#### UPS-ST-1

Aug 14 4 52 9H 100

#### ROSENDAN FOR THE CONTROL OF **BEFORE THE POSTAL RATE COMMISSION**

POSTAL RATE AND FEE CHANGES, 2000 : DOCKET NO. R2000-1

SUPPLEMENTAL TESTIMONY OF STEPHEN E. SELLICK ON BEHALF OF UNITED PARCEL SERVICE

#### TABLE OF CONTENTS

	Page
INTRODUCTION	1
PURPOSE OF TESTIMONY AND SUMMARY OF CONCLUSIONS	1
REVIEW OF THE DISAGGREGATED BRPW DATA THAT HAS BEEN MADE AVAILABLE SUPPORTS MY PRIOR CRITICISMS	4
THE PERMIT SYSTEM INCORRECTLY COUNTS SOME PORTION OF STANDARD (A) PARCELS AS STANDARD (B) PARCEL POST	6
VOLUME INFORMATION FROM THE POSTAL SERVICE'S CARRIER COST SYSTEM IS CONSISTENT WITH THE RESULTS OF THE HISTORICAL DRPW-ONLY ESTIMATES	8
THE POSTAL SERVICE'S FY1999 ESTIMATES ARE ONLY PARTIALLY BASED ON A UNIQUE TRIAL BALANCE ACCOUNT FOR PARCEL POST	9
THE PERMIT SYSTEM IS INCAPABLE OF DETERMINING THE TRUE WEIGHT OF PARCEL POST BY RATE CATEGORY	10
SUMMARY AND CONCLUSIONS	14

<b>INTRODUC</b>	TI	O	Ν
-----------------	----	---	---

2	My name is Stephen E. Sellick. I have already presented testimony in this
3	proceeding regarding the distribution of mail processing labor costs (UPS-T-2) as well
4	as testimony on the Postal Service's proposed Parcel Post revenue, pieces, and weight
5	estimates (UPS-T-4). My background is set forth in that testimony. See Tr. 27/13122-
6	23.

## PURPOSE OF TESTIMONY AND SUMMARY OF CONCLUSIONS

I have been asked to recalculate Cost Segment 3 costs under 100% mail processing labor cost variability using the improved cost distribution methods proposed by Postal Service witnesses Degen and Van-Ty-Smith, using actual FY1999 data as the base. See Order No. 1294 (May 26, 2000); Tr. 27/13139-40. The results of that recalculation, which makes use of FY1999 data provided by the Postal Service, are presented in my Table ST-1, below.

4 5

Class and Subclass of Mail or Special Service	Postal Service Proposal	100% Attribution
First Class Mail	FTOposar	100 / Acti ibation
Single-Piece Letters	5,910,827	6,685,161
	1,499,010	1,654,975
Presort Letters	223,030	256,630
Single-Piece Letters Presort Cards	44,447	50,932
Total First Class	7,677,314	8,647,698
	773,790	938,013
Priority Mail Express Mail	159,738	235,135
Mailgrams	252	279
Periodicals	252	
in-County	19,283	20,848
	19,203	20,040
Outside County:	627,056	686,738
Regular	112,889	126,482
Nonprofit	5,353	5,968
Classroom	764,581	840,036
Total Periodicals	764,561	040,030
Standard Mail (A)	46 500	E1 067
Single-Piece Rate	46,523	51,267
Commercial Standard	. 440.052	460.754
Enhanced Carrier Route	410,052	460,754
Regular	2,273,342	2,497,461
Total Commercial Standard	2,683,394	2,958,215
Aggregate Nonprofit	54044	FO 400
Nonprofit Enhanced Carrier Route	54,314	59,422
Nonprofit	489,765	540,881
Total Aggregate Nonprofit	544,079	600,302
Total Standard Mail (A)	3,273,996	3,609,785
Standard Mail (B)		750
Parcels Zone Rate	291,633	311,756
Bound Printed Matter	141,677	150,990
Special Standard	124,404	132,238
Library Mail	17,519	18,123
Total Standard Mail (B)	575,233	613,107
US Postal Service	164,184	208,342
Free Mail	9,392	11,009
International Mail	308,690	362,091
Total Mail	13,707,170	15,465,495
Total Special Services	399,061	392,983
Total Volume Variable	14,106,231	15,858,478
Other	4,192,176	2,440,303
Total Accrued	18,298,407	18,298,781

Sources: Postal Service Proposal – USPS-LR-I-276, pp. 1-2; 100% Attribution – UPS-Sellick-WP-Supp-1-A, Calculation of Fiscal Year 1999 Costs for Cost

Segment 3. Totals may not add due to rounding.

1	I have also been asked to review certain additional information provided by the
2	Postal Service on the subject of the Postal Service's method of estimating revenue,

- 3 pieces, and weight for Parcel Post, first introduced in this proceeding. This additional
- 4 information was made available after the filing of my direct testimony, UPS-T-4, on
- 5 May 22, 2000. In the course of my analysis, I have reviewed Library Reference USPS-
- 6 LR-I-401, Library Reference USPS-LR-I-403, the Response of United States Postal
- 7 Service Witnesses Pafford and Hunter to Presiding Officer's Information Request No. 17
- 8 (August 3, 2000), and other relevant documents. Based on my review, I have come to
- 9 the following conclusions:

11

12

13

14

15

16

17

18

19

20

21

- 1. The PERMIT System incorrectly recorded certain Standard (A) mail pieces as Standard Mail (B) (including Parcel Post) in FY1998. This error has been perpetuated in FY1999, and in fact may have been compounded in FY1999 over FY1998 by also infecting the FY1999 DRPW system.
  - Information from the Postal Service's Carrier Cost System corroborates
    the original FY1998 DRPW-only estimates of Parcel Post volume and
    contradicts the estimates derived from the proposed "hybrid"
    BRPW/DRPW approach.
  - The PERMIT System is incapable of determining correct Parcel Post weight information by rate category and zone.
- In short, the disaggregated data in USPS-LR-I-401 does not change my prior conclusion that the Postal Service's adjusted Parcel Post estimates are untested and

potentially unreliable. In fact, the evidence indicates that the Postal Service's estimates

2 are overstated.

## REVIEW OF THE DISAGGREGATED BRPW DATA THAT HAS BEEN MADE AVAILABLE SUPPORTS MY PRIOR CRITICISMS.

In my direct testimony (UPS-T-4), I pointed out that the high level of aggregation in the BRPW data available at that time made a thorough investigation of the validity and reasonableness of the Postal Service's BRPW Parcel Post estimates impossible. Despite the aggregation, however, it was still possible to determine that nonsensical results were present in the data. See Exhibit UPS-T-4C, filed under seal (Tr. 31/15054).

After my direct testimony was filed, the Postal Service produced (pursuant to Presiding Officer's Ruling No. R2000-1/72) Library Reference USPS-LR-I-401, which is described as "Permit Imprint Parcel Post Data Extract and Documentation." As its title indicates, the data in that library reference is an "extract" of the permit imprint Parcel Post data. A complete set of the raw data remains unavailable.

The Postal Service has acknowledged that this information does not permit "a perfect replication [of its results], just a decent one." Despite a number of exchanges with the Postal Service, we have not been able to completely reconcile the disaggregated information provided in Library Reference USPS-LR-I-401 with the highly aggregated BRPW information provided in Library Reference USPS-LR-I-194.

Significantly, the disaggregated LR-I-401 weight data differs from the aggregated LR-I-194 BRPW data by 55 million pounds. The Postal Service has been unable to explain this discrepancy.

Nevertheless, a review of the disaggregated information has revealed the following:

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

- Each nonsensical record in the aggregated data was rendered nonsensical by individual nonsensical records; none of the identified aggregated nonsensical records identified in my prior testimony was caused by "correcting" or "adjusting" entries in BRPW.
  - More nonsensical records have been identified in the disaggregated data than were revealed by an analysis of the aggregated data. Only 73 of 555 records which fail the Postal Service's very broad "revenue tolerance" test when applied to the disaggregated data could be detected at the aggregated data level.<sup>1</sup> In other words, 482 nonsensical records were not detected by the revenue tolerance test in the BRPW system due to the high level of data aggregation.
  - Even the disaggregated data cannot be reasonably validated because the PERMIT System and the BRPW system inaccurately calculate weight by rate category and zone for up to 81% of Parcel Post pieces, as described below.

The revenue tolerance test only checks to see if the postage data in a record is below or above the lowest possible or highest possible postage for an entire zone, without regard to the actual weight of the packages involved. Library Reference USPS-LR-I-25, Appendix A. The disaggregated data also contains other nonsensical records.

- In short, due to the incompleteness of the data, the fact that the disaggregated
- 2 data does not fully match the BRPW data originally produced, and the appearance of
- additional nonsensical results, the conclusions in my original testimony not only remain
- 4 valid, but are reinforced by the disaggregated data.

# THE PERMIT SYSTEM INCORRECTLY COUNTS SOME PORTION OF STANDARD (A) PARCELS AS STANDARD (B) PARCEL POST.

7 The minimum weight for Parcel Post parcels is one pound; pieces that weigh less

- 8 than one pound may not be sent as Parcel Post. Domestic Mail Classification
- 9 Schedule, § 322.11, reproduced in Appendix A to Subpart C of the Commission's Rules
- of Practice, 39 C.F.R. § 3001.68; Domestic Mail Manual, Issue 53, ¶ E613.1.0, at page
- 11 E-87.<sup>2</sup> Although Standard (A) parcels for which Parcel Post rates are lower may pay
- 12 the lower Parcel Post rates, they maintain the characteristics of Standard (A) mail.<sup>3</sup> And
- in fact, in FY1998 the Postal Service recorded these pieces as Standard (A) mail in
- DRPW. Postal Service Handbook F-75, Library Reference USPS-LR-I-37, pages 3-83,
- 15 3-95, 3-149, and 3-156.

5

6

The <u>Domestic Mail Manual</u> provision states: "Standard Mail (B) consists of mailable matter that (except Special Standard Mail and Library Mail) weighs 16 ounces or more."

<sup>3.</sup> Domestic Mail Manual ¶ E620.1.1 (Issue 53) states at page E-89, in relevant part: "If the computed Single-Piece Standard Mail rate is higher than any Standard Mail (B) rate for which the mail could qualify except for weight, the lower Standard Mail (B) rate may be paid; all other standards for Single-Piece Standard Mail apply." See also Domestic Mail Manual, Issue 53, ¶ E612.4.6, at page E-85.

On July 20, 2000, the Postal Service informed UPS that the Permit System (and 1

hence the BRPW data on which the Postal Service relies) counted such pieces as 2

Standard (B) mail in FY1998, and continues to do so. Prior to 1998 (and in the Postal 3

Service's original FY1998 DRPW-only Parcel Post estimates), these pieces were 4

5 correctly counted in the RPW estimates as Standard (A) mail.

9

10

11

12

13

14

15

It is clear, then, that the Postal Service's BRPW Parcel Post estimates for 6 FY1998 incorrectly count some unknown portion of Standard (A) parcels as Parcel Post, 7 contributing to the alleged 50 million parcel increase in Parcel Post volume from the 8 DRPW-only estimate to the hybrid BRPW/DRPW estimate for Parcel Post.

The Postal Service has also indicated that the instructions to the DRPW data collectors have changed since 1998. Response of the United States Postal Service to interrogatory UPS/USPS-48 (August 9, 2000). Beginning on January 10, 1999, such Standard (A) parcels began to be recorded as Standard (B) pieces in the DRPW system as well as in the BRPW system. Thus, any FY1999 DRPW-only estimates of Parcel Post revenue, pieces, and weight would also be overstated to some unknown extent.

# VOLUME INFORMATION FROM THE POSTAL SERVICE'S CARRIER COST SYSTEM IS CONSISTENT WITH THE RESULTS OF THE HISTORICAL DRPW-ONLY ESTIMATES.

4 5

6

7

8

9

1

2

3

As discussed in my prior testimony, the BRPW/DRPW hybrid approach to estimating Parcel Post revenue, pieces, and weight generates results which differ significantly from the DRPW-only results. The hybrid approach volume estimate for Parcel Post in FY1998 is 316 million pieces, as opposed to the 266 million pieces estimated by DRPW alone -- an increase of approximately 19%.

10 Volume information in the Postal Service's City Carrier Cost System ("CCS") corroborates the DRPW-only results. The CCS data indicates that there were 252 11 million Parcel Post parcels delivered by City and Rural Carriers on regular letter routes 12 in FY 1998. See Response of United States Postal Service Witness Harahush to 13 Questions Asked During Hearings (May 10, 2000). The addition of approximately 9 14 million Parcel Post pieces delivered on Special Purpose Routes in FY1998 results in 15 Parcel Post volume of 261 million pieces in FY1998.4 That result is much more 16 consistent with the DRPW-only estimate of 266 million pieces than is the hybrid 17 BRPW/DRPW estimate of 316 million pieces. 18

<sup>4.</sup> Data contained in a Postal Service interrogatory to UPS witness Luciani indicates that 7.3 million Parcel Post pieces were delivered on Special Purpose Routes in 1996. See Postal Service Interrogatory USPS/UPS-T5-5, Tr. 25/11868. Adjusting this 1996 estimate for the overall increase in Parcel Post volume from 1996 to 1998 suggests that approximately 9 million parcels were delivered on Special Purpose Routes in 1998.

. 12

# THE POSTAL SERVICE'S FY1999 ESTIMATES ARE ONLY PARTIALLY BASED ON A UNIQUE TRIAL BALANCE ACCOUNT FOR PARCEL POST.

During FY1999, the Postal Service implemented a unique trial balance revenue account for permit imprint Parcel Post; the account was used to adjust the BRPW data in PQ3 and PQ4 of FY1999 only. Response of the United States Postal Service to Interrogatory UPS/USPS-41 (May 17, 2000). For the other two quarters of FY1999, the Postal Service has relied on the "interim" factor of 1.0092075 obtained from a special study done in postal quarter 2 of FY1997. See id.; Library Reference USPS-LR-I-230 and USPS-LR-I-403.

This approach is flawed in a number of respects. First, the Postal Service is applying what was originally developed to be an annualized factor to quarterly data.<sup>5</sup> It is impossible to know what the "correct" trial balance adjustment factors would be for the first two quarters of FY 1999, but it is virtually certain that the 1.0092075 "blowup" factor developed in FY1997 is not correct for either quarter.

More fundamentally, as I indicated on oral cross-examination (Tr. 31/15160-61), the FY1997 survey for postal quarter 2 serves an entirely different purpose from the unique trial balance revenue account adjustment factors. The PQ2 FY1997 survey is meant to increase the Parcel Post BRPW estimates to account for permit imprint Parcel Post entered at non-PERMIT System offices that would not be captured in the BRPW data. In other words, it is a substitute for the samples of non-automated offices used in

<sup>5.</sup> While the factor was originally applied to quarterly data, it is in effect an annualized factor since the same factor was used for each quarter.

- developing BRPW estimates for mail categories other than Parcel Post. On the other
- 2 hand, trial balance adjustment factors may result in increasing or decreasing BRPW
- 3 estimates. They are intended to act as a check on the accuracy of those estimates
- 4 (including the estimates derived from supplemental surveys or samples).

The Postal Service's use of the non-automated survey factor to adjust FY1999
data may be inappropriate for still another reason. To the extent that offices which were
non-automated during the study period (PQ 2 of FY1997) became automated in FY1998
or FY1999, application of the 1.0092075 factor overstates permit imprint Parcel Post
volume and revenue estimates.

### THE PERMIT SYSTEM IS INCAPABLE OF DETERMINING THE TRUE WEIGHT OF PARCEL POST BY RATE CATEGORY.

11 12

13

14

15

16

17

18

19

20

21

22

10

The Postai Service's RPW results assume that BRPW provides accurate weight estimates by rate category and zone. That is not correct. While the Postal Service uses information from BRPW to *compute* weight information for each Parcel Post rate category and zone, that is not the same as recording the *actual* weight for a given rate category and zone. In fact, the method used to compute weight by VIP code (i.e., rate category and zone) for non-identical weight mailings -- which account for 98% of all permit imprint Parcel Post pieces -- is demonstrably wrong.

PERMIT System data, and thus BRPW information, is derived from the postage statements presented with bulk mailings. Individual postage statements generally cover pieces in different Parcel Post rate categories (e.g., inter-BMC, intra-BMC, and DBMC)

sent to different zones.<sup>6</sup> The only weight information available from a postage

2 statement is the total weight of the entire mailing and, only in the case of identical

3 weight mailings, the weight of a single piece.

In other words, while a postage statement contains piece and postage (revenue) information at the rate category and zone level (i.e., at the VIP code level), it does not collect weight information at the rate category and zone level. See Exhibit UPS-T-4A (attached to my direct testimony), Tr. 31/15050-51.

The computation method used by the Postal Service for non-identical weight mailings computes the weight for a rate category and zone by multiplying the pieces for the rate category and zone combination by the average weight *for the entire mailing*; the average weight is determined by dividing the total weight for the mailing recorded in the Total Weight box on the front of the postage statement by the total number of pieces recorded in the Total Pieces box on the postage statement. Tr. 21/8490. Thus, even though the pieces in a non-identical mailing are not all of the same weight, the Postal Service assumes that they are.

A hypothetical example of a non-identical weight mailing is provided in Table ST
2. In this example, the total mailing consists of 577 pieces covering two rate categories and sent to various zones: 491 inter-BMC pieces and 86 intra-BMC pieces, sent to the

<sup>6.</sup> The data in USPS-LR-I-401 show that 71% of Parcel Post postage statements included pieces going to a number of different zones, while 28% included mailings of pieces sent in different rate categories.

- zones indicated in the table. The "actual" weights used in the table correspond to the
- 2 average weights for each respective rate category and zone for Parcel Post as
- 3 determined by the 1996 Parcel Post billing determinants (USPS-LR-H-145 in Docket
- 4 No. R97-1).7

10

11

12

5 Table ST-2
6 Example of PERMIT System Incorrect Calculation of Rate Category and Zone Weight

Rate Category	Zone	Mailing Average Weight	Pieces	Actual Total Weight	PERMIT Weight	PERMIT Error (Pct)
Inter-BMC Inter-BMC Inter-BMC	Zone 7 Zone 1&2 Zone 3	6.16 4.56 4.75	1 141 349	6 642 1,659	5 701 1,736	-19.2% 9.2% 4.6%
Intra-BMC Intra-BMC	Zone 4 Zone 1&2	6.57 · 4.43	85 1	558 4	423 5	-24.3% 12.3%
Total		4.98	577	2,871	2,871	
Inter-BMC Subtotal Intra-BMC Subtotal			491 86	2,308 563	2,443 428	5.8% -24.0%
Total			577	2,871	2,871	

<sup>8</sup> PERMIT Weight = Rate Category Zone pieces / Total Pieces \* Total Weight.

Since the example is for a non-identical weight mailing (as is the case for 98% of BRPW Parcel Post pieces), the only weight information on the postage statement -- and thus the only weight information that would be in the PERMIT System and in BRPW -- is the total weight of the entire mailing, or 2,871 pounds. The Permit System assumes

<sup>7.</sup> Billing determinant data for 1996 are used to avoid any possible data corruption that may arise from the use of BRPW data in determining billing determinants.

each piece weighs the same amount -- in this case, 4.98 pounds -- even though the

2 actual average weight of the pieces is demonstrably different. Thus, the PERMIT

3 System would determine that a total of 423 pounds were sent as an intra-BMC shipment

4 to zone 4 when actually 558 pounds of intra-BMC parcels were sent. Likewise, the

5 PERMIT System would indicate that 701 pounds were sent as an inter-BMC shipment

6 to zone 1/2, even though the actual shipment was of 642 pounds.

12

13

14

15

16

17

18

19

20

The Postal Service's method has the effect of overstating total weight in some

zone and rate categories and understating it in others. In the above example, the

PERMIT system misstates weight by amounts ranging from +12% (intra-BMC zone 1/2)

to -24% (intra-BMC zone 4); overall, inter-BMC weight is overstated by 5.8%, while

intra-BMC weight is understated by 24%.

The disaggregated Parcel Post BRPW information in Library Reference USPS-LR-I-401 shows that postage statements representing 98% of Parcel Post BRPW pieces do not include the Single Piece Weight variable described above. This indicates that 98% of Parcel Post pieces are sent as part of non-identical weight mailings. Of these, 82% are multi-zone mailings; therefore, up to 81% of Parcel Post pieces in BRPW are incorrectly assigned an average weight rather than their actual weight. As a result, the total weights assigned to rate categories and zones are incorrect. To the extent that these postage statements included multiple classes of mail in FY1998 (e.g., both Parcel Post and either Priority Mail or Bound Printed Matter, as permitted on PS

<sup>8.</sup> It is not possible to make this determination using only the aggregated data originally provided.

- 1 Form 3605-R, Exhibit UPS-T-4A, Tr. 31/15050-51), this inaccuracy contaminates the
- 2 data for other mail classes as well.

11

12

13

14

15

16

17

18

19

20

- This problem is different from and in addition to the concern I expressed in my
- 4 direct testimony regarding the need under the Postal Service's approach to assume, for
- 5 billing determinant purposes, that the distribution by rate cell of BRPW permit imprint
- 6 parcels is the same as that for DRPW parcels. That point remains valid as well. As the
- 7 Postal Service has acknowledged, because "[e]stimates from BRPW do not provide
- 8 distributions by weight cell . . . reference is made to the DRPW distributions by weight
- 9 within zone" in developing its billing determinants. Tr. 21/9337.

#### SUMMARY AND CONCLUSIONS

I have recalculated mail processing labor costs as provided in my original testimony (UPS-T-2) using actual FY1999 data instead of FY1998 data. Should the Commission determine to project test year costs on the basis of the actual FY1999 data, those results should be used.

I have also reviewed additional BRPW and other data on the Postal Service's RPW estimates for Parcel Post that became available after my original RPW testimony (UPS-T-4) was filed. Review of that information has only strengthened my conclusion that the Postal Service's decision to alter the methodological basis upon which estimates of revenue, volume, and weight are developed for Parcel Post is premature and unwise.