

UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Before Commissioners:

Ruth Y. Goldway, Chairman;
Tony L. Hammond, Vice Chairman;
Mark Acton;
Dan G. Blair; and
Nanci E. Langley

Modification of Analytic Principles in
Periodic Reporting
(Proposals Twenty-Two through Twenty-Five)

Docket No. RM2010-4

ORDER ACCEPTING ANALYTICAL PRINCIPLES USED IN PERIODIC REPORTING
(PROPOSALS TWENTY-TWO THROUGH TWENTY-FIVE)

(January 27, 2010)

I. INTRODUCTION

The Commission has adopted periodic reporting rules under the authority of section 204(b) of the Postal Accountability and Enhancement Act (PAEA). See 39 U.S.C. 3652(a)(1) and (e). Those rules require the Postal Service to obtain advance approval in a notice and comment proceeding under 5 U.S.C. 553 whenever it seeks to change the analytical principles that it applies in preparing the periodic reports to the Commission required by section 3652 of the PAEA.

On October 23, 2009, the Postal Service filed a petition to initiate an informal rulemaking to consider changes in the analytical methods approved for use in its

periodic reports to the Commission.¹ The Commission accepts all of the proposed changes.

II. DISCUSSION

A. Proposal Twenty-Two—to Adopt the Docket No. R2000-1 Incremental Cost Model

In Proposal Twenty-Two, the Postal Service proposes to use an incremental cost model first applied by witness Kay in Docket No. R2000-1² to test for any cross-subsidies of competitive products by market dominant products in accordance with section 3633 of the PAEA. The model the Postal Service proposes to use is a constant elasticity (variability) cost function, first presented by witness Bradley in the same docket.³ The Postal Service's approach would estimate costs at the cost component level by using the most recent volume variabilities as the constant elasticity values for the corresponding cost components. These estimated costs would be summed to determine system-level incremental costs. The Postal Service considers the incremental cost test to be an improvement over the current method of aggregating the attributable costs of competitive products as a group. The Commission has accepted the incremental cost test as the conceptually correct method for detecting the existence of cross-subsidies.⁴

In support of its approach, the Postal Service states that “a product's or group of products' incremental cost will exceed the corresponding attributable cost and is thus a better cost floor for a cross-subsidy test.” Petition, Proposal Twenty-Two, at 5. The

¹ Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Proposed Changes in Analytic Principles (Proposals Twenty-Two – Twenty-Five), October 23, 2009 (Petition).

² See Docket No. R2000-1, Direct Testimony of Nancy R. Kay on Behalf of the United States Postal Service, January 12, 2000.

³ See Docket No. R2000-1, Direct Testimony of Michael D. Bradley on Behalf of the United States Postal Service, January 12, 2000 (USPS-T-22).

⁴ PRC Op. R97-1 at 235-36.

Postal Service also claims that in cases where incremental costs cannot be computed for some cost components, the resulting “hybrid” total costs (sum of component level incremental and attributable costs) would still be greater than costs estimated using the current approach.

The Postal Service would apply the proposed test only to competitive domestic products using Cost and Revenue Analysis (CRA) data. The International Cost Revenue (ICRA) data would still be used to estimate attributable costs for international products because (a) the ICRA does not distinguish between domestic and competitive international products at the cost pool level, and (b) certain costs that are treated as product-specific in the CRA are reclassified as institutional in the ICRA.⁵

Comments. The Public Representative⁶ was the only party submitting comments on this proposal. She recommends approval of the Postal Service’s proposal “as an interim step with further refinements to come in the future.” Public Representative Comments, November 30, 2009, at 4. The Public Representative encourages the Postal Service to refine its method by extending the incremental cost estimation method to all cost components. She recommends that the Postal Service “explore more deeply the problem of the estimation of incremental cost at the cost component level” in areas where attributable cost estimation continues to be used. *Id.* at 3.

Commission analysis. The Commission commends the Postal Service for its efforts to implement an incremental cost analysis to test for competitive product cross-subsidies. As reflected in the Postal Service’s proposed formulae, if marginal costs

⁵ Reclassification to institutional costs is necessary, according to the Postal Service, because further cost disaggregation to the specific products identified in the ICRA is not possible. Petition at 3.

⁶ Public Representative Comments in Response to Order No. 327, November 17, 2009 and Public Representative Comments in Response to Order No. 327 (Proposal Twenty-Two), November 30, 2009. (Public Representative Comments). Motion of the Public Representative for Late Acceptance of Public Representative Comments in Response to Order No. 327 was filed on November 16, 2009. That motion is granted.

decline continuously, incremental costs will be higher than attributable costs.⁷

Therefore, substituting the Commission analysis for the costs for the former would raise the competitive product cost floor used to determine compliance with U.S.C. 3633(a)(1) to test for cross-subsidies. Bringing the cost floor closer to actual incremental costs will help ensure that there is an economically efficient incentive for entry by competitors who might otherwise be unable to participate in postal markets.

The Commission notes that at existing volume levels, the Postal Service's use of the constant elasticity cost function produces the same marginal cost estimates as any valid model used to estimate volume-variable costs. Further, as noted by the Commission in its Opinion in Docket No. R2000-1, the proposed approach can be expected to provide a reasonable approximation of actual incremental costs when eliminating small volume products. In that docket, however, the Commission noted that the proposed approach might overstate actual incremental costs, and noted that there may be bias in the results under certain circumstances.⁸ With respect to the current proposal, because the volume of competitive products is a very small percentage of total Postal Service volume, the estimated incremental cost for all competitive products can be expected to be reasonably close to their actual incremental cost.⁹ However, the risk of bias in the Postal Service's approach would increase as the volume eliminated becomes a higher percentage of the total volume.

For this reason, the Commission accepts Proposal Twenty-Two, but urges the Postal Service to continue its investigation of other approaches that can be expected to provide unbiased estimates of incremental costs when evaluated over wider volume ranges. One plausible alternative is to replace the generic, log-linear approach with the

⁷ If marginal costs start increasing at a particular volume level, then incremental costs would still be higher than attributable costs up to the point where the marginal and average incremental costs curves intersect. For any volume above that point, incremental costs would be lower than attributable costs.

⁸ See PRC Op. R2000-1 at 212-15 for a full discussion of the Commission's previous analysis of the proposed methodology.

⁹ In FY 2008, total competitive volume represented only .78 percent of all mail volume for the Postal Service. See FY 2008 Annual Compliance Determination, March 30, 2009, Table III-2.

Commission-approved cost models that the Postal Service now uses to develop volume variabilities at the component level. Under this approach, these models would be used to estimate incremental costs annually by using fresh volume data. Using a common set of models to estimate both incremental and volume-variable costs would have the advantage of producing unbiased estimates for both attributable and incremental costs, as long as the underlying econometric models are correctly specified and are unbiased in their parameters.

Also, the Postal Service should work towards ensuring that current and future econometric cost models appropriately capture long-term cost savings that result from volume declines. Because the long-term cost functions described by these models consider cost savings from reconfiguration, they are the relevant cost functions from which to estimate incremental costs. Finally, the Postal Service should work to resolve problems in those areas where incremental costing cannot be currently implemented. This is especially important with respect to international mail because competitive products comprise a greater share of international mail than domestic mail. The Commission agrees with the Public Representative that it is important to make progress toward a comprehensive measure of incremental costs.

B. Proposal Twenty-Three—to Make the Treatment of Volume-Variable Window Service Costs Consistent for Domestic and International Money Orders

Background. International Money Transfer Service (IMTS) consists of two services: international hardcopy money orders and international electronic money

transfers.¹⁰ IMTS's volume-variable costs are estimated in the "B" Workpapers, Cost Segment 3 (Clerks and Mailhandlers), Component 3.2 (Window Services).

The "B" Workpapers currently categorize window costs for domestic money orders as "window acceptance," of which 64.76 percent is treated as volume variable. Unlike domestic money orders, however, all window service costs for international money orders, both hardcopy and electronic money transfers, are treated as "window non-acceptance."¹¹ Window non-acceptance costs are treated as 100 percent volume variable. The Postal Service defines window non-acceptance costs as those that remain after window acceptance costs are identified. This implies that window non-acceptance costs are "All Other Window Activities." These include a variety of activities performed by mail clerks unrelated to transactions involving mail classes.¹²

The Postal Service states that "[n]early all IOCS tallies for domestic and international money orders at the Window Services occur while serving a customer (IOCS Question 18G01)." Petition, Proposal Twenty-Three, at 2. Thus, the Postal Service suggests that window costs for both domestic and international money orders should be categorized as window acceptance in the "B" Workpapers.

Proposal. The Postal Service proposes for the FY 2009 Annual Compliance Report¹³ to (1) categorize window costs for both domestic and international money orders as "window acceptance," and (2) apply the same volume-variability factor, 64.76 percent, to both. This methodological change would "remedy an inconsistency in the

¹⁰ In Docket No. MC2009-19, the Postal Service proposes to separate IMTS into two separate competitive products: IMTS-Outbound and IMTS-Inbound. Docket No. MC2009-19, Request of the United States Postal Service to Add Postal Products to the Mail Classification Schedule in Response to Order No. 154, March 10, 2009, at 6-10; Appendix A at 12. However, the Postal Service is unable to adequately separate costs for IMTS-Outbound and IMTS-Inbound. FY 2008 International Cost and Revenue Analysis (ICRA) Report (Non-Public), Tab "A Pages (c)," at page A-2, Note 5. Proposal Twenty-Three is not related to Docket No. MC2009-19 and only addresses the IMTS product as it existed during FY 2009.

¹¹ See Chairman's Information Request No. 1, November 13, 2009, Question 2 (CHIR No. 1).

¹² See Summary Description of USPS Development of Costs by Segments and Components FY 08, section 3.2 Window Service, pp. 3-14.

¹³ United States Postal Service FY 2009 Annual Compliance Report, December 29, 2009 (ACR).

treatment of domestic and international money orders for FY 2009.” Petition, Proposal Twenty-Three, at 1. The Postal Service explains that if the proposed change had been in effect during FY 2008, then attributable window costs for IMTS “would have been reduced by 45 percent. . .resulting in a reduction of the total attributable cost figure reported in the FY 08 Nonpublic CRA of approximately one-third.” *Id.* at 3.

Participants’ comments. No party objects to the proposal. However, the Public Representative points out that the “volume-variability factor of 64.76 percent presented in Proposal Twenty-Three is lower than the actual volume-variability factor estimated by Professor Bradley in R2006-1 for money orders, which is 65.50 percent.”¹⁴ Public Representative Comments, November 17, 2009, at 2. The Public Representative recommends that the Commission seek an explanation for the difference in the variability factors.

Commission analysis. The Commission approves Proposal Twenty-Three, and applauds the Postal Service’s efforts to improve cost methodologies for the IMTS product. The proposal is reasonable and would address inconsistencies in the treatment of window service costs for domestic and international money orders.

With respect to the difference in variability factors identified by the Public Representative, the Commission notes that the initial direct testimony of witness Bradley estimated the variability for money orders at 65.50 percent. However, witness Bradley’s testimony also included an addendum. The addendum (page 41) explains that the spreadsheet used to calculate the variabilities contained minor cell errors. Table 10, “Effect of Correcting Minor Cell Errors,” presents a revised variability factor for money orders of 64.7 percent. This revised factor was used for reporting the variability of domestic money orders in FY 2008.

¹⁴ See USPS-T-22.

C. Proposal Twenty-Four—to Modify the Unit Cost Model

Background. In Proposal Twenty-Four, the Postal Service simplifies and updates the unit cost model provided most recently in library reference USPS-FY08-30. The unit cost model estimates mail processing, window service, delivery—city and rural, vehicle service, transportation, and other information that is needed to evaluate market dominant Negotiated Service Agreements (NSAs). The data presented in the unit cost model are then used as inputs in FY08.30.NSA.Value.xls, which reports revenues and volumes associated with market dominant NSAs, and calculates the costs and net value to the Postal Service of those NSAs. The Postal Service’s proposal only affects the unit cost model.

Comments. Only the Public Representative commented on Proposal Twenty-Four. The Public Representative agrees with the Postal Service that the modifications made in Proposal Twenty-Four simplify the model. As a result, she encourages the Commission to accept the proposal. Public Representative Comments, November 17, 2009, at 3-4.

Commission analysis. In this proposal, the Postal Service corrects errors in formulae and cell references, removes redundant data, and updates data to reflect recent changes in the CRA. The Commission finds that the modifications proposed in Proposal Twenty-Four produce a better organized and more accurate model without altering the fundamental approach of the calculations in the model. For this reason, the Commission accepts Proposal Twenty-Four.

D. Proposal Twenty-Five—Three Modifications to Flats Cost Models

Proposal Twenty-Five seeks approval of three changes to the Flats Cost Models filed in Docket No. ACR2008 in library reference USPS-FY08-11.

1. Modification 1

Background. Mechanized Flats Coverage Factors are estimates of the percentage of flats processed at plants with mechanized flat sorting equipment. The current method of estimating Mechanized Flats Coverage Factors matches ODIS-RPW volumes of flat mail with different types of mechanized mail processing equipment available at plants from a representative sample of ZIP Codes. The volume of flats and the volume of flats processed at plants with each type of mechanized processing equipment are then aggregated to the national level. The Mechanized Flats Coverage Factor for each type of mechanized equipment is estimated as the ratio of the volume of flats processed at plants with that type of mechanized sorting equipment to the total volume of flats. See Docket No. R2005-1, library reference USPS-LR-K-44, at i.

Proposal. Proposed Modification 1 seeks approval of a new method of calculating Mechanized Flats Coverage Factors. In addition to using the ODIS-RPW data, the proposed method would also use MODS data and data from a file labeled “MAILDIRECTIONSv2.” The latter is a national database of dropship addresses and types of destinating facilities (DBMC, DADC, DSCF) where all 3-digit zone mail is processed.¹⁵ The proposed method could be updated annually, since it relies upon national data sources that are updated annually. It would also allow the Postal Service to determine the facility where mail is processed, allowing data from Mail Processing Annexes and Logistics and Distribution Centers to be included in the determination of Mechanized Flats Coverage Factors. Finally, the use of MODS would allow the Postal Service to determine whether mechanized bundle and piece sorting equipment were actually used, rather than assuming this equipment was used.¹⁶

Chairman’s Information Request. The Commission sought more detail about the type of information contained in the MAILDIRECTIONSv2 file as well as the role it would

¹⁵ See Petition, Proposal Twenty-Five, Appendix A, at 4; and Response of United States Postal Service to Chairman’s Information Request, Proposal Twenty-Five Modification 1, November 23, 2009, Question 2, including Prop.25.Mod.1.Q.2.LAYOUT.doc (Response to CHIR No. 1).

¹⁶ Response to CHIR No. 1, Proposal Twenty-Five, Modification 1, Question 1.

play in estimating coverage factors. The Postal Service explains that the file allows a MODS finance number to be uniquely associated with a single mail processing facility, even if the facility is not the main plant, but an annex where the mail is processed. This would allow all MODS data to contribute to the determination of coverage factors. *Id.*

Comments. The Public Representative supports the proposal on the grounds that it would provide more accurate information and could be updated annually. She recommends that the Commission accept the proposed modification and review the impact of its application at some later date. Public Representative Comments, November 17, 2009, at 5. Time Warner does not object to the proposal.¹⁷ However, Time Warner notes that the MAILDIRECTIONSv2 file occasionally incorporates local decisions to redirect mail. It expresses some concern that this might encourage the manual sorting of Periodicals to meet service commitments. *Id.* at 3.

Commission analysis. The Commission accepts the proposed method of estimating coverage factors because it appears to be likely to provide more accurate information and can be annually updated. The proposal method also dispenses with the assumption that all outgoing mail is sorted on the AFSM100. This assumption resulted in the counterintuitive finding that mechanized sorting on the UFSM1000 was, at times, more expensive than manual sorting. *Id.* at 2-3. This result does not occur when the Mechanized Flats Coverage Factors are estimated applying the proposed method on existing data.

In accepting this proposal, the Commission cautions the Postal Service to bear in mind that the MODS TPH data on which Proposal Twenty-Five relies are piece-handling data serving as a proxy for volumes. The correspondence of piece handlings to volume is imperfect, and its validity depends on the context in which the proxy is used. Because the flats processing environment is rapidly changing, the Postal Service should periodically re-evaluate the suitability of using the MODS TPH data as a proxy for flats volume. The Commission also echoes the concern of Time Warner that the use of the

¹⁷ Initial Comments of Time Warner Inc. in Response to Order No. 327, November 16, 2009 (Time Warner Comments).

MAILDIRECTIONSv2 file as proposed not serve to insulate from management scrutiny the soundness of local decisions to sort flats manually.

2. Modification 2

Background. Piece density calculations show the percentage of mail that flows from a given sorting operation to the next downstream sorting operation. For example, if 100 barcoded, machinable Mixed Area Distribution Center (MADC) flats arrive at a manual outgoing primary (OP) operation where the outgoing secondary (OS) piece density is 12 percent and the incoming primary (IP) piece density is 15 percent, then 12 pieces will flow to an OS operation and 15 will flow to an IP operation.

Piece densities for manual sorting operations were most recently estimated in Docket No. MC95-1. In that case, the Postal Service applied manual piece densities to the UFSM1000 because it had only recently been introduced, and the Postal Service was not able to reliably estimate its piece densities.¹⁸ The Postal Service reasoned that because the UFSM1000 would be used to process flats which had previously been manually sorted, it would be reasonable to apply the manual piece density estimates to the UFSM1000.¹⁹

The Postal Service applied the same logic in Docket No. R2001-1. It updated the piece density estimates of automated operations in library reference USPS-LR-J-63, but lacked the data to estimate the piece densities of *manual* operations. In this case, it applies the UFSM1000 piece densities to manual sorting operations.²⁰

¹⁸ This machine was referred to as the USA-1000 at that time.

¹⁹ The Postal Service recognized that rejects from a mechanized sorting machine such as the UFSM1000 would get reprocessed at the same level of operations. Consequently, it applied the reprocessed piece densities from the FSM-BCR/881 to the UFSM1000. See Docket No. MC95-1, Direct Testimony of Oystein Brattli on Behalf of the United States Postal Service, March 24, 1995, at 15-16.

²⁰ However, since UFSM1000's SCF/SCF positive piece densities came from the FSM-BCR/881, the Postal Service set the SCF/SCF manual piece densities equal to zero to reflect the fact that mail sorted manually would not be reprocessed at the same level of operations. See Docket No. R2001-1, library reference USPS-LR-J-61, File: Period.xls, Sheet: PIECE DENSITIES, Cells G24:H24.

Proposal. Proposed Modification 2 seeks approval to use the UFSM1000 piece density data from last year's ACR to update what is claimed to be the manual operations density data introduced in Docket No. R2001-1, library reference USPS-LR-J-63. Petition, Proposal Twenty-Five, at 2. The Postal Service justifies this proposal on the grounds that the Commission has, in the past, supported using UFSM1000 piece densities as a proxy for manual densities and because "sortation in UFSM1000 operations is conceptually similar to that of manual units. . ." *Id.*

Chairman's Information Request. The Commission filed a request seeking information about how manually sorting pieces to the various downstream entry points is conceptually similar to that of mail sorted on the UFSM1000. CHIR No. 1, Question 4. The Postal Service responded that both operations use the same labeling lists, and manual sorting cases have only a few more separations than the UFSM1000. Response to CHIR No. 1, Proposal Twenty-Five, Modification 2, Question 1.

Comments. The Public Representative asks the Commission to reject the proposal since it maintains that manual piece densities used in the current methodology differ substantially from the updated UFSM1000 densities. She proposes to leave current manual piece densities unchanged. Public Representative Comments, November 17, 2009, at 6. Time Warner also believes that inaccuracies would be introduced into the flats models by using this proxy for manual piece densities, but does not recommend rejecting the proposal because it recognizes it could be expensive to directly estimate manual piece densities. Time Warner Comments at 5.

Time Warner makes two recommendations. First, it recommends removing from manual piece densities the densities that appear to represent pieces that are fed back into a UFSM1000 and sorted again at the same level of the mail flow. It argues that this feedback would not occur in manual piece sorting operations. *Id.* It also recommends modifying the 3-digit presort mail flow model to account for "the proportion of 3-digit/SCF pieces that have SCF bundle presort...." *Id.* at 7. Time Warner maintains this could be easily accomplished once the proportion of 3[-digit/]SCF pieces that have an

SCF bundle presort is known, and that it should be possible to obtain this information from the mail characteristics data. *Id.* at 7-8.

Commission analysis. The Commission accepts the use of UFSM1000 piece densities as proxies for manual piece densities, provided the Postal Service “zeros out” piece densities that represent resorting at the same level of mail flow operation. The previous density studies performed in Docket Nos. MC95-1 and R2001-1 recognized that while manual and UFSM1000 piece densities would be similar, mail sorted manually in an operation at one level would not flow back to the same operation at the same level. The Commission does not accept the Public Representative’s argument that it would be more accurate to maintain current manual piece densities because these piece densities reflect UFSM1000 piece densities from Docket No. R2001-1.

The Commission shares both the Public Representative’s and Time Warner’s concern that the use of UFSM piece densities as a proxy for manual piece densities introduces imprecision into the flats models. It encourages the Postal Service to look for opportunities to include a direct estimate of manual piece densities as part of any future special flats model study that relies upon sample results.

3. Modification 3

Background. According to the Postal Service, MADC sacks are comprised of L009 sacks and L201 sacks. L009 sacks entered at an Origin Sectional Center Facility (OSCF) are cross-docked, opened, and worked. L201 sacks entered at an OSCF are opened and worked. The costing procedure at issue is intended to follow the described operational flow of sacks. However, the current cost calculations inadvertently apply the unit costs associated with the operational flow of L009 sacks to the operational flow of L201 sacks and the unit costs of the operational flow of L201 sacks to the operational flow of L009 sacks.

Proposal. The Postal Service proposes to calculate the cost of handling OSCF-entered sacks by aligning L009 costs with L009 sack flows and L201 costs with L201 sack flows.

Comments. The Public Representative agrees that the current procedure is incorrect and that the Postal Service's proposal corrects the error. Public Representative Comments, November 17, 2009, at 7.

Commission analysis. The Postal Service's proposed cost calculation methodology accurately reflects the way MADC sacks are handled. Therefore, the Commission accepts the proposal.

III. ORDERING PARAGRAPH

It is Ordered:

For purposes of periodic reporting to the Commission, the Commission accepts the changes in analytical principles proposed in the Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Proposed Changes in Analytic Principles (Proposals Twenty-Two through Twenty-Five). Proposal Twenty-Two is accepted subject to the modification described in the body of this Order.

By the Commission.

Shoshana M. Grove
Secretary