DOCKET SECTION

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97–1

# RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BERNSTEIN TO INTERROGATORIES OF THE OFFICE OF THE CONSUMER ADVOCATE (OCA/USPS–T31—11–13)

The United States Postal Service hereby provides responses of witness Bernstein to the following interrogatories of the Office of the Consumer Advocate: OCA/USPS–T31—11–12, filed on September 16, 1997, and -13, filed on September 17, 1997.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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September 30, 1997

RESPONSE OF POSTAL SERVICE WITNESS BERNSTEIN
TO INTERROGATORIES OF OCA

OCA/USPS-T31-11. Please refer to pages 44 and 54-55 of your testimony. You state at page 44 that library reference H-165 contains "the entire set of effective Test Year price elasticities used in making the Ramsey volume forecasts."

a. Please provide in hard copy a table showing, side by side, "effective Test Year price elasticities used in making the Ramsey volume forecasts," and "long-run own-price elastic[ies]."

b. Table 11 appears to be based on "long-run own-price elastic[ies]." Is this correct? If so, please provide a version of Table 11 based on "effective Test Year price elasticities." If not, please provide a version of Table 11 based on "long-run own-price elastic[ies]."

RESPONSE:

a. The requested information can be found in the LOTUS files CALL.WK1 or RAMDATA.WK4, accompanying LRH-165. For your convenience, the effective Test Year and long-run own-price elasticities are reprinted in Table 1 accompanying this response.

b. Table 11 is based on both the long-run and the effect Test Year price elasticities. The long-run price elasticities are used in the calculations of the Ramsey prices. These elasticities reflect mailer valuation of each postal product. Effective Test Year elasticities are used in the calculations of the Ramsey and non-Ramsey volumes. These elasticities closely approximate the change in volume that would be expected to occur in the Test Year, given a change in rates that occurs on the first day of the Test Year. They were employed as a simplification instead of projecting volumes using the current and lagged elasticities as done in the volume forecasts of Postal Service witnesses Tolley and Musgrave. Please see my testimony at pages 41 through 44 for a discussion of the use of effective Test Year elasticities in my volume forecasts.

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A version of Table 11 based entirely on the long-run price elasticities would yield incorrect forecasts of Test Year volume. A version of Table 11 based entirely on the effective Test Year price elasticities would yield correct volumes, but the Ramsey prices would not be based on the estimated elasticities of demand. Accordingly, there is no point in providing the versions of Table 11 that were requested in this interrogatory.

**TABLE 1**
**RESPONSE OF POSTAL SERVICE WITNESS BERNSTEIN**
**TO OCA/USPS-T31-11(a)**

**Elasticities Used in Calculation of Ramsey Prices**
**(USPS-T-31)**

| | Own-Price Elasticities for Volume Calculations | Own-Price Elasticities for Price Calculations |
|---|---|---|
| First-Class Letters Total | -0.175905 | -0.232492 |
| First-Class Cards Total | -0.620961 | -0.862674 |
| Priority Mail | -0.596004 | -0.770488 |
| Express Mail | -1.140566 | -1.533788 |
| Periodicals In County | -0.428748 | -0.529948 |
| Periodicals Nonprofit | -0.178703 | -0.227917 |
| Periodicals Classroom | -0.889888 | -1.178481 |
| Periodicals Regular | -0.092997 | -0.143253 |
| Standard A Single Peice | -0.510956 | -0.654259 |
| Standard A Regular | -0.335303 | -0.381623 |
| Standard A ECR | -0.436161 | -0.597746 |
| Standard A Nonprofit | -0.112126 | -0.135814 |
| Standard A Nonprofit ECR | -0.112126 | -0.135814 |
| Standard B Parcel Post | -0.844828 | -0.964629 |
| Standard B Bound Printed | -0.218267 | -0.335170 |
| Standard B Special Rate | -0.319024 | -0.362037 |
| Standard B Library Rate | -0.437038 | -0.634333 |
| Registered | -0.317230 | -0.413445 |
| Insured | -0.068253 | -0.104734 |
| Certified | -0.195546 | -0.286961 |
| COD | -0.118573 | -0.182012 |
| Money Orders | -0.312525 | -0.391377 |

RESPONSE OF POSTAL SERVICE WITNESS BERNSTEIN
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OCA/USPS-T31-12. Please provide in hard copy a step-by-step calculation of the Ramsey prices for Express Mail using:

a. "effective Test Year price elasticities"

b. "long-run own-price elasticities"

RESPONSE:

As explained in my response to OCA/USPS-T31-11, Ramsey prices are calculated using long-run price elasticities and Ramsey volumes are calculated using effective Test Year price elasticities, which serve as a close approximation of the more complex volume forecast approach employed by witnesses Tolley and Musgrave. I have no calculation of separate Express Mail Ramsey prices requested in this interrogatory since in (a), the price would not be the Ramsey price and in (b), the volume forecast of Express Mail would be incorrect.

In regards to a step-by-step calculation, Ramsey prices are computed through an iterative procedure that does not lend itself to a step-by-step presentation. The Ramsey computer program simultaneously solves for all Ramsey prices for a given level of leakage (k), projects the volumes of all mail products at these prices, recalculates the Ramsey prices based on these new volumes (since the Ramsey prices of products with inter-dependent demands depend on product volumes), and once a set of consistent Ramsey prices and volumes are generated, checks to see if the Ramsey net revenue requirement is satisfied. If not, the iterative process is repeated until the k value that satisfies the Ramsey net revenue requirement is found. The computation requires hundreds, perhaps thousands of individual iterations on price, volume, and net revenue and cannot possibly be presented in hard copy form.

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OCA/USPS-T31-13. Please refer to page 60 of your testimony. You explain that the price you calculate for Express Mail is not a simple Ramsey price, but is higher because the Ramsey price would not yield enough revenue to cover incremental cost.

a. What was the calculated Ramsey price for Express Mail?

b. How was the constrained price, which is high enough to cover the incremental cost ($11.2947) calculated?

RESPONSE:

a. The calculated price of Express Mail using the Ramsey pricing formula is found by removing the price constraint from the MATLAB program and re-running the Ramsey computer algorithm. When this was done, the resulting unconstrained Ramsey price of Express Mail was $7.0420, yielding a mark-up of about seven percent above marginal cost, consistent with the product's own-price elasticity of -1.534.

b. Table 7 at page 40 of my testimony shows that the Test Year before-rates incremental costs of Express Mail are $727.1 million and the Test Year before-rates volume variable costs of Express Mail are $423.481 million. The ratio of incremental costs to volume variable costs ($727.1 million/$423.481 million) is 1.717. The price of Express Mail was set at 1.717 times the volume variable costs per piece of this product, thereby providing a mark-up that satisfied the incremental cost test.

DECLARATION

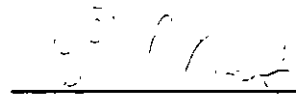
I, Peter Bernstein, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information and belief.

Peter Bernstein
(Signed)

9/29
(Date)

## CERTIFICATE OF SERVICE

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



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