonletter-size packages. 10,000 letters take up 20 small trays while 10,000 small parcels occupy about 90 sacks. *See* TR 14/6200-01. Therefore, the counting cost ratio of 1 to 3 is high if anything, but certainly acceptable.

B. Monthly Fixed Fee For QBRM Received in High Volumes

For the fixed cost, I have accepted USPS witness Campbell's monthly cost estimate of $232. However, in order to establish a reasonably high breakeven volume, I recommend that the monthly fee be $1,000, an amount that far exceeds the relevant costs. Such a fee is also much greater than any markup that might be reasonably justified from application of the statutory criteria of the Act.

The reasons for my proposed $1,000 monthly fee are two-fold. First, the $1,000 per month establishes an annual breakeven volume of 300,000 pieces.[10] A reasonably high breakeven volume serves to maximize the opportunity for the Postal Service to realize cost savings from counting QBRM returned in high volumes. In this regard, my breakeven volume compares well with the proposed 200,000 minimum for PRM in Docket No. R97-1. Second, a relatively high fixed monthly accounting fee provides additional revenues for which QBRM recipients are credited. This will tend to raise the cost coverage for QBRM letters.

I also recommend a monthly fee, rather than a quarterly fee as proposed by the Postal Service, to be consistent with the fee structure already in place for nonletter-size BRM.

[10] The 4.5-cent QBRM alternative unit fee less the .5 proposed fee is 4.0 cents. 4.0 divided into the $12,000 annual fee is 300,000 pieces.

C. Per Piece Fee For QBRM Received in Low Volumes

For QBRM received in low volume, I have derived a unit cost 3.43 cents as shown in Exhibit KE-1B. This analysis accepts USPS witness Campbell's productivities and costs insofar as they relate to the accounting functions (i.e. rating and billing). However, for counting QBRM received in low quantities, I assumed the same productivities for counting by hand and by weighing techniques that were obtained from the special study I conducted for high volume QBRM.

The next step is to estimate the percent of volumes that are processed by each of the two accounting methods and each of the two counting methods. For accounting, I have generally accepted the results from Mr. Campbell's special study. For counting, I derived volume and percentage estimates for low volume QBRM, as provided in Exhibit KE-1B.

The results of this analysis are shown in Table 3. Based on this unit cost, I recommend a per piece fee of 4.5 cents for low volume QBRM, which results in a cost coverage of 131, slightly higher than the 125 proposed by USPS witness Mayo.

Table 3

Derivation Of Unit Cost
For Low Volume QBRM
(Cents)

QBRM Processing	Percent	Unit Cost
PERMITS Rating & Billing	46.0%	0.55
Manual Rating & Billing	44.4%	5.52
Manual Counting	48.0%	1.50
Weight/SCM Counting	7.6%	0.06
Total		3.43

IV. THE POSTAL SERVICE'S QBRM PER PIECE COST ANALYSIS SHOULD BE REJECTED

A. Study Design

As discussed above, the only extra QBRM function that needs to be recovered by the per piece fee is the cost for counting QBRM letters. All sorting costs, whether they occur in the incoming secondary or postage due unit, are included as part of the First-Class QBRM postage rate paid. Notwithstanding USPS witness Campbell's concession that "QBRM recipients pay for sortation down to the customer level as part of First-Class Postage" (TR 14/5972, TR 14/6140), he disagrees with that premise.

In his study design, Mr. Campbell overcomplicates a seemingly simple disaggregation of functions by incorporating more than just counting costs into the per piece cost derivation. His explanation: "The Postal Service's proposed per piece fee for QBRM letters reflects counting and sorting that occurs above and beyond that which is required for an 'Automation Basic Presort First-Class' letter. *See* TR 14/5971,73. I do not understand what sorting could possibly be relevant to QBRM processing, especially sorting that would occur "above and beyond" that which is required for basic automation letters. While USPS witness Campbell believes that "QBRM has to pay something in addition to the First-Class mail rate" in order to have it sorted to the end user (TR 14/6130), he provides no logical explanation in his testimony or interrogatory responses. *See* TR 14/6168-70. Instead, he testified, it is "implicit through" his "presentation of costs." (Id.)

Because of the similarities between his high volume QBRM proposal and the current category for nonletter-size BRM, Mr. Campbell should have measured the costs for counting (and only counting) to support his per piece fee. The underlying reasons for creating the two categories, based on the efficiency of processing and delivering large volumes to a single customer, are identical. The fee structures as well as the cost analyses underlying those fees should be similar as well.

Rather than using the straightforward method for determining per piece costs for nonletter-size BRM, Mr. Campbell utilizes a convoluted methodology that first adds in sortation costs, and subsequently removes only a portion of those costs. Given an opportunity to explain why he has proposed unit fees for QBRM and nonletter-size BRM

that are so inconsistent, Mr. Campbell leaves the record bare. His answer is simply, "The Postal Service's proposed per piece fee for QBRM letters reflects counting and sorting that occurs above and beyond that which is required for an 'Automation Basic Presort First-Class' letter." See TR 14/5973. The Commission should not accept this circular reasoning by USPS witness Campbell.

As a consequence, I urge the Commission to reject the Postal Service's methodology for supporting the high volume QBRM per piece fee.

B. Unreasonable Assumptions

The Postal Service has proposed to reduce the current 5-cent per piece fee now being charged for QBRM that is received in high volumes, while raising the fee for QBRM that is received in low volumes. The obvious reason to offer such a proposal presumably is that there are (1) different methods used to process high and low volumes, and (2) the different processing techniques result in lower costs for processing QBRM in high volumes. For example, QBRM received in high volumes is much more likely to be counted by one of several cost effective techniques, whereas QBRM received in low volumes is not.[11]

Remarkably, USPS witness Campbell rejects the above propositions and. makes the following revelations (TR 14/5931, 5963-66, 6014-17) concerning the processing of QBRM.

- He does not know the productivity or unit cost to count QBRM received in high quantities
- He does not know the productivity or unit cost to count QBRM received in low quantities
- He did not specifically study whether high volume QBRM cost less to count than low volume QBRM.
- He did not know whether high volume QBRM cost less to count than low volume QBRM.

[11] QBRM received in low volumes on any given day is counted primarily by hand, but also may be counted by EOR counts and by BRMAS. In contrast, QBRM received in high volumes on any day is counted primarily by BRMAS and EOR counts, by weight conversion, and by SCMs. There is no justification for Postal Service personnel to consistently hand count QBRM received in high volumes. If they do, QBRM recipients should not have to pay for such inefficiencies.

- He wanted to know whether high volume QBRM cost less to count than low volume QBRM, but could not perform a study because of time constraints.[12]

- He assumes that the costs for counting high and low QBRM letters are not dependent on volume and are identical.13

The last item is particularly troublesome. Not only does USPS witness Campbell concede that his assumption is unsupported[14], it is intuitively illogical to assume that (1) low and high volume QBRM are counted in the same manner, and (2) the unit costs for counting low and high volume QBRM are the same. Certainly, unit costs can be reduced when postal operations are performed for bulk volumes rather than individual pieces. The same concept is true for counting QBRM received in high volumes. If not counted by automation, it is far less expensive to weigh one or more trays of letters and estimate the total quantity through use of a weight conversion factor, rather than to hand count the letters.[15] In my own study, it took about 25 *times* longer to hand count 5,357 letters than to count those same letters by weighing them. *See* Exhibit KE-1C.

USPS witness Campbell's unsupported assumption has additional implications as well. He was asked to compare the costs of counting QBRM, which is prebarcoded, uniform and automation-compatible, to the costs of counting nonletter-size BRM, which is irregular, non-uniform, non-machinable and of varying weights and sizes. His first answer was that without a study, he did not know how shape might affect the costs for

[12] USPS witness Campbell fails to meet his own objective in this regard. Although he wanted to know if high volume QBRM costs less to count than low volume QBRM, he was "unable to conduct a study" (*see* TR 14/6015), thereby failing to achieve his objective to "come up with new and updated data" that he felt was "appropriate". *See* TR 14/6078.

[13] USPS witness Campbell effectively contradicted this assumption under cross examination. He provided percentages of volumes by counting method for several offices. For these high volume accounts, he specifically noted that the percentages provided for the office as a whole would not apply to the largest accounts shown, and that in every case where he checked with the specific office, manual counting methods were not used for the high volume accounts. See TR 14/6189.

[14] *See* TR 14/6014,16. It is difficult to understand why USPS witness Campbell failed to study possible counting method differences between high and low volume QBRM. After all, he proposes separate per piece fees for such mail and was specifically directed to study QBRM processing activities in the field. See TR 14/6071-72.

[15] At first, Mr. Campbell would not agree that it makes operational sense to count four trays of QBRM for one recipient by weighing techniques. See TR 14/6179. He later changed his mind when he was shown 3 trays of actual QBRM letters. *See* TR 14/6180 . I suggest that if a scale is available, it could never make operational sense to hand count such letters. A videotape made as part my QBRM counting study is provided as KE-LR-2. This videotape shows why hand counting of QBRM letters is an inefficient and exceedingly boring operation. Moreover, there is no guarantee of accuracy by hand counting letters compared to using a weight conversion technique.

counting BRM.[16] *See* TR 14/5933-34, 5994-96. He later modified his answer noting that he did not know *by how much* shape would affect counting costs. *Id.* Finally, when confronted, with an actual sack full of nonletter-size BRM and trays of QBRM letters, he agreed that weighing the QBRM letters would be more efficient and cost effective. (TR14/6202)

Aside from USPS witness Campbell's unsupported assumption that QBRM counting costs are unrelated to the volume received by a customer, there are several other problems with his derived costs for QBRM received in high and low volumes. A comprehensive discussion of these deficiencies is provided in Exhibit KE-1E.

C. Newly Discovered Data

The data Mr. Campbell relied upon to develop the unit cost for high volume QBRM generally characterizes QBRM processing as very inefficient.

When asked to explain why the Service manually sorts 41.6% of QBRM at a cost of 2.2 cents more than for an average Basic Automated letter, he stated that "BRM processing sites do not necessarily use the least costly method to process QBRM pieces received in high volumes. *See* TR 14/5964. When asked why the Service would adopt strict procedures for requiring QBRM to be prebarcoded, but then choose to sort 41.6% manually, he has no answer, other than "In some cases...it makes more operational sense to process QBRM using manual methods." *Id.* It is difficult, to say the least, to establish cost-based fees when the underlying premise is that the Postal Service chooses to be less efficient than it could be.

But the Postal Service may not, in fact, be quite as inefficient as USPS witness Campbell originally thought it was. Although Mr. Campbell originally claimed that he used the "best available data in my possession to project costs into the test year" (TR 14/6111), subsequently he provided more current data that indicates otherwise.

[16] Mr. Campbell's apparent reluctance to form a judgment on such an obvious matter as this should be contrasted against eagerness to conclude, without a study, that counting costs for QBRM would be the same regardless of volume. Such inconsistent application of expert judgment is troublesome.

In response to KeySpan interrogatories, Mr. Campbell provided very current volume data for the top 77 QBRM recipients. In addition, he conducted a telephone survey to ascertain the method by which these very high volume accounts are counted. Mr. Campbell is to be commended for his diligence in obtaining this important information at such a late stage in this proceeding.

The data provided by Mr. Campbell is shown on Page 2 of Exhibit KE-1D. The total volumes shown there constitute more than 50% of all QBRM volumes. Utilizing this data, I estimated the percentages by counting method for all high volume QBRM pieces. I also estimated comparable percentages for low volume QBRM using the method described in Exhibit KE-1G.

USPS witness Campbell relied on the 1997 BRM Practices Study and simply assumed that the percentages for all QBRM would apply equally to high and low volume QBRM recipients. However, the CBCIS data indicate that the picture of QBRM processing inefficiency painted by USPS witness Campbell has changed considerably. Table 4 compares the percentages of QBRM pieces that are counted by the various counting methods.

Table 4

Comparison of Percentages of QBRM Letters Counted By Various Methods From Two Data Sources

		% Of QBRM COUNTED BY:					
QBRM Category	Data Source	BRMAS	EOR	SCM	Weight	Manual	Total
High Volume QBRM	BRM Practices Study	14%	19%	10%	9%	47%	100%
	CBCIS Data System	52%	28%	1%	8%	11%	100%
Low Volume QBRM	BRM Practices Study	14%	19%	10%	9%	47%	100%
	CBCIS Data System	21%	23%	1%	7%	48%	100%
All QBRM	BRM Practices Study	14%	19%	10%	9%	47%	100%
	CBCIS Data System	44%	27%	1%	8%	20%	100%

This up-to-date QBRM customer specific information shows that for high volume QBRM recipients, (1) the very efficient BRMAS counting, rating, and billing system is much more widely used (52%) than assumed by Mr. Campbell (14%); and (2) hand counting is used much less frequently (only 11%) than the 1997 BRM Practices Study showed (47%).[17]

The CBCIS data provided by Mr. Campbell demonstrates that the 1997 BRM Practices Study data are not representative at all for high volume QBRM accounts. For this reason, the 2.0 cent unit cost derived by USPS witness Campbell for high volume QBRM is unreliable and should be rejected.

V. THE QBRM FIRST-CLASS RATE

In Docket No. R97-1 the QBRM First-Class rate of 30 cents was established. This rate is currently paid by QBRM in addition to the 5-cent QBRM per piece fee. Thus, the total charge for a QBRM letter is 35 cents.

The Postal Service measures QBRM cost savings as the difference between processing a postage prepaid handwritten addressed reply envelope and a prebarcoded QBRM letter. These savings generally reflect the additional costs incurred by handwritten addressed envelopes that must be processed through the RBCS operation that reads the address and sprays on a barcode. In this proceeding, I also recommend that the Commission reflect window service cost savings as part of overall QBRM savings. Window service cost savings stem from a unique BRM feature, namely that postage is paid when the mail is delivered rather than when sent.

My detailed analysis of the QBRM cost savings is provided in Exhibit KE-1A and Table 5 summarizes my proposed QBRM unit cost savings.

[17] Mr. Campbell's derived unit cost for high volume QBRM is based on a 67% manual counting percentage since he combined the percentages for SCM and weighing with manual counting.

Table 5

QBRM Cost Savings
(Cents)

Type of Mail	Mail Processing Unit Cost	Window Service Unit Cost	Total Unit Cost
Handwritten Addressed	9.0	1.6	10.6
Less: QBRM	5.5	-	5.5
QBRM Savings	3.6	1.6	5.2

A. Prebarcode Cost Savings

USPS witness Campbell estimates that QBRM cost savings will be reduced from 4.0 cents, estimated in Docket No. R97-1, to 3.4 cents. Apparently, the cost reductions anticipated by more efficient RBCS operations more than offset the 11% increase in labor rates between the test years in Docket No. R97-1 and this case. My analogous unit derived cost savings is 3.6 cents. I have adopted USPS witness Campbell's methodology except for two modifications. First, I use the Commission's cost methodology for attributing costs, rather than the Postal Service's proposed methodology.

Second, I use a much more stable Cost and Revenue Analysis (CRA) proportional adjustment factor than USPS witness Campbell does. To "tie" the cost model-derived unit costs to the CRA cost data system, Mr. Campbell uses a CRA proportional adjustment factor derived for non-automation presort costs. His reasoning is that the mail flow for non-automation presort letters closely resembles that of single piece, and that QBRM and handwritten letters are both part of the single piece mailstream. *See* TR 14/6004. While I don't necessarily agree with USPS witness Campbell's premise, the choice of the CRA proportional adjustment factor is not all that relevant to the specific type of mail being studied.

The CRA proportional adjustment factor measures how well the mail flow model simulates the true cost. If the models are reliable and consistent, then the CRA proportional adjustment factors for the various categories of letters should be somewhat similar. For example, if a model consistently omits certain real-world costs, then the

mail flow model-derived unit costs should be consistently low. In Library Reference MMA-LR-1, I have computed several CRA proportional adjustment factors for First-Class presorted mail categories that vary from 1.143 to 1.190. I believe the most reliable CRA proportional adjustment factor, which reflects the overall accuracy of the mail flow cost models, is the one computed for all presort letters. Therefore, I have used 1.19 as the CRA proportional adjustment factor in my derivation of QBRM cost savings resulting from prebarcoding.

B. Window Service Cost Savings

The Postal Service presently spends hundreds of millions of dollars to offer window service to First-Class mailers. Per originating First-Class letter, this works out to be 1.6 cents. Window service is necessary to allow customers to purchase stamps and to serve as an outlet for mailing letters and packages. While mailers of handwritten addressed reply envelopes have a genuine reason to stand in line in order to talk to a postal window clerk, mailers of QBRM do not. *See* TR 14/6038. Therefore, I have credited QBRM letters with additional savings due solely because of the non-prepaid nature of this mail.

VI. PROJECTED QBRM HIGH VOLUME RECIPIENTS AND PIECES

USPS witness Mayo projected total letters qualifying for the QBRM high volume fee by using a very imprecise method. Her methodology assumes that every high volume QBRM recipient will receive exactly the "breakeven" volume of 113,000 pieces per year. Such an assumption is not reasonable since certainly there will be recipients that will receive much higher volumes than the "breakeven" volume. Moreover, rational QBRM recipients will not pay a fixed quarterly fee unless they are fairly confident that they will receive significantly more pieces than the "breakeven" volume. Accordingly, the Commission should find that her recommended number of 1,358 qualifying QBRM recipients is much too high.[18]

[18] According to the recent data provided by USPS witness Campbell, the two largest QBRM recipients account for 95 million pieces. This information alone reduces Ms. Mayo's projected high volume QBRM estimate from 154 to 59 million pieces. Therefore, using her methodology, the maximum number of remaining high volume recipients can be no higher than. 522 (59 million pieces divided by 113,000 pieces = 522 potential high volume QBRM recipients). Ms. Mayo's unrealistic estimate of 1,358 qualifying high volume recipients must be rejected.

Ms. Mayo's methodology for estimating the number of QBRM pieces likely to pay the high volume per piece fee is flawed for similar reasons. She simply assumed that one-third of total volumes would qualify, which is similar to the figure the Postal Service proposed for PRM in Docket No. R97-1. While such an assumption might be adequate when no other data is available, this is not the situation here. It simply lacks support. Therefore, I recommend that the Commission similarly reject USPS witness Mayo's QBRM total volume estimate of 154 million pieces.

Library Reference KE-LR-1 provides current QBRM data by account for almost all of the large accounts. As shown, there are 288 recipients who have either received more than 300,000 pieces in the past 12 months, or in FY 99. Since this might not include every single account, I have rounded this figure up to 300.[19] This is a much more reasonable estimate than USPS witness Mayo's guess. Using the CBCIS data, the average volume received by the 1300th largest recipient is less than 50,000 per year. Such recipients would never pay the $850 quarterly fee under the Postal Service's proposal.

A similar situation occurs with total high volume QBRM pieces received. During oral cross examination, USPS witness Mayo was shown that just the top 75 accounts received 183 million pieces. This is already 29 million more pieces than her 154-million piece estimate, yet she felt no compunction to modify her proposal. *See* TR 14/5643. Library Reference KE-LR-1 shows that the top 288 accounts received 342 million pieces during a recent 12-month period. Therefore, I have rounded this figure up to 345 million pieces as an estimate for the test year.

As shown in Exhibit KE-1F, my QBRM proposal will result in a reduced contribution to institutional costs compared to the Postal Service's proposal. But this difference is only $922,000. I view this as inconsequential.

VII. CONCLUSION

In this proceeding, the Postal Service has made an innovative proposal to disaggregate the fees for high and low volume QBRM recipients and to create a well thought out two part rate structure for QBRM received in high volumes. Unfortunately,

[19] The CBCIS system accounts for over 90% of the QBRM universe. *See* TR 14/5620.

however, the Service's cost and fee presentations for QBRM continues an all too familiar pattern of proposals that are based largely on incomplete or out-of-date information and resort to unreasonable assumptions regarding real world operations and costs for processing QBRM. In this case, that unfortunate situation is compounded by the Service's suggestion that the Commission should establish QBRM per piece fees under an assumption that the majority of all QBRM, low and high volumes alike, will be processed using obviously inefficient manual methods. The Commission should refuse to reward the Service's inefficiency with higher QBRM fees. The Commission should reject the Postal Service's presentations outright and take this opportunity to send a strong message that inefficient operations will not be tolerated.

Fortunately, in this case the Commission can disregard the Postal Service's unreliable cost presentation and set more reasonable QBRM fees based on newly discovered QBRM volume data and up-to-date information that USPS witness Campbell obtained. That new information shows that high volume QBRM provides significant cost savings to the Postal Service and supports the establishment of a separate fee structure for high volume QBRM. In addition, it shows that the Postal Service has significantly overstated the unit costs for counting high volume QBRM.

For these reasons, I urge the Commission to adopt a monthly fee of $1,000 and a per piece fee of .5 cents for high volume QBRM. Because the new data also indicates that the Service has overstated the cost of processing low volume QBRM, I recommend a 4.5-cent per piece fee for such pieces. Given these fee levels, the minimum breakeven volume for high volume QBRM will be at 300,000 pieces per year and I project approximately 300 recipients will switch to the new QBRM fee category.

QUALIFICATIONS OF RICHARD BENTLEY

Richard Bentley is president of Marketing Designs, Inc., a marketing and consulting firm.

Mr. Bentley began his career as a market research analyst for the Postal Rate Commission in 1973 and remained until 1979. As a member of the Officer of the Commission's technical staff (now Office of the Consumer Advocate) his responsibilities included analysis of USPS costs, volumes, rates and operations. As a witness on behalf of the Officer of the Commission, Mr. Bentley testified before the Postal Rate Commission in five separate proceedings. In Docket No. MC73-1, Mr. Bentley filed rebuttal testimony concerning the Postal Service's bound printed matter proposal.

In Docket Nos. MC76-1 and MC76-3, Mr. Bentley testified on changes proposed by the Officer of the Commission to the Domestic Mail Classification Schedule. Those changes concerned proposals to establish local First-Class rates and to eliminate third-class single piece as a separate subclass. With regard to the latter, it is interesting to note that 20 years later, the Commission has eliminated this subclass as one of its recommendations in Docket No. R97-1.

In Docket No. R77-1, Mr. Bentley presented proposed rates for all classes of mail and services, including the projected volumes that would result from those rates. He also analyzed the rates proposed by the Postal Service and critiqued the volume projections presented in support of its proposals.

In Docket No. MC78-1, the Postal Service proposed to restructure parcel post rates by asking the Commission to establish new rates for parcel post mailed in bulk and for a parcel post nonmachinable surcharge. Mr. Bentley presented two pieces of testimony in that docket--one concerned with the rate aspects of the Postal Service's proposal and one concerned with the parcel post volume projections.

In 1979, Mr. Bentley left the Postal Rate Commission to become a senior program engineer for Systems Consultants, Inc. (which became Syscon Corporation and is not part of Logicon), a national consulting firm. There, Mr. Bentley's responsibilities included the analysis and estimation of life cycle costs required to research, develop, manufacture, and maintain various weapon system programs for the Department of Defense. He developed cost estimating relationships and completed a computerized model for estimating future weapon system program costs.

In addition, Mr. Bentley testified before the Postal rate Commission in Docket No. R80-1 concerning presorted First-Class mail rates and second-class within county rates.

After leaving Syscon in 1981, Mr. Bentley started his own company, Marketing Designs, Inc., which provides specialized marketing services to various retail, commercial, and industrial concerns as well as consulting services to a select group of clients.

In Docket No. R84-1, Mr. Bentley testified on behalf of the Council of Public Utility Mailers and the American Retail Federation in favor of an increased

First-Class presort discount. At that time Mr. Bentley presented a methodology for estimating cost differences between processing First-Class single piece and presorted letters that eventually become the foundation for the Commission's "Appendix F" methodology for supporting First-Class presorted discounts.

In Docket No. C86-3, Mr. Bentley testified on behalf of Roadway Package System concerning a proposed special rate increase for parcel post. In Docket Nos. R87-1 and R90-1, Mr. Bentley testified on behalf of the Council of Public Utility Mailers, the National Retail Federation, Brooklyn Union Gas, and other First-Class mailers. Mr. Bentley recommended and supported various rate discount proposals for presorted First-Class mail, and a lower fee for "BRMAS" business reply mail.

In Docket No. R94-1, Mr. Bentley testified on behalf of Major Mailers Association with respect to several issues that concerned First-Class rates. These included the relationship between the proposed cost coverages for First and third class, the rates for First-Class incremental ounces, prior year losses, and the Postal Service's changes to the Commission's city delivery carrier out-of-office cost methodology. In addition, Mr. Bentley worked on behalf of Brooklyn Union Gas to have the Postal Service's proposed tripling of the "BRMAS" BRM fee rejected, although he did not file any formal testimony.

In Docket Nos. MC95-1 and MC96-3, Mr. Bentley again represented Major Mailers Association. In Docket No. MC95-1 he endorsed the overall classification concept proposed by the Postal Service for First-Class Mail and suggested that the First-Class second and third ounce rate be reduced for letter-

shaped pieces. In Docket No. MC96-3, Mr. Bentley compared the attributable costing approaches between the Postal Service and Commission and asked that the Commission require the Postal Service to provide the impact of proposed changes utilizing established attributable cost methodologies. This testimony was the impetus for Docket No. RM97-1 and resulted in the Commission amending Rule 54(a)(1) to require the Postal Service to make such a cost presentation.

In the last omnibus rate case, Mr. Bentley represented both Major Mailers Association and the Brooklyn Union Gas Company with two separate pieces of testimony. For Major Mailers, he recommended that the Commission reject the Postal Service's newly proposed cost attribution methodology, increase First-Class discounts and offer a reduced rate for 2-ounce First-Class letters. For Brooklyn Union, he endorsed the Postal Service's Prepaid Reply Mail concept, but asked the Commission to alter it slightly with two modifications.

In 1972, Mr. Bentley received a Bachelor of Science degree in Industrial Engineering/Operations Research from Cornell University. The following year Mr. Bentley was awarded a Master's degree in Business Administration from Cornell's graduate School of Business and Public Administration (now the Johnson Graduate School of Management). Mr. Bentley is a member of Tau Beta Pi and Alpha Pi Mu Engineering Honor Societies.

Exhibit KE-1A

Derivation of the Unit Cost Savings For QBRM Letters

Cost Avoidance Calculation for QBRM Discount

CRA Proportional Adjustment			1.190	[1]
	Model Cost		**Total Worksharing Related Unit Cost**	
HANDWRITTEN	7.595	[2]	9.039	[3]
QBRM	4.587	[4]	5.459	[5]
Processing Cost Avoidance			3.580	[6]
Window Service Savings			1.619	[7]
Stamp Printing Costs ($000)	$ 209,827	[8]		
TY First-Class Volume	52,877,658	[9]		
Avoided Unit Stamp Printing Cost			0.004	[10]
Total QBRM Savings			5.199	[11]

[1] See LR-MMA-1A, CRA PROP ADJ (ALL PRESORT) spreadsheet (page 8)
[2] See L-2 (handwritten cost sheet)
[3] [1] * [2]
[4] See L-3 (QBRM cost sheet)
[5] [1] * [4]
[6] [3] - [5]
[7] Response to MMA-T28-13 (Inst) for single piece letters
[8] KE/USPS-T29-52
[9] Exhibit MMA-1B at 1A
[10] [8] / [9]
[11] [6] + [7] + [8]

HANDWRITTEN
COST SHEET

Entry Activities	(1) TPH	(2) Pieces Per Hour	(3) Wage Rate	(4) Direct Cents Per Piece	(5) Piggyback Factor	(6) Premium Pay Factor	(7) Premium Pay Adjust	(8) Total Cents Per Piece	(9) Weighted Cents Per Piece
Bundle Sorting	10,000	---	---	---	---	---	---	0.0000	0.0000
Outgoing RBCS									
ISS	375	6,854	$28.25	0.4121	2.001	1.0219	0.0090	0.8337	0.0313
RCR	10,375							0.4860	0.5042
REC	3,213	676	$17.79	2.6297	1.563	1.0219	0.0576	4.1679	1.3392
OSS	10,612	8,994	$28.25	0.3141	1.794	1.0219	0.0069	0.5703	0.6052
LMLM	1,020	3,890	$28.25	0.7260	2.722	1.0219	0.0159	1.9922	0.2033
Outgoing Primary									
Automation	186	5,740	$28.25	0.4920	2.301	1.0219	0.0108	1.1429	0.0212
Manual	599	488	$28.25	5.7829	1.360	1.0219	0.1268	7.9915	0.4788
Outgoing Secondary									
Automation	2,081	8,340	$28.25	0.3387	2.274	1.0219	0.0074	0.7775	0.1618
Manual	198	479	$28.25	5.8920	1.360	1.0219	0.1292	8.1423	0.1610
Incoming RBCS									
ISS	0	4,374	$28.25	0.6457	2.001	1.0219	0.0142	1.3062	0.0000
RCR	0							0.4860	0.0000
REC	0	676	$17.79	2.6297	1.563	1.0219	0.0576	4.1679	0.0000
OSS	0	8,134	$28.25	0.3472	1.658	1.0219	0.0076	0.5832	0.0000
LMLM	0	3,890	$28.25	0.7260	2.722	1.0219	0.0159	1.9922	0.0000
Incoming MMP									
Automation AADC	1,929	5,576	$28.25	0.5066	2.189	1.0219	0.0111	1.1200	0.2160
Manual ADC	345	604	$28.25	4.6763	1.360	1.0219	0.1025	6.4623	0.2229
Incoming SCF/Primary									
Automation	4,567	5,908	$28.25	0.4781	2.062	1.0219	0.0105	0.9963	0.4550
Manual	452	641	$28.25	4.4051	1.360	1.0219	0.0966	6.0875	0.2750
5-Digit Barcode Sort	585	5,908	$28.25	0.4781	2.062	1.0219	0.0105	0.9963	0.0583
Incoming Secondaries									
Auto Carrier Route	2,548	5,224	$28.25	0.5407	2.101	1.0219	0.0119	1.1476	0.2924
Auto 3-Pass DPS	3,471	13,361	$28.25	0.2114	1.915	1.0219	0.0046	0.4095	0.1421
Auto 2-Pass DPS	11,308	8,755	$28.25	0.3226	2.328	1.0219	0.0071	0.7582	0.8574
Man Inc Sec Final At Plant	1,584	523	$28.25	5.4005	1.360	1.0219	0.1184	7.4630	1.1824
Man Inc Sec Final At DU	562	1,155	$28.25	2.4465	1.360	1.0219	0.0536	3.3809	0.1900
Box Section Sort, DPS	585	2,365	$28.25	1.1945	1.360	1.0219	0.0262	1.6507	0.0966
Box Section Sort, Other	305	1,179	$28.25	2.3952	1.360	1.0219	0.0525	3.3100	0.1009

	(10)
MODEL COST =	**7.5952**

Source: LR-I-146

15%

(1) Values From Handwritten Mail Flow Spreadsheet (L-4)
(2) Values From Productivities Spreadsheet (L-12)
(3) Values From Wage Rates Spreadsheet (L-13)
(4) [(3) * (100 cents/dollar)] / (2)
(5) Values From Piggybacks Spreadsheet (L-15)
(6) Values From Wage Rates Spreadsheet (L-13)
(7) [(6) - 1] * (4)
(8) (4) * (5) + (7)
(9) (1) * (8) / 10,000 Pieces
(10) Sum (9)

QBRM
COST SHEET

Entry Activities	(1) TPH	(2) Pieces Per Hour	(3) Wage Rate	(4) Direct Cents Per Piece	(5) Piggyback Factor	(6) Premium Pay Factor	(7) Premium Pay Adjust	(8) Total Cents Per Piece	(9) Weighted Cents Per Piece
Bundle Sorting	10,000	---	---	---	---	---	---	0.0000	0.0000
Outgoing RBCS									
ISS	0	6,854	$28.25	0.4121	2.001	1.0219	0.0090	0.8337	0.0000
RCR	0							0.4860	0.0000
REC	0	676	$17.79	2.6297	1.563	1.0219	0.0576	4.1679	0.0000
OSS	0	8,994	$28.25	0.3141	1.794	1.0219	0.0069	0.5703	0.0000
LMLM	0	3,890	$28.25	0.7260	2.722	1.0219	0.0159	1.9922	0.0000
Outgoing Primary									
Automation	10,005	5,740	$28.25	0.4920	2.301	1.0219	0.0108	1.1429	1.1435
Manual	480	488	$28.25	5.7829	1.360	1.0219	0.1268	7.9915	0.3836
Outgoing Secondary									
Automation	715	8,340	$28.25	0.3387	2.274	1.0219	0.0074	0.7775	0.0556
Manual	120	479	$28.25	5.8920	1.360	1.0219	0.1292	8.1423	0.0974
Incoming RBCS									
ISS	0	4,374	$28.25	0.6457	2.001	1.0219	0.0142	1.3062	0.0000
RCR	0							0.4860	0.0000
REC	0	676	$17.79	2.6297	1.563	1.0219	0.0576	4.1679	0.0000
OSS	0	8,134	$28.25	0.3472	1.658	1.0219	0.0076	0.5832	0.0000
LMLM	0	3,890	$28.25	0.7260	2.722	1.0219	0.0159	1.9922	0.0000
Incoming MMP									
Automation AADC	3,745	5,576	$28.25	0.5066	2.189	1.0219	0.0111	1.1200	0.4195
Manual ADC	331	604	$28.25	4.6763	1.360	1.0219	0.1025	6.4623	0.2140
Incoming SCF/Primary									
Automation	8,675	5,908	$28.25	0.4781	2.062	1.0219	0.0105	0.9963	0.8643
Manual	559	641	$28.25	4.4051	1.360	1.0219	0.0966	6.0875	0.3402
5-Digit Barcode Sort	0	5,908	$28.25	0.4781	2.062	1.0219	0.0105	0.9963	0.0000
Incoming Secondaries									
Auto Carrier Route	0	5,224	$28.25	0.5407	2.101	1.0219	0.0119	1.1476	0.0000
Auto 3-Pass DPS	0	13,361	$28.25	0.2114	1.915	1.0219	0.0046	0.4095	0.0000
Auto 2-Pass DPS	1,303	8,755	$28.25	0.3226	2.328	1.0219	0.0071	0.7582	0.0988
Man Inc Sec Final At Plant	790	523	$28.25	5.4005	1.360	1.0219	0.1184	7.4630	0.5899
Man Inc Sec Final At DU	280	1,155	$28.25	2.4465	1.360	1.0219	0.0536	3.3809	0.0948
Box Section Sort, DPS	56	2,365	$28.25	1.1945	1.360	1.0219	0.0262	1.6507	0.0092
Box Section Sort, Other	834	1,179	$28.25	2.3952	1.360	1.0219	0.0525	3.3100	0.2761

	(10)
MODEL COST =	**4.5868**

Source: LR-I-146

19%

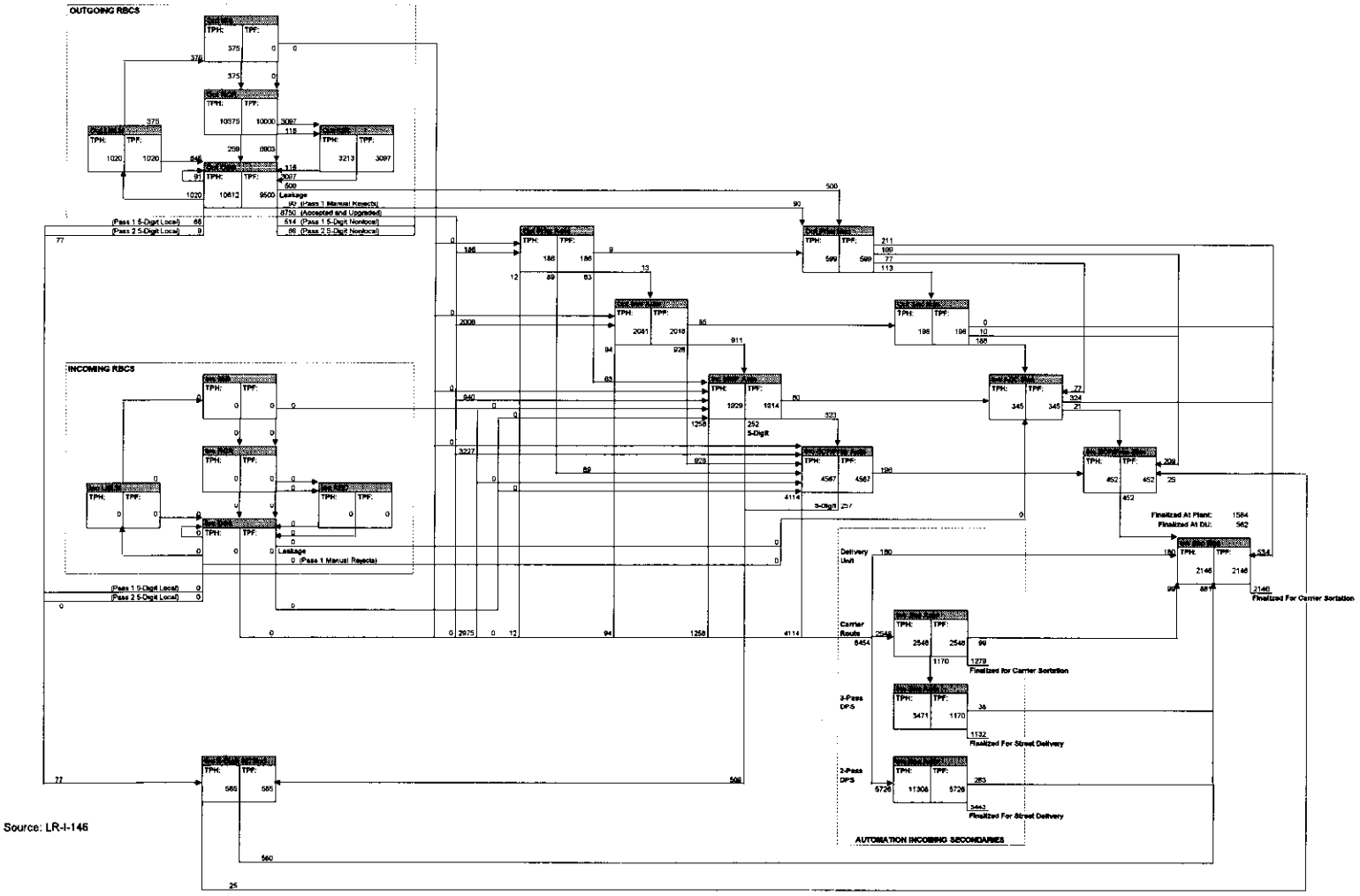
(1) Values From QBRM FLOW MODEL Spreadsheet (L-5)
(2) Values From Productivities Spreadsheet (L-12)
(3) Values From Wage Rates Spreadsheet (L-13)
(4) [(3) * (100 cents/dollar)] / (2)
(5) Values From Piggybacks Spreadsheet (L-15)
(6) Values From Wage Rates Spreadsheet (L-13)
(7) [(6) - 1] * (4)
(8) (4) * (5) + (7)
(9) (1) * (8) / 10,000 Pieces
(10) Sum (9)

HANDWRITTEN
MAIL FLOW MODEL

ENTERED = 10000 PROCESSED = 10000

ENTRY POINTS:

Out ISS	0	Inc ISS	0
Out RCR	10000	Inc MMP Auto	0
Out Prim Auto	0	Inc SCF/Prim Auto	0
Out Sec Auto	0	Inc Sec Auto	0
Out Prim Man	0	Inc ADC Man	0
Out Sec Man	0	Inc SCF/Prim Man	0
		Inc Sec Man	0



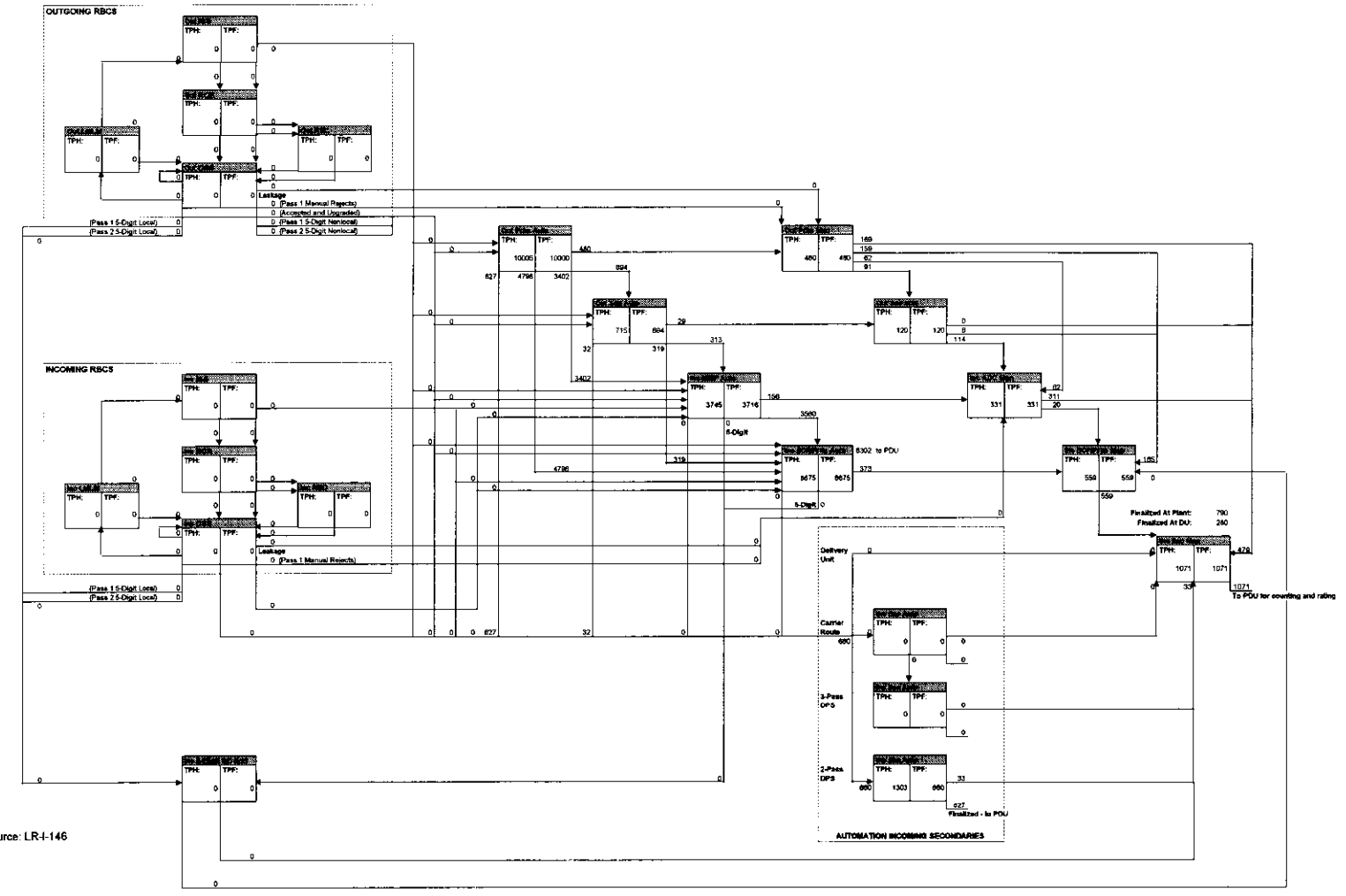
Source: LR-I-146

QBRM
MAIL FLOW MODEL

ENTERED = 10000 PROCESSED = 10000

ENTRY POINTS:

Out ISS	0	Inc ISS	0
Out RCR	0	Inc RCR Auto	0
Out Prim Auto	10000	Inc SCF/Prim Auto	0
Out Sec Auto	0	Inc Sec Auto	0
Out Prim Man	0	Inc ADC Man	0
Out Sec Man	0	Inc SCF/Prim Man	0
		Inc Sec Man	0



Source: LR-I-146

ACCEPT/UPGRADE RATES

Description	Source	FCM Sing Pc Hand
MLOCR Accept	Docket No. R97-1, USPS LR-H-130	8.36%
MLOCR Upgrade	Docket No. R97-1, USPS LR-H-130	57.42%
MPBCS OSS Accept	Docket No. R97-1, USPS LR-H-130	87.35%
MPBCS OSS Upgrade	Docket No. R97-1, USPS LR-H-130	92.99%
MPBCS OSS Errors:		
OSS Refeeds	Docket No. R97-1, USPS LR-H-130	0.96%
LMLM - ID Tag	Docket No. R97-1, USPS LR-H-130	3.95%
LMLM - Postnet Barcode	Docket No. R97-1, USPS LR-H-130	6.79%
Manual	Docket No. R97-1, USPS LR-H-130	0.95%
Other Accept Rates		
Outgoing BCS Primary	USPS LR-I-107	95.20%
Outgoing BCS Secondary	USPS LR-I-107	95.80%
Incoming BCS MMP	USPS LR-I-107	95.80%
Incoming BCS SCF/Primary	USPS LR-I-107	95.70%
Incoming BCS Secondary Carrier Route	USPS LR-I-107	96.10%
Incoming BCS Secondary DPS Pass 1	USPS LR-I-107	97.50%
Incoming BCS Secondary DPS Pass 2	USPS LR-I-107	97.50%
Incoming CSBCS Secondary Pass1	USPS LR-I-107	98.90%
Incoming CSBCS Secondary Pass2,3	USPS LR-I-107	98.90%

Source: LR-I-146

HANDWRITTEN
MAIL FLOW DENSITIES

		---------OUTGOING--------		----------INCOMING----------			
From Operation	Refeeds	Primary	Secondary	Mgd Mail Program	SCF/ Primary	Inc Sec	Total
Out ISS Auto		3.22%	28.61%	3.86%	37.94%	26.36%	100.00%
Out OSS Auto		2.12%	16.26%	10.74%	36.88%	34.00%	100.00%
Out Prim Auto	0.05%		7.29%	35.74%	50.38%	6.59%	100.00%
Out Sec Auto	3.08%			47.12%	48.01%	4.87%	100.00%
Inc ISS Auto				2.41%	32.39%	65.19%	100.00%
Inc OSS Auto				0.92%	20.28%	78.81%	100.00%
Inc MMP Auto	0.79%				20.43%	79.57%	100.00%
Out Prim Man			18.86%	12.81%	33.18%	35.15%	100.00%
Out Sec Man				94.94%	5.06%	0.00%	100.00%
Inc ADC Man					6.18%	93.82%	100.00%

Source: LR-I-146

QBRM
MAIL FLOW DENSITIES

	--------OUTGOING--------			----------INCOMING----------			
From Operation	Refeeds	Primary	Secondary	Mgd Mail Program	SCF/ Primary	Inc Sec	Total
Out ISS Auto		3.22%	28.61%	3.86%	37.94%	26.36%	100.00%
Out OSS Auto		2.12%	16.26%	10.74%	36.88%	34.00%	100.00%
Out Prim Auto	0.05%		7.29%	35.74%	50.38%	6.59%	100.00%
Out Sec Auto	3.08%			47.12%	48.01%	4.87%	100.00%
Inc ISS Auto				2.41%	32.39%	65.19%	100.00%
Inc OSS Auto				0.92%	20.28%	78.81%	100.00%
Inc MMP Auto	0.79%				100.00%	0.00%	100.00%
Out Prim Man			18.86%	12.81%	33.18%	35.15%	100.00%
Out Sec Man				94.94%	5.06%	0.00%	100.00%
Inc ADC Man					6.18%	93.82%	100.00%

Source: LR-I-146

FY 99 REMOTE BAR CODE SYSTEM (RBCS) STATISTICS

Source: Corporate Information System (CIS)

AP	LEAKAGE PERCENT	RCR FINAL PERCENT
1	5.7%	39.0%
2	5.8%	41.1%
3	5.7%	44.1%
4	4.9%	47.5%
5	5.8%	49.9%
6	5.6%	50.3%
7	5.5%	50.4%
8	5.5%	50.9%
9	5.5%	51.3%
10	5.7%	51.4%
11	6.1%	50.3%
12	6.2%	50.0%

Source: LR-I-146

HANDWRITTEN
MISCELLANEOUS FACTORS

Description	Source	Value
AADC Trays Entered At MMP Operation	Docket No. R97-1, LR-H-128	79.60%
Local Originating	FY 98 ODIS	11.65%
RCR Finalization Rate	RCR 2000 D.A.R.	69.03%
RBCS Leakage Rate	Operations Leakage Target	5.00%
Automation Incoming Secondaries		
Delivery Unit (ZIP Code)	F.A.S.T. (AP 8 FY 99)	2.13%
Carrier Route	F.A.S.T. (AP 8 FY 99)	15.74%
3-Pass DPS (CSBCS)	F.A.S.T. (AP 8 FY 99)	14.40%
2-Pass DPS (DBCS)	F.A.S.T. (AP 8 FY 99)	67.73%
		100.00%
Finalized At Least To Carrier Route At Plant	F.A.S.T. (AP 8 FY 99)	73.81%
Post Office Box Destination	MC95-1, USPS-T-10I	8.90%

Source: LR-I-146

QBRM
MISCELLANEOUS FACTORS

Description	Source	Value
AADC Trays Entered At MMP Operation	Docket No. R97-1, LR-H-128	79.60%
Local Originating	FY 98 ODIS	11.65%
RCR Finalization Rate	RCR 2000 D.A.R.	69.03%
RBCS Leakage Rate	Operations Leakage Target	5.00%
Automation Incoming Secondaries		
Delivery Unit (ZIP Code)	F.A.S.T. (AP 8 FY 99)	0.00%
Carrier Route	F.A.S.T. (AP 8 FY 99)	0.00%
3-Pass DPS (CSBCS)	F.A.S.T. (AP 8 FY 99)	0.00%
2-Pass DPS (DBCS)	F.A.S.T. (AP 8 FY 99)	100.00%
		100.00%
Finalized At Least To Carrier Route At Plant	F.A.S.T. (AP 8 FY 99)	73.81%
Post Office Box Destination	MC95-1, USPS-T-10I	8.90%

Source: LR-I-146

MARGINAL PRODUCTIVITIES

Description	Source	(A) Variability Factor	(B) MODS Productivity	(B) / (A) Marginal Productivity	Cents/ Piece
Outgoing ISS	USPS LR-I-107	0.999	6,847	6,854	
Incoming ISS	USPS LR-I-107	0.999	4,370	4,374	
RCR		---	---	---	0.486
REC	USPS LR-I-107	0.995	673	676	
LMLM	USPS LR-I-107	0.995	3,871	3,890	
Outgoing OSS	USPS LR-I-107	0.998	8,976	8,994	
Incoming OSS	USPS LR-I-107	0.998	8,118	8,134	
Outgoing BCS Primary	USPS LR-I-107	0.998	5,729	5,740	
Outgoing BCS Secondary	USPS LR-I-107	0.998	8,323	8,340	
Incoming BCS MMP	USPS LR-I-107	0.998	5,565	5,576	
Incoming BCS SCF/Primary	USPS LR-I-107	0.998	5,896	5,908	
Incoming BCS Secondary Carrier Route	USPS LR-I-107	0.998	5,214	5,224	
Incoming BCS Secondary DPS (2 Pass)	USPS LR-I-107	0.998	8,737	8,755	
Incoming CSBCS Secondary DPS (3 Pass)	USPS LR-I-107	0.998	13,334	13,361	
Manual Outgoing Primary	USPS LR-I-107	0.995	486	488	
Manual Outgoing Secondary	USPS LR-I-107	0.995	477	479	
Manual MMP	USPS LR-I-107	0.995	601	604	
Manual Incoming SCF/Primary	USPS LR-I-107	0.995	638	641	
Manual Incoming Secondary, MODS Site	USPS LR-I-107	0.977	511	523	
Manual Incoming Secondary Non MODS Sites	USPS LR-I-107	0.990	1,143	1,155	
P.O. Box Sort DPS	USPS LR-I-107	0.990	2,341	2,365	
P.O. Box Sort Other	USPS LR-I-107	0.993	1,171	1,179	

Source: LR-I-146

TEST YEAR WAGE RATES

Description	Source	Wage Rate
Remote Encoding Centers (REC)	USPS LR-I-106, Part VIII, Table VIII, p. VIII-2	$17.787
Other Mail Processing	USPS LR-I-106, Part VIII, Table VIII, p. VIII-2	$28.246
Premium Pay Adjustment Factor	USPS-T-21, Attachment 15	1.022

Source: LR-I-146

FY 99 AP 11 MODS VOLUMES

OPER NO.	DESCRIPTION	MODS VOLUME	% VOL	
971	Outgoing Primary OSS - MPBCS	1,165,065,900	66.64%	74.35%
972	Outgoing Secondary OSS - MPBCS	134,827,300	7.71%	
271	Outgoing Primary OSS - DBCS	10,881,900	0.62%	25.65%
272	Outgoing Secondary OSS - DBCS	437,523,900	25.03%	
		1,748,299,000	100.00%	
871	Outgoing Primary - MPBCS	44,560,100	3.79%	
891	Outgoing Primary - DBCS	1,132,472,500	96.21%	
		1,177,032,600	100.00%	
872	Outgoing Secondary - MPBCS	78,226,000	7.57%	
892	Outgoing Secondary - DBCS	954,707,700	92.43%	
		1,032,933,700	100.00%	
973	Incoming MMP OSS - MPBCS	214,099,200	49.72%	
974	Incoming SCF OSS - MPBCS	108,182,800	25.12%	93.36%
975	Incoming Primary OSS - MPBCS	79,754,100	18.52%	
273	Incoming MMP OSS - DBCS	11,669,200	2.71%	
274	Incoming SCF OSS - DBCS	14,820,100	3.44%	6.64%
275	Incoming Primary OSS - DBCS	2,109,100	0.49%	
		430,634,500	100.00%	
873	Incoming MMP - MPBCS	401,941,100	19.34%	
893	Incoming MMP - DBCS	1,675,940,800	80.66%	
		2,077,881,900	100.00%	
874	Incoming SCF - MPBCS	878,379,200	25.56%	37.06%
875	Incoming Primary - MPBCS	395,607,400	11.51%	
894	Incoming SCF - DBCS	1,411,489,600	41.07%	62.94%
895	Incoiming Primary DBCS	751,728,200	21.87%	
		3,437,204,400	100.00%	
876	Incoming Secondary Carrier Route - MPBCS	562,735,000	31.65%	
896	Incoming Secondary Carrier Route - DBCS	1,215,011,900	68.35%	
		1,777,746,900	100.00%	

Source: LR-I-146

PIGGYBACK FACTORS

EQUIPMENT DESCRIPTION	SOURCE	VALUE
MLOCR	USPS LR-I-136	2.001
REC	USPS LR-I-136	1.563
LMLM	USPS LR-I-136	2.722
MPBCS	USPS LR-I-136	1.610
DBCS	USPS LR-I-136	2.328
CSBCS	USPS LR-I-136	1.915
Manual	USPS LR-I-136	1.360
Manual P.O. Box	USPS LR-I-136	1.360

OPERATION DESCRIPTION	VALUE
Outgoing ISS	2.001
Outgoing REC	1.563
Outgoing OSS	1.794
Outgoing LMLM	2.722
Outgoing Prim Auto	2.301
Outgoing Prim Man	1.360
Outgoing Sec Auto	2.274
Outgoing State Dist Man	1.360
Incoming ISS	2.001
Incoming REC	1.563
Incoming OSS	1.658
Incoming LMLM	2.722
Incoming MMP Auto	2.189
Incoming ADC Man	1.360
Incoming SCF/Prim Auto	2.062
Incoming SCF/Prim Man	1.360
Incoming 5-Digit Barcode Sort	2.062
Incoming Sec Auto Carrier Route	2.101
Incoming Sec Auto 3-Pass DPS	1.915
Incoming Sec Auto 2-Pass DPS	2.328
Man Inc Sec Final At Plant	1.360
Man Inc Sec Final At DU	1.360
Box Section Sort, DPS	1.360
Box Section Sort, Other	1.360

Source: LR-I-146

Exhibit KE-1B

Derivation of High Volume And Low Volume QBRM Per Piece Costs

Determination of Per-Piece Costs for QBRM (high-volume)
Counting Activities
TY01

Method of final piece count:	**% Volume**	
BRMAS software report	51.6%	[1]
EOR report	28.1%	[1]
Manual	11.2%	[1]
Weight Averaging/Counting Machines	9.2%	[1]
Hourly wage rate, Postage Due Clerk	$28.24	[2]
Piggyback factor, Business Reply	1.456	[3]

QBRM Counting	(1) Pieces Per Hour	(2) Direct Cost/Piece	(3) Direct & Indirect Cost/Piece	(4) % of Pieces
Manual Hand Counting, Postage Due Unit	2,746	$0.0103	$0.0150	11.2%
Manual Counting by Weight Averaging, Postage Due Unit	68,078	$0.0004	$0.0006	9.2%
Weighted cost per piece (direct & indirect)			$0.0017	[4]

Footnotes:
[1] Counting % (High Vol) spreadsheet (page 4)
[2] USPS-LR-I-106, Part VIII, Table VIII, p. VIII-2
[3] MODS 18 piggyback, USPS-T-21, Attachment 14
[4] Sum [(3) * (4)]
(1) Exhibit KE-1C at 3
(2) [2] / (1)
(3) [3] * (2)
(4) [1] as appropriate

Determination of Volume Variable Costs of QBRM (Low Volume)
Counting, Rating and Billing Activities
TY01

Method of final piece count:	**% Volume**	**Adj % Volume**
BRMAS software report	14.2% [1]	21.0% [2]
EOR report	19.3% [1]	23.3% [2]
Manual	47.2% [1]	48.0% [2]
Weight Averaging/Counting Machines	19.3% [1]	7.6% [2]

Method of Postage Due Activities:	**% Volume**	**Adj % Volume**
BRMAS	6.5% [3]	9.6% [4]
PERMITS/other software	47.6% [3]	46.0% [5]
Manual Other	45.9% [3]	44.4% [5]

Hourly wage rate, Postage Due Clerk	$28.24 [6]
Piggyback factor, Business Reply	1.456 [7]

	(1)		(2)	(3)	(4)
QBRM Processing	Pieces per hour		Direct Cost/Piece	Direct & Indirect Cost/Piece	% of Pieces
PERMITS Rating and Bill Generation Productivity, Postage Due Unit	7,461	[8]	$0.0038	$0.0055	46.0%
Manual Rating/Billing Productivity, Postage Due Unit	745	[8]	$0.0379	$0.0552	44.4%
Manual Hand Counting, Postage Due Unit	2,746	[9]	$0.0103	$0.0150	48.0%
Counting by Weight Averaging & SCM's, Postage Due Unit	68,078	[9]	$0.0004	$0.0006	7.6%
Weighted cost per piece (direct & indirect)				$0.0343	[10]

Footnotes

[1] BRM Practices Survey for all QBRM
[2] Counting % (Low Vol) spreadsheet (page 5)
[3] 1999 Survey, see Appendix 1, Table 2
[4] [3] adjusted to reflect % of pieces (rated by BRMAS/counted by BRMAS)
[5] Based on [3] for remaining percentage
[6] MODS 18 piggyback, USPS-T-21, Attachment 14
[7] Sum [(3) * (4)]
[8] USPS-LR-I-160, Section B at 3 (Revised 3/2/00)
[9] Exhibit KE-1C at 3
[10] Sum [(3) * (4)]

(2) [6] / (1)
(3) [7] * (2)
(4) [2], [4] or [5] as appropriate

Determination of Per-Piece Costs for All QBRM
Counting, Rating and Billing Activities
TY01

QBRM Processing	(1) Annual Volume (000)	(2) Number of Accounts	(3) Direct & Indirect Cost/Piece	(4) Direct & Indirect Cost/Acc't	(5) Total Annual Cost (000)
High Volume Counting	345,000 [1]		$0.0017 [5]		$596
High Volume Rating and Billing		300 [4]		$ 2,785 [7]	$836
Low Volume Counting, Rating and Billing	116,610 [2]		$0.0343 [6]		$3,995
Total	461,610 [3]				$5,426 [8]
Unit Cost					$0.0118 [9]

Footnotes:
[1] Counting % (High Vol) spreadsheet (page 4)
[2] Counting % (Low Vol) spreadsheet (page 5)
[3] [1] + [2]
[4] KE-LR-1 at 1
[5] High Volume QBRM spreadsheet (page 1)
[6] Low Volume QBRM spreadsheet (page 2)
[7] USPS-LR-I-160, Section B at 1
[8] Sum (Col 5)
[9] [8] / [3]
(5) (1) x (3) and (2) x (4)

Derivation of Counting Method %'s for QBRM

High Volume (300,000+ Pieces)

		Volumes By Counting Method					
	Customer Category	Manual	EOR	BRMAS	Counting Machine	Weight Averaging	Total Volume
[1]	Top 77	24,419,257	56,759,319	141,653,407	2,129,276	16,441,663	241,402,921
	%	10%	24%	59%	1%	7%	100%
[2]	Top 77 less #1,2	19,914,150	56,759,319	51,161,793	2,129,276	16,441,663	146,406,200
	%	14%	39%	35%	1%	11%	100%
[3]	Total Volume						345,000,000
[4]	Remaining Vol	14,091,259	40,162,914	36,202,103	1,506,676	11,634,126	103,597,079
[5]	Total High Vol	38,510,516	96,922,233	177,855,511	3,635,952	28,075,789	345,000,000
	%	11%	28%	52%	1%	8%	100%

[1] Exhibit KE-1D at 1
[2] Id.
[3] LR-KE-1 at 1
[4] [3] - [1] for total, counting methods based on [2]
[5] [1] + [4]

Derivation of Counting Method %'s for QBRM

Low Volume (Less than 300,000 Pieces Per Account)

		Volumes By Counting Method					
	Customer Category	Manual	EOR	BRMAS	Counting Machine	Weight Averaging	Total Volume
[1]	Total High Vol	38,510,516	96,922,233	177,855,511	3,635,952	28,075,789	345,000,000
	%	11%	28%	52%	1%	8%	100%
[2]	Vol 100,000+ Pcs/Acc't						415,167,825
[3]	Top 77 less #1,2	19,914,150	56,759,319	51,161,793	2,129,276	16,441,663	146,406,200
	%	14%	39%	35%	1%	11%	100%
[4]	Vol Small but 100,000+	9,544,217	27,202,932	24,520,217	1,020,494	7,879,965	70,167,825
[5]	Total TY QBRM Vol						461,610,000
[6]	Remaining Small Vol	46,442,175					46,442,175
[7]	Total Low Volume	55,986,392	27,202,932	24,520,217	1,020,494	7,879,965	116,610,000
	%	48%	23%	21%	1%	7%	100%

[1] Counting % (High Vol) spreadsheet (p. 4)
[2] KE-LR-1 at 2
[3] Exhibit KE-1D at 1
[4] [3] - [1] for total, counting methods based on [3]
[5] USPS-LR-I-168 (total TY QBRM Volume)
[6] Assume remaining volume is manually counted
[7] [4] + [6]

Derivation of Counting Method %'s for QBRM

All QBRM

		Volumes By Counting Method					
	Customer Category	Manual	EOR	BRMAS	Counting Machine	Weight Averaging	Total Volume
[1]	Low Volume	55,986,392	27,202,932	24,520,217	1,020,494	7,879,965	116,610,000
[2]	High Volume	38,510,516	96,922,233	177,855,511	3,635,952	28,075,789	345,000,000
[3]	Total Volume	94,496,908	124,125,165	202,375,727	4,656,446	35,955,754	461,610,000
	%	20%	27%	44%	1%	8%	100%

[1] Counting % (Low Volume) spreadsheet (page 5)
[2] Counting % (High Volume) spreadsheet (page 4)
[3] [1] + [2]

Exhibit KE-1C

QBRM Counting Productivity Study

Study To Derive The Productivity To Count QBRM Letters

Purpose

The purpose of this study is to estimate the productivity in pieces per hour (PPH) for counting QBRM letters by hand and by a weight conversion technique.

Background

Currently, the costs for providing QBRM service, including counting, rating, billing and collecting postage, are all lumped into the 5-cent QBRM per-piece fee. KeySpan is considering a recommendation similar to that proposed by the Postal Service to split the costs into two fee categories for QBRM received by individual customers in high quantities. A per-piece fee would recover the cost for counting the QBRM letters, and a fixed, monthly fee would recover cost of the remaining accounting functions.

According to a Postal Service witness there are no studies that measure counting productivities. The results from this study will provide input data for deriving the unit cost to count QBRM letters. These unit costs will be used to support two separate proposed unit fees for QBRM, one for customers who receive high volumes and a second for those who receive low volumes.

Sample Design

The study design calls for several respondents to count QBRM letters using two different methods: hand-counting and weighing.

Hand-Counting: The manual hand-counting method would generally apply to QBRM that is received in small volumes. Each of the respondents is asked to be timed as they hand-count approximately two full trays of QBRM letters using any method available. For example, I found it fastest to count out small stacks of 20, by eyeballing three and two letters at a time, and then combining 5 small stacks to form a pile of 100. Then the piles of 100 could be quickly identified and counted to reach a total. Practicing different counting methods to obtain the fasted method is permitted.

Weighing: The weight conversion method for counting QBRM letters requires at least one respondent to be timed. This time the respondent will weigh 100 letters to obtain an average weight per letter. All of the letters are then weighed. Finally, the total weight of all letters is divided by the final average weight of one letter to obtain a total count.

Data Collection

The data collection sheet provided should be filled out in its entirety and returned via fax to Rich Bentley at 703-281-0677.

Questions

If there are any questions about the procedures for this study, please feel free to call Rich Bentley at 703-255-3888.

Data Collection Sheet for the QBRM Counting Productivity Study						
	Hand-Counting		Weight Conversion			
	Total	Total	Total	Total	Timed	Effective
Clerk #	Time	Count	Time	Count	PPH	PPH
	(min)	(pieces)	(min/sec)	(pieces)	pcs/hour	pcs/hour

Data Collection Results for the QBRM Counting Productivity Study						
	(1)	(2)	(3)	(4)	(5)	(6)
	Hand-Counting		Weight Conversion			
	Total	Total	Total	Total	Timed	Effective
Clerk #	Time	Count	Time	Count	PPH	PPH
	(min)	(pieces)	(min/sec)	(pieces)	pcs/hour	pcs/hour
Clerk #1	13.50	1,356		1,344	6,027	3,616
Clerk #2	17.92	1,369		1,335	4,585	2,751
Clerk #3	15.12	1,313		1,346	5,211	3,127
Clerk #4	23.70	1,319		1,334	3,339	2,004
Total	70.23	5,357		5,359	4,576	2,746
Clerk #5			2.83	5,359	113,485	68,091
(1)	5/2/00 data collection					
(2)	Id.					
(3)	Id.					
(4)	Id.					
(5)	(2) / (1) * 60 or (4) / (3) * 60					
(6)	(5) *.6					

Exhibit KE-1D

QBRM Volume and Counting Method Used For the Top 74 of 77 QBRM Accounts Obtained From The CBCIS Data System

74 OF THE TOP 77 QBRM CBCIS ACCOUNT VOLUMES
FY99 (AP6) THROUGH FY2000 (AP5)

		ACTUAL VOLUMES BY COUNTING METHOD						
	74 of Top 77 QBRM Accounts*	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces	Total Pieces
[1]	2000 Data	14,829,379	27,877,073	127,046,174	0	11,789,369	0	181,541,995
		8%	15%	70%	0%	6%	0%	100%
[2]	1996 Data	9,589,878	28,882,246	14,607,233	2,129,276	1,003,337	3,648,957	59,860,926
		16%	48%	24%	4%	2%	6%	100%
[3]	All Accounts	24,419,257	56,759,319	141,653,407	2,129,276	12,792,706	3,648,957	241,402,921
		10%	24%	59%	1%	5%	2%	100%
[4]	All Accounts Excluding #'s 1&2	19,914,150	56,759,319	51,161,793	2,129,276	12,792,706	3,648,957	146,406,200
		14%	39%	35%	1%	9%	2%	100%

*Counting method missing for 3 offices

[1] From "2000 Data" spreadsheet (page 5)
[2] From "1996 Data" spreadsheet (page 6)
[3] [1] + [2]
[4] [3] minus #1 and #2 account volumes from Volumes spreadsheet (page 4)

ATTACHMENT 2 OF RESPONSE TO KE/USPS-T29-49 (TR 14/6029-30)
QBRM ACCOUNT VOLUMES
FY99 (AP6) THROUGH FY2000 (AP6)

					COUNTING METHOD (customer method shaded)					
Customer	Post Office	Acct volume	1996 Practices Study data	FY2000 Data	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces
2	17	38,382,839		X			100.0%			
82	6	9,433,164	X		23.5%	76.5%				
86	41	8,310,062		X	2.0%	1.0%	97.0%			
49	21	6,936,441		X	6.0%	94.0%			6.0%	
9	23	4,226,212		X			100.0%			
66	42	4,138,339	X		1.2%		98.8%			
39	8	3,718,409		X			100.0%			
81	16	3,644,859		X	40.0%	54.0%			6.0%	
78	35	3,527,732		X	100.0%					
57	15	3,507,447		X	30.0%	70.0%				
86	41	3,204,907		X	2.0%	1.0%	97.0%			
84	47	2,953,486		X	20.0%				80.0%	
64	41	2,812,312		X	2.0%	1.0%	97.0%			
7	17	2,712,699		X		100.0%				
41	34	2,710,945		X	10.0%	90.0%				
40	6	2,634,921	X		23.5%	76.5%				
10	3	2,468,908	X		52.4%	44.3%				3.3%
77	35	2,400,709		X	100.0%					
14	7	2,136,743	X		10.0%	90.0%				
72	1	2,109,074	X		10.0%	4.7%	80.5%	4.7%		
37	48	2,074,582	X		98.4%		1.6%			
54	27	2,061,932		X			100.0%			
37	48	2,041,846	X		98.4%		1.6%			
44	33	2,031,984	X		36.5%		63.5%			
9	23	1,948,174		X			100.0%			
67	12	1,944,311	X		26.4%	1.5%	60.7%	7.6%		3.8%
69	39	1,868,356	X		19.6%	76.5%				3.9%
19	38	1,860,129	X		10.0%	90.0%				
63	24	1,818,455	X		50.0%	50.0%				
44	33	1,808,286	X		36.5%		63.5%			
38	13	1,774,401	X		80.0%					20.0%
45	45	1,672,203		X	1.0%		99.0%			
50	18	1,509,851								
32	48	1,503,213	X		98.4%		1.6%			
4	28	1,497,313		X	100.0%					
41	34	1,487,567		X	10.0%	90.0%				
79	20	1,484,742		X	15.0%	80.0%			5.0%	
24	11	1,467,578		X	25.0%	75.0%				
60	40	1,327,965	X		45.0%	55.0%				
6	48	1,297,976	X		98.4%		1.6%			
46	17	1,268,330		X		100.0%				
33	38	1,231,997	X		10.0%	90.0%				
67	12	1,223,703	X		26.4%	1.5%	60.7%	7.6%		3.8%
13	2	1,216,770	X		50.0%					50.0%
28	23	1,200,441		X			100.0%			
15	3	1,199,208	X		52.4%	44.3%				3.3%
12	29	1,184,575		X			100.0%			
80	45	1,178,905		X	1.0%		99.0%			
5	36	1,163,613								
25	29	1,161,241		X			100.0%			
27	15	1,147,115		X	30.0%	70.0%				
20	5	1,127,114	X		10.0%	90.0%				
1	45	1,107,286	X		1.0%		99.0%			
74	44	1,100,260		X	15.0%				85.0%	
67	41	1,093,074		X	2.0%	1.0%	97.0%			
8	39	1,067,593	X		19.6%	76.5%				3.9%
76	35	1,046,671		X	100.0%					
51	22	1,003,337	X		20.0%				80.0%	
68	41	1,002,077		X	2.0%	1.0%	97.0%			
35	25	986,135	X		100.0%					
83	32	969,750		X	10.0%				90.0%	
53	31	964,959		X	10.0%	90.0%				
36	30	948,133	X		35.9%	5.1%		59.0%		
30	4	940,355								
23	46	930,710		X	100.0%					
48	19	921,137		X	100.0%					
71	10	920,323	X		100.0%					
52	42	912,083	X		1.2%		98.8%			
90	9	908,877		X	5.0%	95.0%				
61	29	905,657		X			100.0%			
91	37	901,387		X	70.0%				30.0%	
42	30	888,185	X		35.9%	5.1%		59.0%		
88	26	881,182	X		10.0%	80.0%				10.0%
73	14	875,224	X		100.0%					
39	8	874,379		X			100.0%			
		182,902,858								

74 OF THE TOP 77 QBRM CBCIS ACCOUNT VOLUMES
FY99 (AP6) THROUGH FY2000 (AP5)

					MODIFIED % VOLUME BY COUNTING METHOD					
Customer	Post Office	Acct volume	1996 Practices Study data	FY2000 Data	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces
NA	NA	56,613,882		X	8%		92%			
2	17	38,382,839		X			100.0%			
82	8	9,433,164	X		0.0%	100.0%				
86	41	8,310,062		X			100.0%			
49	21	6,936,441		X		100.0%				
NA	NA	5,500,000		X					100.0%	
9	23	4,226,212		X			100.0%			
66	42	4,138,339	X		0.0%		100.0%			
39	8	3,718,409		X			100.0%			
81	16	3,644,859		X	0.0%	90.0%			10.0%	
78	35	3,527,732		X	100.0%					
57	15	3,507,447		X		100.0%				
86	41	3,204,907		X			100.0%			
84	47	2,953,486		X					100.0%	
64	41	2,812,312		X			100.0%			
7	17	2,712,699		X		100.0%				
41	34	2,710,945		X		100.0%				
40	6	2,634,921	X		0.0%	100.0%				
10	3	2,468,908	X		0.0%	93.1%				6.9%
77	35	2,400,709		X	100.0%					
14	7	2,136,743	X		0.0%	100.0%				
72	1	2,109,074	X		0.0%	5.3%	89.5%	5.3%		
37	48	2,074,582	X		98.4%		1.6%			
54	27	2,061,932		X			100.0%			
37	48	2,041,846	X		98.4%		1.6%			
44	33	2,031,984	X		0.0%		100.0%			
9	23	1,948,174		X			100.0%			
67	12	1,944,311	X		0.0%	2.0%	82.5%	10.3%		5.2%
89	39	1,868,356	X		0.0%	95.1%				4.9%
19	38	1,860,129	X		0.0%	100.0%				
63	24	1,818,455	X		0.0%	100.0%				
44	33	1,808,286	X		0.0%		100.0%			
38	13	1,774,401	X		0.0%					100.0%
45	45	1,672,203		X			100.0%			
50	18	1,509,851								
32	48	1,503,213	X		98.4%		1.6%			
4	28	1,497,313		X	100.0%					
41	34	1,487,567		X		100.0%				
79	20	1,484,742		X		100.0%				
24	11	1,467,578		X	0.0%	100.0%				
60	40	1,327,965	X		0.0%	100.0%				
6	48	1,297,976	X		98.4%		1.6%			
46	17	1,266,330		X		100.0%				
33	38	1,231,997	X		0.0%	100.0%				
67	12	1,223,703	X		0.0%	2.1%	82.5%	10.3%		5.2%
13	2	1,218,770	X		0.0%					100.0%
28	23	1,200,441		X			100.0%			
15	3	1,199,208	X		0.0%	93.1%				6.9%
12	29	1,184,575		X			100.0%			
80	45	1,178,905		X			100.0%			
5	36	1,163,613								
25	29	1,161,241		X			100.0%			
27	15	1,147,115		X		100.0%				
20	5	1,127,114	X		0.0%	100.0%				
1	45	1,107,286	X		0.0%		100.0%			
74	44	1,100,260		X					100.0%	
67	41	1,093,074		X			100.0%			
8	39	1,067,593	X		0.0%	95.1%				4.9%
76	35	1,046,671		X	100.0%					
51	22	1,003,337	X		0.0%				100.0%	
68	41	1,002,077		X			100.0%			
35	25	986,135	X		100.0%					
83	32	969,750		X					100.0%	
53	31	964,959		X		100.0%				
36	30	948,133	X		0.0%	7.9%		92.1%		
30	4	940,355								
23	46	930,710		X	100.0%					
48	19	921,137		X	100.0%					
71	10	920,323	X		100.0%					
52	42	912,083	X		0.0%		100.0%			
90	9	908,877		X		100.0%				
61	29	905,657		X			100.0%			
91	37	901,387		X					100.0%	
42	30	888,185	X		0.0%	7.9%		92.1%		
88	26	881,182	X		0.0%	88.9%		0.0%		11.1%
73	14	875,224	X		100.0%					
39	8	874,379		X			100.0%			
	Total	245,016,740			10%	24%	59%	1%	5%	2%
Percentage without 2 largest accounts					14%	39%	35%	1%	9%	2%

Added to data base since these two offices are not included in the CBCIS data base
Assumed to be 100% of the process used in that office other than manual
Manual pieces distributed to the other methods in the same ratio as originally provided

Sources: TR 14/6029-30 and "Data for #1" spreadsheet (page 7)

74 OF THE TOP 77 QBRM CBCIS ACCOUNT VOLUMES
FY99 (AP6) THROUGH FY2000 (AP5)

		ACTUAL VOLUMES BY COUNTING METHOD								
Customer	Post Offic	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces	Total Pieces	1996 Practices Study data	FY2000 Data
NA	NA	4,505,107		52,108,775				56,613,882		X
2	17			38,382,839				38,382,839		X
82	6		9,433,164					9,433,164	X	
86	41			8,310,062				8,310,062		X
49	21		6,936,441					6,936,441		X
NA	NA					5,500,000		5,500,000		X
9	23			4,226,212				4,226,212		X
66	42			4,138,339				4,138,339	X	
39	8			3,718,409				3,718,409		X
81	16		3,280,373			364,486		3,644,859		X
78	35	3,527,732						3,527,732		X
57	15		3,507,447					3,507,447		X
86	41			3,204,907				3,204,907		X
84	47					2,953,486		2,953,486		X
64	41			2,812,312				2,812,312		X
7	17		2,712,699					2,712,699		X
41	34		2,710,945					2,710,945		X
40	6		2,634,921					2,634,921	X	
10	3		2,297,744				171,164	2,468,908	X	
77	35	2,400,709						2,400,709		X
14	7		2,136,743					2,136,743	X	
72	1		111,004	1,887,066	111,004			2,109,074	X	
37	48	2,041,767		32,815				2,074,582	X	
54	27			2,061,932				2,061,932		X
37	48	2,009,549		32,297				2,041,846	X	
44	33			2,031,984				2,031,984	X	
9	23			1,948,174				1,948,174		X
67	12		39,626	1,603,528	200,771		100,386	1,944,311	X	
89	39		1,777,727				90,629	1,868,356	X	
19	38		1,860,129					1,860,129	X	
63	24		1,818,455					1,818,455	X	
44	33			1,808,286				1,808,286	X	
38	13						1,774,401	1,774,401	X	
45	45			1,672,203				1,672,203		X
50	18									
32	48	1,479,436		23,777				1,503,213	X	
4	28	1,497,313						1,497,313		X
41	34		1,487,567					1,487,567		X
79	20		1,484,742					1,484,742		X
24	11		1,467,578					1,467,578		X
60	40		1,327,965					1,327,965	X	
6	48	1,277,445		20,531				1,297,976	X	
46	17		1,268,330					1,268,330		X
33	38		1,231,997					1,231,997	X	
67	12		25,231	1,009,240	126,155		63,077	1,223,703	X	
13	2						1,216,770	1,216,770	X	
28	23			1,200,441				1,200,441		X
15	3		1,116,374				82,834	1,199,208	X	
12	29			1,184,575				1,184,575		X
80	45			1,178,905				1,178,905		X
5	36									
25	29			1,161,241				1,161,241		X
27	15		1,147,115					1,147,115		X
20	5		1,127,114					1,127,114	X	
1	45			1,107,286				1,107,286	X	
74	44					1,100,260		1,100,260		X
67	41			1,093,074				1,093,074		X
8	39		1,015,807				51,786	1,067,593	X	
76	35	1,046,671						1,046,671		X
51	22					1,003,337		1,003,337	X	
68	41			1,002,077				1,002,077		X
35	25	986,135						986,135	X	
83	32					969,750		969,750		X
53	31		964,959					964,959		X
36	30		74,853		873,280			948,133	X	
30	4									
23	46	930,710						930,710		X
48	19	921,137						921,137		X
71	10	920,323						920,323	X	
52	42			912,083				912,083	X	
90	9		908,877					908,877		X
61	29			905,657				905,657		X
91	37					901,387		901,387		X
42	30		70,120		818,065			888,185	X	
88	26		783,273				97,909	881,182	X	
73	14	875,224						875,224	X	
39	8			874,379				874,379		X
		24,419,257	56,759,319	141,653,407	2,129,276	12,792,706	3,648,957	241,402,921		
		10%	24%	59%	1%	5%	2%	100%		
w/o #1& #2 Acc'ts		19,914,150	56,759,319	51,161,793	2,129,276	#########	3,648,957	146,406,200		
		14%	39%	35%	1%	9%	2%	100%		

Source: Total volumes multiplied by the percentages by method from "Modified %'s" spreadsheet (page 3)

74 OF THE TOP 77 QBRM CBCIS ACCOUNT VOLUMES (2000 DATA)
FY99 (AP6) THROUGH FY2000 (AP5)

		2000 ACTUAL VOLUMES BY COUNTING METHOD						
Customer	Post Office	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces	Total Pieces
NA	NA	4,505,107	-	52,108,775	-	-	-	56,613,882
2	17	-	-	38,382,839	-	-	-	38,382,839
82	6							-
86	41	-	-	8,310,062	-	-	-	8,310,062
49	21	-	6,936,441	-	-	-	-	6,936,441
NA	NA					5,500,000		5,500,000
9	23	-	-	4,226,212	-	-	-	4,226,212
66	42							-
39	8	-	-	3,718,409	-	-	-	3,718,409
81	16	-	3,280,373	-	-	364,486	-	3,644,859
78	35	3,527,732	-	-	-	-	-	3,527,732
57	15	-	3,507,447	-	-	-	-	3,507,447
86	41	-	-	3,204,907	-	-	-	3,204,907
84	47	-	-	-	-	2,953,486	-	2,953,486
64	41	-	-	2,812,312	-	-	-	2,812,312
7	17	-	2,712,699	-	-	-	-	2,712,699
41	34	-	2,710,945	-	-	-	-	2,710,945
40	6							-
10	3							-
77	35	2,400,709	-	-	-	-	-	2,400,709
14	7							-
72	1							-
37	48							-
54	27	-	-	2,061,932	-	-	-	2,061,932
37	48							-
44	33							-
9	23	-	-	1,948,174	-	-	-	1,948,174
67	12							-
89	39							-
19	38							-
63	24							-
44	33							-
38	13							-
45	45	-	-	1,672,203	-	-	-	1,672,203
50	18							-
32	48							-
4	28	1,497,313	-	-	-	-	-	1,497,313
41	34	-	1,487,567	-	-	-	-	1,487,567
79	20	-	1,484,742	-	-	-	-	1,484,742
24	11	-	1,467,578	-	-	-	-	1,467,578
60	40							-
6	48							-
46	17	-	1,268,330	-	-	-	-	1,268,330
33	38							-
67	12							-
13	2							-
28	23	-	-	1,200,441	-	-	-	1,200,441
15	3							-
12	29	-	-	1,184,575	-	-	-	1,184,575
80	45	-	-	1,178,905	-	-	-	1,178,905
5	36							-
25	29	-	-	1,161,241	-	-	-	1,161,241
27	15	-	1,147,115	-	-	-	-	1,147,115
20	5							-
1	45							-
74	44	-	-	-	-	1,100,260	-	1,100,260
67	41	-	-	1,093,074	-	-	-	1,093,074
8	39							-
76	35	1,046,671	-	-	-	-	-	1,046,671
51	22							-
68	41	-	-	1,002,077	-	-	-	1,002,077
35	25							-
83	32	-	-	-	-	969,750	-	969,750
53	31	-	964,959	-	-	-	-	964,959
36	30							-
30	4							-
23	46	930,710	-	-	-	-	-	930,710
48	19	921,137	-	-	-	-	-	921,137
71	10							-
52	42							-
90	9	-	908,877	-	-	-	-	908,877
61	29	-	-	905,657	-	-	-	905,657
91	37	-	-	-	-	901,387	-	901,387
42	30							-
88	26							-
73	14							-
39	8	-	-	874,379	-	-	-	874,379
Total Pieces		14,829,379	27,877,073	##########	-	11,789,369	-	181,541,995
Total %		8%	15%	70%		6%		100%

Source: Total volumes for 2000 data from "Volumes" spreadsheet (page 4)

74 OF THE TOP 77 QBRM CBCIS ACCOUNT VOLUMES (1996 DATA)
FY99 (AP6) THROUGH FY2000 (AP5)

1996 ACTUAL VOLUMES BY COUNTING METHOD

Customer	Post Office	Manual	EOR	BRMAS	Special Counting Machine	Weight Averaging	Weighing of Identical Pieces	Total Pieces
2	17							-
82	6	-	9,433,164	-	-	-	-	9,433,164
86	41							-
49	21							-
9	23							-
66	42	-	-	4,138,339	-	-	-	4,138,339
39	8							-
81	16							-
78	35							-
57	15							-
86	41							-
84	47							-
64	41							-
7	17							-
41	34							-
40	6	-	2,634,921	-	-	-	-	2,634,921
10	3	-	2,297,744	-	-	-	171,164	2,468,908
77	35							-
14	7	-	2,136,743	-	-	-	-	2,136,743
72	1	-	111,004	1,887,066	111,004	-	-	2,109,074
37	48	2,041,767	-	32,815	-	-	-	2,074,582
54	27							-
37	48	2,009,549	-	32,297	-	-	-	2,041,846
44	33	-	-	2,031,984	-	-	-	2,031,984
9	23							-
67	12	-	39,626	1,603,528	200,771	-	100,386	1,944,311
89	39	-	1,777,727	-	-	-	90,629	1,868,356
19	38	-	1,860,129	-	-	-	-	1,860,129
63	24	-	1,818,455	-	-	-	-	1,818,455
44	33	-	-	1,808,286	-	-	-	1,808,286
38	13	-	-	-	-	-	1,774,401	1,774,401
45	45							-
50	18							-
32	48	1,479,436	-	23,777	-	-	-	1,503,213
4	28							-
41	34							-
79	20							-
24	11							-
60	40	-	1,327,965	-	-	-	-	1,327,965
6	48	1,277,445	-	20,531	-	-	-	1,297,976
46	17							-
33	38	-	1,231,997	-	-	-	-	1,231,997
67	12	-	25,231	1,009,240	126,155	-	63,077	1,223,703
13	2	-	-	-	-	-	1,216,770	1,216,770
28	23							-
15	3	-	1,116,374	-	-	-	82,834	1,199,208
12	28							-
80	45							-
5	36							-
25	29							-
27	15							-
20	5	-	1,127,114	-	-	-	-	1,127,114
1	45	-	-	1,107,286	-	-	-	1,107,286
74	44							-
67	41							-
8	39	-	1,015,807	-	-	-	51,786	1,067,593
76	35							-
51	22	-	-	-	-	1,003,337	-	1,003,337
58	41							-
35	25	986,135	-	-	-	-	-	986,135
83	32							-
53	31							-
36	30	-	74,853	-	873,280	-	-	948,133
30	4							-
23	46							-
48	19							-
71	10	920,323	-	-	-	-	-	920,323
52	42	-	-	912,083	-	-	-	912,083
90	9							-
61	29							-
91	37							-
42	30	-	70,120	-	818,065	-	-	888,185
88	26	-	783,273	-	-	-	97,909	881,182
73	14	875,224	-	-	-	-	-	875,224
39	8							-
otal Pieces		9,589,878	28,882,246	14,607,233	2,129,276	1,003,337	3,648,957	59,860,926
Total %		16%	48%	24%	4%	2%	6%	100%

Source: Total volumes for 1996 data from "Volumes" spreadsheet (page 5)

Volumes for Highest QBRM Recipient (Not Included in CBCIS)

	Manual		Automation		
Year/AP	Cards	Letters	Cards	Letters	Total
1998/1	289,113	389,609	1,617,626	2,941,505	5,237,853
1998/2	220,694	138,099	1,467,970	2,785,669	4,612,432
1998/3	267,803	403,226	1,130,961	2,621,494	4,423,484
1998/4	201,268	247,416	1,377,375	2,671,590	4,497,649
1998/5	487,859	520,920	2,596,920	4,090,587	7,696,286
1998/6	242,221	236,369	1,409,848	2,816,066	4,704,504
1998/7	193,370	173,846	1,334,641	2,744,806	4,446,663
1998/8	172,191	206,532	1,354,768	2,537,293	4,270,784
1998/9	187,020	305,927	1,226,599	2,181,384	3,900,930
1998/10	191,306	169,857	1,276,901	2,479,647	4,117,711
1998/11	242,213	296,405	1,645,780	3,046,572	5,230,970
1998/12	267,081	370,479	1,144,748	2,916,878	4,699,186
FY 1998	2,962,139	3,458,685	17,584,137	33,833,491	57,838,452
1999/1	218,170	405,946	1,420,062	2,821,088	4,865,266
1999/2	196,352	273,125	1,448,258	2,833,391	4,751,126
1999/3	226,006	290,337	1,201,446	2,444,471	4,162,260
1999/4	146,202	113,217	1,282,591	2,638,561	4,180,571
1999/5	431,445	489,713	2,202,492	4,217,141	7,340,791
1999/6	316,848	425,357	1,467,934	2,391,940	4,602,079
1999/7	195,755	209,555	1,450,084	2,574,950	4,430,344
1999/8	257,668	401,069	1,178,000	2,262,974	4,099,711
1999/9	181,640	166,695	1,230,694	2,352,370	3,931,399
1999/10	151,324	130,608	1,339,055	2,398,187	4,019,174
1999/11	173,254	153,215	1,682,620	2,810,203	4,819,292
1999/12	165,889	163,992	1,494,790	2,526,972	4,351,643
1999/13	111,392	63,954	1,289,844	2,326,261	3,791,451
FY 1999	2,771,945	3,286,783	18,687,870	34,598,509	59,345,107
2000/1	178,006	220,810	1,359,500	2,742,526	4,500,842
2000/2	133,444	112,088	1,378,950	2,634,280	4,258,762
2000/3	105,551	56,368	1,145,560	2,596,141	3,903,620
2000/4	106,796	113,951	1,044,445	2,083,761	3,348,953
2000/5	127,505	82,373	2,236,777	4,109,957	6,556,612
2000/6	153,786	114,870	1,795,059	2,636,111	4,699,826
2000/7	116,450	94,185	1,488,674	2,438,646	4,137,955
2000/8	86,243	65,248	1,264,155	2,587,905	4,003,551
1999/5-2000/6	2,205,072	2,300,035	18,298,253	33,810,522	56,613,882
		4,505,107		52,108,775	
Grand Total	6,741,865	7,605,361	47,985,127	90,261,327	152,593,680

Source: 5/5/00 fax from USPS Attorney Michael Tidwell

Exhibit KE-1E

Technical Deficiencies of USPS Witness Campbell's QBRM Unit Cost Derivations

Technical Deficiencies of USPS Witness Campbell's QBRM Cost Analysis

There are several technical deficiencies in the two per piece cost analyses USPS witness Campbell presents in support of his proposals for (1) separate fixed accounting and per piece fees for QBRM received in high volumes and (2) a single per piece fee for QBRM received in low volumes. These deficiencies all tend to overstate the true costs for providing QBRM service. While the specific problems discussed below refer to high volume QBRM, most apply to low volume QBRM as well.

1. The Postal Service's Derived Unit Cost Includes More Than The Costs Of The Extra QBRM Processing Functions Of Counting, Rating And Billing

In case after case, the Commission notes that the BRM per piece fee is intended to recover only the costs of counting, rating and billing, and nothing more. The costs of all other sorting and delivery services are not included in the QBRM fee because the recipient pays for them in the First-Class rate. Even Mr. Campbell agrees that QBRM "is entitled to have it sorted to the addressee for whatever First Class rate he pays." *See* TR 14/6140. I agree with the Commission that the additional QBRM per piece fee (or fees in the case of high volume QBRM) should only include the costs for counting, rating and billing the reply mail pieces.

Under the Postal Service's proposal for the new high volume QBRM service, rating and billing costs are recovered by a separate, fixed quarterly fee. Therefore, the per piece fee should reflect *only* the cost of counting. Unfortunately, USPS witness Campbell's study design does not accurately follow the conceptual framework described above. Instead of limiting the QBRM per piece fee to counting costs, he has included sortation costs.

Since Mr. Campbell's per piece fee reflects both counting and sorting, his costing approach improperly charges high volume QBRM recipients **twice** for the same sortation costs, once in the QBRM First-Class rate and again in the QBRM per piece fee.[1]

2. The Study Design Is Inappropriate

Even though USPS witness Campbell proposes to revamp the high volume QBRM fee structure, he uses the same basic study design that the Postal Service has used since USPS witness Pham first presented it in Docket No. R90-1. Those cost studies were designed to develop **one** per piece fee that recovers costs associated with all three of the BRM functions (counting, rating and billing) and applies to all BRM recipients regardless of the volumes they receive.

In the instant proceeding, the Postal Service has proposed to develop different rate structures and fees for high and low volume QBRM recipients. For high volume QBRM, it proposes to institute **two separate** fees, one fixed fee to recover billing and rating costs and a separate per piece free to recover counting costs. There was no reason to follow the old study design.

For the high volume fixed quarterly fee, USPS witness Campbell followed proper procedures by developing a separate cost for rating and billing. However, he has not, but could just as easily have, developed a separate counting cost by conducting a relatively simple study, as I have done. *See* Exhibit KE-1C. Certainly, such a study is not beyond the capability of an organization as large as the Postal Service.

[1] This error also affects low volume QBRM recipients.

For these reasons, the principal problem with USPS witness Campbell's methodology is that he continued to employ an outmoded methodology for a one-fee-fits-all per piece fee when he was proposing an entirely new fee structure.

3. The Assumption That A High Percentage Of QBRM Will Be Sorted And Counted Manually Is Unfair

In Docket No. R90-1, USPS witness Pham focused primarily on automated BRMAS operations in his study of BRMAS BRM costs. He also assumed that BRMAS processing would expand rapidly throughout postal facilities and estimated that 85% of BRMAS BRM volumes would be processed on the automated equipment in the test year of that case.

In contrast, when USPS witness Campbell's derives his unit cost for QBRM, he assumes that 66.5% of the pieces are sorted and counted manually at a cost of 4.32 cents per piece. Such an assumption is extremely unfair to QBRM recipients for two reasons. First, QBRM letters are prebarcoded and automation-compatible by regulation. Consequently, QBRM letters are more susceptible to being processed on automated equipment than other First-Class letters. Whether or not these pieces are processed by automation is a purely management decision. This is well beyond the control of the QBRM recipient

Second, the Postal Service claims that QBRM is processed manually because automated incoming secondary equipment is already at full capacity. *See* TR 14/6088-89. If the equipment is being used to sort other First-Class mail, it unfair to penalize a subset of First-Class letters when other First-Class letters are receiving the benefit of automation. The rate for First Class is based on an average of all processing methods

available for that mail.[2] Since QBRM is part of that subclass, the Postal Service cannot justify charging QBRM for the alleged extremely high probability of that QBRM will receive manual processing.

4. Mr. Campbell Does Not Apply The Pham Method Correctly

In Docket No. R90-1, USPS witness Mr. Pham noted that his study results included certain automated and manual sorting costs.[3] Recognizing this fact, Mr. Pham adjusted his unit per piece fee cost by subtracting out a weighted incoming sortation cost for such pieces. *Id.* at 9. More specifically, the sortation costs he removed generally reflected the same sorting processes (i.e., manual vs. automated) as the BRM sorting costs he originally added into his model. Accordingly, when Mr. Pham subtracted out the relevant sorting costs, his derived unit cost represented just the cost for the BRM functions of counting, rating and billing.

Although witness Campbell used the Pham methodology, he does apply it correctly.

a. Inconsistent Assumptions Regarding How High Volume QBRM Letters Are Processed

In Docket No. R90-1, Mr. Pham developed a BRM unit cost based on the separate costs for various automated and manual processing methods.[4] Then he

[2] According to the Postal Service, 42% of QBRM (TR 14/6096) is processed manually in the incoming secondary whereas only 6% of all other letters (TR 14/6091) is processed manually in that same operation.
[3] For example, Mr. Pham recognized that the BRMAS system performed not only the counting, rating and billing functions (for which recipients properly should pay the BRMAS BRM fee) but also the final sort to the end user as well. *See* Docket No. R90-1, USPS-T-23 at 3. In other words, the BRMAS operation combined all four of these functions into one.
[4] As mentioned above, Mr. Pham projected that a majority of BRMAS qualified BRM would receive automated processing.

subtracted out a **weighted** incoming secondary cost that reflected proportionately the same percentages of processing methods used to develop the unit cost in the first place. For example, when deriving both the BRMAS unit cost and the avoided incoming secondary cost, Mr. Pham made similar assumptions regarding the processing methods for these pieces.

Mr. Campbell fails to apply this method consistently. Unlike Mr. Pham, Mr. Campbell derives his QBRM unit cost under the assumption that 66.5% of QBRM pieces will be sorted manually. But when determining the unit incoming secondary cost to subtract in order to avoid double counting sorting costs, he assumes that only 10% of QBRM will be sorted manually. *See* TR 14/5963-64. Thus, he is inconsistent in his attempt to avoid double counting of incoming secondary sort costs. Since automated costs are so much lower than manual costs, his derived QBRM net unit cost, adjusted for avoided incoming secondary sort costs, is overstated. He defines these costs, which he fails to remove, as "premium" sortation costs. As stated in my testimony, there no legitimate reason to include any sortation costs in the per piece fee.

b. Sorting Costs For 25% Of The QBRM Volumes Were Never Removed

When deriving his QBRM unit cost, USPS witness Campbell assumes that 66.5% of the letters are hand counted. *See* LR-I-160, Schedule B at 2. Thus, he applies his 4.32-cent sorting and counting manual unit cost to 66.5% of the pieces. But when subtracting out the incoming secondary sort cost, he applies the 2.11-cent First-Class Basic Automated unit cost to only 41.6% of the pieces. Thus, for 24.9% of the pieces he made no adjustment for the avoided sorting costs.

Such pieces represent letters that were sorted by automation but counted manually. *See* TR 14/5928. By including these pieces in the derivation of the QBRM

unit cost before the adjustment, Mr. Campbell already has included the cost of hand-sorting these pieces. Thus he errs twice. First, he assumes a manual sorting and counting PPH of 951 for these pieces, which are really sorted by automation. Second, he never subtracts out any avoided sorting costs for these pieces. Thus, the resulting QBRM net unit cost not only double counts sorting costs, but assumes a manual sortation and counting cost for pieces that are presumed to be sorted by automation.

5. Use Of The 10-Year-Old 951 PPH For Manually Sorting And Counting QBRM Letters Is Inappropriate

a. Incoming Secondary automation has increased considerably

The 951 PPH productivity factor Mr. Campbell used for manually sorting and counting QBRM letters within the postage due unit is taken from USPS witness Pham's 10-year old study. Although USPS Mr. Campbell concludes that field observations confirm that this operation has not changed in ten years, the manner in which BRM letters is provided to the postage due unit has. After spending billions of dollars on automation equipment, it seems reasonable that a far greater percent of QBRM is sorted to the final customer prior to being sent to the postage due unit now than compared to 10 years ago. Such mail would not need any sorting, certainly impacting the amount of sortation that would need to take place in the postage due unit. USPS witness Campbell's field observations do not address this situation.

Moreover, the CBCIS data provided by Mr. Campbell shows that most high volume counts (80%) are performed by BRMAS or EOR outside the postage due unit. Thus, his assumption that 66.5% of high volume QBRM would be counted and sorted manually with a 951 PPH is way off base.

b. The 951 PPH relies too heavily on data from one very inefficient and unrepresentative office

The derivation of the 951 PPH for manual sorting and counting BRM letters in the postage due unit relies upon data that is highly dependent upon the operation of one office with almost 10,000 separate accounts. USPS witness Campbell could not verify the identity of that office, whether that office still has 10,000 separate accounts, or whether the operations of that office are still manually conducted. He simply assumed the 951 would be representative of the current environment for counting QBRM received in both high and low volumes for the test year. Further, had he removed this one office from the derivation of the 951 PPH, the PPH would have become 1,097, reducing his unit cost from 2.0 cents to 1.61 cents. *See* TR 14/6033-35.

c. The Assumption That The 951 PPH For Manually Processed QBRM Can Be Used To Derive The Cost Of QBRM Counted By Weight Conversion Techniques And Special Counting Machines Is Neither Supportable Nor Reasonable

Of the 66.5% of QBRM that USPS witness Campbell claims is counted manually, 19.3% is counted by special counting machines or by weighing techniques. Because he had no further data on the productivities for special counting machines or weighing techniques, he simply assumed that the 951 PPH productivity factor applies to such pieces as well. *See* TR 14/5916-17, 5957, 6033-35, 6112. Since the productivity for counting by special counting machines or weighing techniques is so much higher than for hand counting, Mr. Campbell's derived cost estimate for manually counting QBRM is overstated.

6. The changed assumption that postage due costs vary 100% with volume, when USPS witness Schenk assumed such costs were 79.7% variable with volume, is not explained

USPS witness Campbell assumed that the 951 manual productivity for counting and sorting QBRM was 100% variable with volume, in contrast to USPS witness Schenk's PPH that was 79.7% variable with volume in Docket No. R97-1. His explanation for this change is that it was an "institutional decision". *See* TR 14/5961. Had he assumed the same 79.7% variability as USPS witness Schenk, his derived unit cost for high volume QBRM would have been reduced to 1.41 cents.

7. Additional data ignored by USPS witness Campbell casts serious doubt on how representative the data from the BRM Practices Study will be for the test year.

a. Manual processing in the incoming secondary

USPS witness Campbell's acceptance of the BRM Practices Study is questionable to say the least. That study indicates that 41.6% of prebarcoded, automation-compatible QBRM letters is sorted to the customer through manual distribution methods. *See* TR 14/5915. Such processing increases unit costs by more than two cents. *See* TR 14/5963-64. One cannot help but ask how such a result is reasonable when the Postal Service also reports that 94% of all barcoded letters will be finalized by automated incoming secondary operations in the test year. *See* TR 5/1675. Although Mr. Campbell was unaware of this (TR 14/6092), it did not seem to bother him that under his assumption, QBRM processing is 7 times more likely to be manually sorted than an average barcoded letter. (41.6% vs. 6%) There can be no logical explanation for this.[5]

[5] Nor, in my view is the particularly relevant since sorting costs should not enter into the cost derivation of QBRM processing costs.

Moreover, USPS witness Campbell ignores the sharp increased capacity for automating mail that will occur between 1996 and the test year, as indicated by the DBCS Machine Deployment Schedule. (USPS LR-I-271)

b. Counting by weight conversion techniques

A USPS study performed in 1987 indicated that at least half of all BRM was counted by use of weight conversion factors. If such a practice was so widely used in 1987, it casts doubt on USPS witness Campbell's conclusion that only 8.9% of QBRM was being counted by weighing techniques in 1996. Mr. Campbell was unaware of this study (TR 14/6074, 6171) and could not explain why counting by weight conversion techniques might have declined so drastically during the 1987 – 1996 time period.

c. Data from high volume recipients indicate significant differences

USPS witness Campbell could have utilized data from the CBCIS system, which tracks QBRM data for almost all recipients. But he failed to update or compare the data taken from the BRM Practices Study with this additional data source. Such data indicates that, at least for high volume recipients, BRMAS processing is *much more* prevalent than he was led to believe. According to the data provided by Mr. Campbell, 59% is processed by BRMAS equipment. This is more than four times the 14% he assumed in his derivation of the QBRM per piece cost.[6]

In addition, manual counting is performed much less often than he assumed. As Mr. Campbell confirmed, even though some offices counted QBRM by various methods, the counting method for the largest accounts is never manual. *See* TR 14/6189. This

[6] The volume of QBRM pieces found to be counted by BRMAS equipment for 74 of the top 77 QBRM accounts is *more* than twice the total number of QBRM pieces that USPS witness Campbell estimates. For example, he assumed that 14.2% of total pieces would be counted by BRMAS. For the test year, this is or 65.5 million pieces (14.2% of 461.6 million pieces). As I show in Exhibit KE-1D, the new data from just 74 accounts indicates that 142 million pieces are counted by BRMAS!

certainly contradicts his own unsupported assumption that the counting method is unrelated the volume per account. In any event, the CBCIS data indicates that only 8% of high volume QBRM from is counted manually, whereas Mr. Campbell's data indicated that eight times that amount, 66.5%, would be counted manually.

From my analysis of the CBCIS data, I also estimate that for all QBRM, only 20% of the pieces are counted manually. This is less than one third of the 66.5% that Mr. Campbell obtained from the BRM Practices Study. This casts serious doubt on how well that study represents the QBRM universe and further indicates why USPS witness Campbell has overstated the QBRM unit costs for high and low volume QBRM.

Exhibit KE-1F

Comparison of QBRM Net Revenue Contribution To Institutional Costs for USPS and KE Proposals

Comparison of Contributions to Institutional Costs Under the KE and USPS QBRM High Volume Fee Proposals

	Fee Per Account	Total Accounts	Fee Per Piece (Cents)	Total Volume (000)	Total ($000)
KE PROPOSAL					
Annual Fee:					
Revenues	$ 12,000	300 [1]			$ 3,600
Vol Variable Costs	$ 2,785	300			$ 836
Contribtution to Inst Costs	$ 9,215	300			$ 2,764
Unit Fee (High Volume)					
Revenues			0.50	345,000 [4]	$ 1,725
Vol Variabe Costs			0.17 [2]	345,000	$ 596
Contribtution to Inst Costs			0.33	345,000	$ 1,129
Unit Fee (Low Volume)					
Revenues			4.50	116,610 [5]	$ 5,247
Vol Variabe Costs			3.43 [3]	116,610	$ 3,995
Contribtution to Inst Costs			1.07	116,610	$ 1,253
Total Contrib to Inst Costs					$ 5,146
USPS PROPOSAL					
Annual Fee:					
Revenues	$ 3,400	1,358			$ 4,617
Vol Variable Costs	$ 2,784	1,358			$ 3,781
Contribtution to Inst Costs	$ 616	1,358			$ 837
Unit Fee (High Volume)					
Revenues			3.00	153,870	$ 4,616
Vol Variabe Costs			2.00	153,870	$ 3,077
Contribtution to Inst Costs			1.00	153,870	$ 1,539
Unit Fee (Low Volume)					
Revenues			6.00	307,740	$ 18,464
Vol Variabe Costs			4.80	307,740	$ 14,772
Contribtution to Inst Costs			1.20	307,740	$ 3,693
Total Contrib to Inst Costs					$ 6,068
Change in Contribution					$ (922)

[1] KE-LR-1 at 1
[2] Exhibit KE-1B at 1
[3] Exhibit KE-1B at 2
[4] KE-LR-1 at 1
[5] 461,610 - [4]

Exhibit KE-1G

Derivation of QBRM Volumes Counted By The Various Methods Available

Derivation Of QBRM Volumes Counted By The Various Methods Available

QBRM can be counted by manual, end-of-run (EOR), BRMAS, special machines, and weighing techniques. Since these methods exhibit various productivities, it is important to know the volumes counted by each method in order to derive the unit costs for counting. To accomplish this, I have utilized data from the CBCIS data system supplied by the Postal Service to which I have made some adjustments based on reasonable assumptions regarding the manner in which postal clerks count mail.

In order to estimate the volumes for the entire QBRM universe, I divided QBRM accounts into high and low, depending upon the number of pieces returned. The following steps describe how I was able to accomplish this.

1. QBRM Volumes By Counting Method For 74 Of The Top 77 Offices

USPS witness Campbell provided the percentage of QBRM pieces that were counted by each of the five methods for 74 of the top 77 offices. For each account he indicated the percentage of QBRM applicable to all of the pieces counted within that office. During oral cross-examination he indicated that, at least for the most current data he had recently retrieved, the method of counting for the particular account was not the same as the percentages shown for the office as a whole, but would be one of the non-manual methods that he had specified. Therefore, where he so indicated, I have assumed that 100% of the pieces were counted using the method that Mr. Campbell suggested was appropriate.

For the older data, collected in 1996, there was a similar problem. The percentages shown were applicable to all QBRM counted by an office, and not necessarily for the large account shown. Because high volume accounts would tend to exhibit different counting methods from low volume accounts, I have made a similar adjustment to the 1996 data. I therefore constrained the manual counting percentage to be zero in those offices that exhibited more than one counting method and re-allocated that volume to the other methods utilized by the office in the same relative amounts.

The analysis that performs these adjustments is shown on pages 2 and 3 of Exhibit KE-1D.

2. Compute Volumes From Percentages

The next step is to convert the percentages to volumes. This is shown separately for the 1996 and 2000 data on pages 5 and 6 of Exhibit KE-1D. In addition, I received separate data for one very large account and for Brooklyn Union Gas, neither of which are part of the CBCIS data system. The very large account's information is shown on page 7 of that same exhibit. All of the volumes are added together, as shown on page 4, and summarized on page 1.

3. Estimate The High Volume Universe

As proposed, the breakeven volume in order to take advantage of the high-volume per-piece fee is 300,000 per year. Accordingly, I have estimated that 300 separate accounts could potentially switch to the new fee category. The total volume from these high volume accounts is estimated to be 345 million pieces. This information is obtained from the CBCIS data provided by the Postal

Service and reported in KE-LR-1. As shown, there are three sources of QBRM volumes: 1-ounce letters, 2-ounce letters and cards. Page 1 of KE-LR-1 summarizes this information for accounts that potentially receive at least 300,000 QBRM pieces.

4. Estimate the Volumes by Counting Method For High Volume Recipients

The 74 offices for which I have the volumes by counting method represent 241 million pieces out of the 345 million that comprise the high-volume universe. However, within my sample there were two very large accounts that may not be representative of any other account. Therefore, I re-computed the percentages by counting method for the sample, excluding the input from those two accounts. This reduced the total volume in my sample to 146 million and is shown on page 1 of Exhibit KE-1D.

The volumes by counting method for the remaining 104 million pieces were estimated by applying the recomputed percentages from my new sample. The entire high-volume QBRM market can then be derived by adding up the volumes from the initial sample, plus the remaining 104 million pieces. This part of the analysis is shown on page 4 of Exhibit KE-1B.

5. Estimate The Volumes by Counting Method For Low Volume Recipients

Focusing on small volume accounts, I estimated that the percentages by counting method derived for the higher volumes would be applicable so long as the volume received was 100,000 piece or more. This implied an average of about 400 pieces received per day, which is near the breakpoint above which

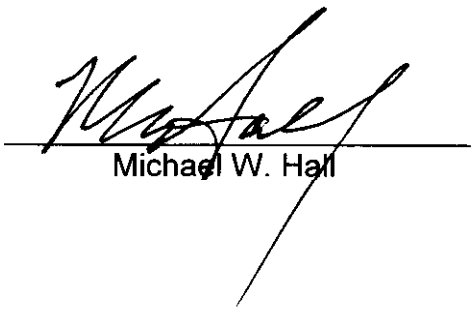
hand counting is no longer efficient. Thus, I assumed that the percentages by counting method derived for my high volume sample would also be applicable to accounts receiving at least 100,000 pieces per year. As shown on page 2 of Library Reference KE-LR-1, over 700 accounts, representing 415 million pieces would qualify. Subtracting out the high-volume QBRM recipients resulted in a total of 70 million. The volumes by counting method for these 70 million pieces were computed using the same percentages for the high volume recipients, as shown on page 5 of Exhibit KE-1B. Since the Postal Service estimates that total QBRM volumes will reach 461 million pieces in the test year, the remaining QBRM volumes can be computed. Thus, the low volume QBRM market consists of the 70 million pieces received in quantities of between 100,000 and 300,000 per year, and the remaining 46 million pieces. For the latter, I have assumed that 100% of the QBRM pieces are counted by hand. This analysis is provided on page 5 of Exhibit 1B.

6. Summary Of Volumes By Counting Method For All QBRM

The volumes by counting method for all QBRM are derived simply by adding the volumes for the low and high volume accounts. This is shown on page 6 of Exhibit 1B.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document, by First-Class Mail, upon the participants in this proceeding.



Michael W. Hall

Round Hill, VA
May 22, 2000