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

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

Modification of Costing Methods 2008—
Postal Service Proposal Twelve

Docket No. RM2009-1

# ORDER CONCERNING COSTING METHODS USED IN PERIODIC REPORTING (PROPOSAL TWELVE)

(Issued January 12, 2009)

## I. INTRODUCTION

On November 4, 2008, the Postal Service filed a petition to initiate an informal rulemaking to consider 13 changes to its flats cost models generally and the Periodicals cost model in particular.[1] The 13 changes contained in Proposal Twelve are intended to address the Commission's request for updated and improved parameters for the Periodical's model made in the Periodical portion of the Commission's Annual Compliance Determination for Fiscal Year 2007.[2] The modifications for which the Postal Service seeks Commission approval may be characterized as falling into three

[1] Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Further Proposed Methodology Changes for the FY 2008 ACR (Proposal Twelve), November 4, 2008 (Petition).

[2] Postal Regulatory Commission Annual Compliance Determination, March 7, 2007 (FY 2007 ACD).

broad categories: (1) collecting information from a new field study; (2) using existing data, at times combined with the field study, to modify existing model parameters; and 3) making new assumptions about existing model parameters.

A. Field Study (Proposed Modification 2)

The Postal Service conducted a national Field Study during the summer of 2008 (Field Study) to gather improved and current data on a variety of key model parameters, such as

- Conversion factors, like the number of pieces per tub and bundles per wheeled container, which improve the estimation of the costs associated with allied bundle and container handling;
- Productivity factors, like the average number of bundles and tubs prepped per hour and manual bundle sorting productivity per hour; and
- Bundle breakage factors, which measure the rate at which sacks and pallets break.

B. Using Existing Data (Proposed Modifications 1, 3, 4, 8, 11, 12, and 13)

The Postal Service also modified modeling efforts using existing data to

- Develop the probability at which bundles on mixed area distribution center (MADC) and area distribution center (ADC) containers flow to the piece, MADC, ADC, 3-digit, 5-digit and carrier route levels;
- More directly model the costs of preparing flats for mechanized sorting by using existing data, combined with data from the Field Study, to calculate the incidence at which bundles receive a mechanized sortation on an AFSM 100 with automatic induction at various entry points;
- Remove the cost of dumping bundles to develop the pure bundle sorting productivity of bundle sorting equipment;
- Calculate the incidence at which bundles in 5-digit containers receive a mechanized incoming secondary sortation;
- Modify the productivity of mechanized piece sorting operations by accounting for rejected pieces;
- Calculate the productivity of the AFSM 100 using AFSM 100 Management Operating Data System (MODS) data; and

- Adjust the productivities of mechanized bundle sorting equipment by removing pieces from broken bundles where each broken piece had been counted as a sorted bundle.

C. New Model Assumptions (Proposed Modifications 5, 6, 7, 9, and 10)

The Postal Service makes new assumptions about the value of several parameters. These include new assumptions that

- Only one bundle handling occurs at any facility;
- Outgoing primary bundle sorting is 100 percent manual;
- Incoming secondary sorting at the destination delivery unit (DDU) is 100 percent manual;
- A single Cost and Revenue Analysis (CRA) adjustment factor will more accurately true-up modeled costs to accrued costs than the current two-factor method, which assumes that modeled piece-related costs fully capture the corresponding portion of accrued costs; and
- All bundles that pass through outgoing primary, outgoing secondary, and mixed mail program entry points receive a mechanized sort.

## II. PROCEDURAL HISTORY

Beginning in August of 2008, the Postal Service filed a series of petitions to initiate informal rulemaking proceedings to consider its proposed changes to the methods by which it estimates costs in the periodic reports that it files with the Commission. Nine proposals were reviewed by the Commission in Docket No. RM2008-2. *See* PRC Order No. 115, issued October 10, 2008. Proposals Ten and Eleven were reviewed and accepted in PRC Order No. 118, issued October 22, 2008.

The Postal Service filed a petition on November 4, 2008, to initiate a rulemaking proceeding to change accepted costing methods for estimating the cost differences underlying worksharing discounts for flat mail. The Postal Service labels the changes in accepted cost methods that it proposes in this docket “Proposal Twelve.” This label

indicates that the proposal is sequential to, but distinct from, the proposals processed in the two earlier dockets.

The Commission issued Order No. 130 on November 7, 2008, initiating the review of Proposal Twelve. It appointed William C. Miller to serve as the Public Representative in this docket. On November 10, 2008, the Postal Service filed a notice supplementing its Petition.[3] With its notice, the Postal Service provided documentation that applies the methods used to update the Periodicals cost avoidance models to its First-Class flats and Standard Mail flats cost avoidance models. Comments on Proposal Twelve were received on December 1, 2008 from the Magazine Publishers of America, Inc. and the Alliance of Nonprofit Mailers (MPA/ANM), the Public Representative, and Time Warner Inc.[4] Reply Comments were received on December 10, 2008 from those participants as well as from Pitney Bowes Inc. and the Postal Service.[5]

## III. PROPOSAL TWELVE

### A. Proposed Modification 1

In its first proposed modification, the Postal Service uses Labeling Lists and Mail.dat files to capture the preparation criteria, container level, and destination ZIP

[3] Notice of the United States Postal Service Regarding Filing of Supplemental Material Relating to Proposal Twelve, November 10, 2008.

[4] Comments of Magazine Publishers of America, Inc., and Alliance of Nonprofit Mailers (MPA/ANM Comments); Public Representative Initial Comments Related to Postal Service Flat Cost Models (Public Representative Comments); and Initial Comments of Time Warner Inc. in Response to Order No. 130 (Time Warner Comments), all filed on December 1, 2008.

[5] Comments of Magazine Publishers of America, Inc., and Alliance of Nonprofit Mailers (MPA/ANM Reply Comments); Reply Comments of Pitney Bowes Inc. (Pitney Bowes Reply Comments); Public Representative Reply Comments Related to Postal Service Flat Cost Models (Public Representative Reply Comments); Reply Comments of Time Warner Inc. in Response to Order No. 130 (Time Warner Reply Comments); and Reply Comments of the United States Postal Service Regarding Proposal Twelve (Postal Service Reply Comments), all filed on December 10, 2008.

Code of bundles entered on MADC and ADC containers. This allows it to identify the proportion of bundles on MADC and ADC containers that flow to the MADC, ADC, 3-digit, 5-digit and carrier route levels. This is one of the areas the Commission identified as needing updated data in its FY 2007 ACD. FY 2007 ACD at 74.

In general, the effect of this modification is to decrease the percentage of more deeply sorted bundles that flow directly to piece sortation, and increase the percentage that require an intermediate level of bundle sorting before going to piece sortation. As noted in Time Warner Comments at 3, "according to the LR-I-88 data, 55.62% of 5-digit bundles on an ADC pallet or in an ADC sack would go directly to piece sorting…[b]ut according to the new data, only 22.90% of such bundles would avoid further bundle sorting." The new data show that bundles go through more intermediate levels of sortation before reaching piece sortation.

No party objects to this modification. Time Warner supports the modification, since it is generally more accurate and current, but also because it might make it possible to obtain class-specific and container-specific down-flow percentages. *Id*. Time Warner states that the method used by the Postal Service to obtain updated down-flow percentages does not include volume from mailers who do not use Mail.dat files. It surmises that these mailers are more likely to use MADC sacks, since such mailers have relatively low volumes. If this is the case, it could skew the data if these mailers have down-flow percentages that differ significantly from those that use Mail.dat files on which the Postal Service proposes to rely. *Id.*

The Commission finds that the availability of more current data that can be annually updated will improve modeling results. In the FY 2007 ACD, the Commission was concerned that modified bundle density figures showed that 55 percent of 5-digit bundles at the ADC were going to piece distribution, which implied that the ADC was functioning like a destination sectional center facility in relation to the delivery units in its service area. FY 2007 ACD at 74. The new bundle density figures show a more realistic 22 percent of bundles at the ADC flow to piece distribution. *See* Docket No. RM2009-1, ACR2007_Periodicals_OC_Flats_Model Modified SP mod ALL ON.xls,

Worksheet, “Bundle Densities,” cell K16. The Commission agrees that the new data source could provide more detailed down-flow information. It shares the concern that the data might be unrepresentative. Nevertheless, the use of more current data that can be annually updated will improve modeling results. The Commission therefore accepts Modification 1.

B. Proposed Modification 2

The Postal Service conducted a field study of flats’ operations. It sampled 15 mail processing facilities and 30 delivery units. It measured the incidence of bundle breakage, mail transport equipment conversion factors for flat tubs, and rolling containers (*e.g*., pieces per tub, pieces per container, bundles per tub, bundles per container), manual bundle sorting productivities, and the incidence of single-piece sortation at mechanized bundle sorting equipment.

No party objects to the study itself. Time Warner, however, notes that the volume of flats in tubs was collected on all flats rather than only Periodical flats. Since Periodicals tend to be thicker than the average flat, fewer Periodicals would be required to fill a tub than the average flat. This observation implies that the productivity rates calculated using the tub conversion factor are overstated. *Id*. at 7. Thus, it proposes that Periodical-only data should be used to calculate the conversion factor for pieces per tub when doing so becomes possible. *Id.* at 8.

The Postal Service opposes this proposal in its reply comments. It argues that collecting Periodical-specific data for these activities would not allow it to gather statistically significant samples. Postal Service Reply Comments at 3.

The Commission accepts Modification 2. The Field Study provides actual data instead of proxy measurements and current data rather than estimated parameters, which improves the accuracy of flat models. The Postal Service, however, should seriously consider collecting class-specific data the next time it updates the model parameters produced by the Field Study.

C. Proposed Modification 3

In Docket No. ACR2007, the Postal Service used CRA unit costs for the "1FlatPreP" cost pool (Operation 035) to derive the unit cost of preparing flats bundles for piece sortation on the AFSM 100. Automatic induction to the AFSM 100 is now widely used to prepare flats for sorting on the AFSM 100. Its costs, however, are included in the AFSM 100 cost pool rather than the Operation 035 cost pool. In order to identify the preparation costs incurred for the AFSM 100 in the current operating environment, the Postal Service combined data collected from the Field Study with existing data to model the costs of preparing bundles for regular and for automatic induction to the AFSM 100. [6]

Both MPA/ANM and Time Warner strongly support this modification. As Time Warner notes, the "[p]roductivity data that the Postal Service has now collected makes it possible for the first time to directly model the flats preparation activity in postal facilities." Time Warner Comments at 5, *see also* MPA/ANM Comments at 2. The Commission accepts Modification 3.

D. Proposed Modification 4

Dumping time is included in the MODS-based productivities for the Small Parcel Bundle Sorter (SPBS) and the Automated Package Processing System (APPS) operations, but dumping time is explicitly modeled elsewhere. Therefore, the time associated with dumping needs to be identified and removed from the productivity calculation to avoid counting it twice. To make this adjustment, the Postal Service uses

[6] For example, the Postal Service coupled data from the Field Study on the number of tubs prepared per hour for automatic induction to the AFSM 100 with data from the Field Study on pieces per tub in order to calculate automatic induction preparation costs. The Postal Service also coupled data from the Field Study on the number of bundles prepared per hour with existing data on the number of pieces per bundle to estimate the number of pieces prepared per hour for sortation on the AFSM 100 that did not use automatic induction. Both calculations determine the number of pieces prepped per hour for sortation on the AFSM 100, and when coupled with the wage rate, both yield the cost of preparing bundles for sorting on the AFSM 100.

answers to IOCS Question No. 18C12 to identify the incidence of dumping at SPBS and APPS bundle sorting machines.

MPA/ANM support the modification. MPA/ANM Comments at 2. In its comments, Time Warner opposes the modification unless the Postal Services modifies the IOCS (or perhaps uses other data) to deal with three possible problems. First, 26 percent of the IOCS tallies used to identify dumping incidence do not identify what activity the employee was performing when preparing mail for sorting on the SPBS or APPS. Time Warner Comments at 9. It argues that these tallies should be excluded to properly calculate dumping incidence. Second, 8 percent of the tallies involve "Moving Mail In or Out of the Operation." It argues that moving mail includes moving pallets, sacks, or postal containers, not just bundles. Since the model separately estimates the productivity of these activities, it argues that tallies from this question should also be excluded. *Id*. at 10. Third, it states that there is more keying time associated with SPBS than with APPS machines. It recommends using IOCS data to obtain a separate keying time and separate productivity for each machine type. *Id.*

The Postal Service addresses each of these concerns in its reply comments. First, it notes that the "No Answer" response to the IOCS Question No. 18C12 involves overhead and other activities that are indirect functions of direct SPBS/APPS activities, and should be distributed to products in proportion to these direct activities. Because removing "No Answer" tallies from the tallies counted accomplishes this result, the Postal Service endorses Time Warner's recommendation. Postal Service Reply Comments at 3.

The Postal Service opposes Time Warner's second proposal, at least for the FY 2008 Annual Compliance Report (ACR). It agrees that some "Moving Mail" activities should be excluded from the calculation of the incidence of dumping, but those "movements are not observationally distinct" from activities that should be included. The Postal Service proposes revisiting this issue "at such time as expanded IOCS data become available." *Id.* at 4.

Finally, the Postal Service acknowledges that APPS and SPBS machines have different keying costs, but states that significant time and effort would be required to reflect separate APPS and SPBS keying costs in the model. Moreover, it claims that annual updating of IOCS data will result in appropriate adjustments to the APPS/SPBS mix.[7] Although it believes the problem that has been identified is small, it promises to investigate methods to improve the calculation of the dumping adjustment. *Id*. at 5.

The Postal Service endorses the proposed solution to the problem that has the largest effect on modeled costs. Removing "No Answer" tallies from its pure keying adjustment factor reduces it from 90.11 percent to 86.6 percent. This is approximately the same as the adjustments made in Docket No. ACR2007. The Commission believes the accuracy of the flats cost models will be improved by Time Warner's proposed refinement. It accepts Modification 4 with this refinement. The Commission does not accept Time Warner's other proposed refinements at this time, although it encourages the Postal Service to continue its research in these areas. The importance of differences in keying costs for the APPS and SPBS should diminish over time. The proper identification of Periodicals cost pools to which different activities belong is part of a larger issue of whether and how to properly disaggregate cost pools.

E. Proposed Modification 5

Here, the Postal Service proposes to set the number of handlings that bundles receive at mechanized bundle sorting machines equal to 1. The previous estimate of the number of handlings per bundle was performed over a decade ago when mechanized bundle sorting machines had fewer separations and a sort scheme could require more than one handling per bundle. The Postal Service asserts this is no longer the case. No party disagrees with this modification. The Commission finds the Postal Service's explanation conforms to its understanding of the increased number of

[7] The Commission presumes that the Postal Service is saying that as the use of the SPBS is phased out, the issue of different keying costs for APPS and SPBS will become moot.

separations available with more recent mechanized bundle sorters, and believes this change will improve the accuracy of the Postal Service's flats models. The Commission accepts Modification 5.

F. Proposed Modification 6

In this proposed modification, the Postal Service proposes to assume that outgoing primary bundle sorting is 100 percent manual. The Postal Service argues that the low volume of mail entered in MADC containers, which are mostly sacks, does not justify the setup costs of a mechanized sort, especially since sacks have a high degree of breakage that makes it difficult for them to receive a mechanized sort. Finally, the Postal Service states that none of the ADCs in the Field Study used either APPS or SPBS on the outgoing primary sort scheme. It also notes that all Managed Mail Program (MMP) sites have either an APPS or SPBS at the ADC, so its proposal assumes that bundle sorting at MMPs is 100 percent mechanized. *See Periodicals Mail Cost Model Modifications* accompanying the Postal Service's Petition, at 3.

No commenter opposes this proposal. Time Warner supports it, but asks the Postal Service to evaluate whether it would be economical to require mailers who enter sacks at MADCs to place their residual bundle volumes on MADC pallets. It argues that until recently, the Postal Service considered mechanizing sack sortation by consolidating their entry into a limited number of facilities. Its proposal is intended to determine whether consolidating MADC sack sorting could reduce the relatively high cost of manual sack sorting. Time Warner Comments at 14.

The Postal Service responds to this suggestion by pointing out that it would have to change its mail preparation and processing operations in order to implement it. It says that it would need to investigate whether this change would increase efficiency without negatively affecting service. Because these efforts would take some time, the Postal Service argues that this suggestion is more appropriately considered in future proceedings. Postal Service Reply Comments at 5.

The Commission agrees that the Postal Service should investigate methods of reducing sack sorting costs, but agrees with the Postal Service that a proper study of this proposed operational change is needed. Accordingly, the Commission accepts Modification 6 as proposed by the Postal Service. However, the issue of such sorting costs should be included when the Postal Service and the Commission turn their attention to implementing section 708 of the Postal Accountability and Enhancement Act (PAEA).[8]

G. Proposed Modification 7

The Postal Service contends that participants in the Field Study failed to observe any mechanized bundle sorting for bundles receiving an incoming secondary sortation at the delivery unit. *Periodicals Mail Cost Model Modifications* at 3. The Postal Service proposes to assume that the incoming secondary bundle sort at the delivery unit is 100 percent manual to reflect this observation in its flats models. The Commission accepts Modification 7.

H. Proposed Modification 8

In Docket No. R2006-1, the ratio of mechanized to manual flat sortation for 5-digit bundles receiving an incoming secondary sort was assumed to be 85/15. In Docket No. ACR2007, the Postal Service observed that only 87.88 percent of processing facilities were equipped to perform mechanized incoming secondary sorts. It calls this the mechanization "coverage" factor. To reflect the fact that some plants are not equipped to perform mechanized incoming secondary sorts, it proposed that the 85 percent mechanization ratio assumed in Docket No. R2006-1 be multiplied by mechanization coverage factor of 87.88 percent to obtain a reduced mechanized-to-manual ratio of

[8] In particular, section 708(a)(2) requires the Commission and the Postal Service to "study and submit to the President and Congress…a report concerning opportunities that might exist for improving efficiencies in the collection, handling, transportation, or delivery of Periodicals by the Postal Service…."

74.7/25.3. The Postal Service then multiplied the percentage of 5-digit bundles flowing to piece distribution at each level (estimated by the bundle density study then in use) by this new ratio to estimate the portion of incoming secondary flats that was sorted mechanically. The Commission accepted this approach. FY 2007 ACD at 72, n.27.

The Postal Service believes that it is preferable to have a more direct measure of the portion of flats that receive a mechanized incoming secondary sort. It, therefore, proposes to use the ratio of total piece handlings (TPH) in mechanized incoming secondary flat sorting operations to total non-carrier route flat Revenue, Pieces, and Weight System (RPW) volumes as a proxy for the ratio of mechanized-to-manual incoming secondary sorts.[9] This proxy method yields a percentage of 5-digit flat bundles that receive a mechanized incoming secondary sort that is almost identical to the percentage used in Docket No. ACR2007. Accepting it would have little effect on the FY 2008 ACR.

Although several commenters criticize Modification 8, none oppose it. Time Warner asserts that this proxy is flawed in several ways. It notes that there is a large volume of carrier route flat bundles, and that a substantial number of those break accidentally. The resulting pieces will then receive a mechanized incoming secondary piece sort, which will be reflected in the numerator of the TPH/RPW ratio, but not the denominator. Time Warner Comments at 16. More importantly, it argues, the ratio developed by the Postal Service applies to all flats, even though it is generally accepted that Periodical flats are more likely to be sorted manually than the typical flat. This means that using the probability of a typical flat receiving a mechanized incoming secondary piece sort as a proxy for the probability of 5-digit Periodical bundles receiving a mechanized bundle incoming secondary sort will probably overstate that probability, and therefore understate the cost of sorting Periodicals bundles. It would prefer that the

[9] Carrier route flats are in bundles and would not normally receive an incoming secondary piece sortation in the processing plant. The Postal Service assumes that total RPW non-carrier route flats is the number of flats that will require an incoming secondary sort of either kind—manual or mechanized. *See Periodicals Mail Cost Model Modifications* at 3.

Postal Service measure Periodical-specific mechanized incoming secondary TPH to determine whether this would corroborate the intuition that the cost of manually sorting flats predicted by the model is substantially less than the actual cost of manually sorting flats. *Id*. at 16-18.

The Public Representative supports the Postal Service's use of annually updated data to calculate the percentage of flats that receive a mechanized incoming secondary sort. Public Representative Reply Comments at 3. He does so because he believes this also makes it possible to estimate separate TPH/RPW ratios for all Periodical piece sorts, not just the incoming secondary sort. Public Representative Reply Comments at 4-6. The Public Representative claims that doing this would reflect the greater likelihood that Periodicals will receive a manual sort rather than mechanized sort, wherever they may be in the mailflow. This, in turn, would increase the cost of manual piece sorting, and reduce the discrepancy between modeled and CRA costs. *Id*. at 6.

He suggests this might be done by matching MODS TPH data with billing determinant data at various entry points. In the alternative, he proposes applying the 74.3 percent proxy developed for flats presorted in 5-digit bundles that receive an incoming secondary mechanized sort to flats in all bundle presort levels for each entry point in the mailflow. *Id.* Moreover, the Public Representative states that if a method is not readily available to develop mechanized coverage estimates for Periodical flats at all entry points, he recommends applying the 74.3 percent probability that flats will receive a mechanized incoming secondary sort to all piece sorts. *Id*.

In response to the criticism that its mechanization rate for Periodicals is overstated, the Postal Service acknowledges that its measure could be improved upon, but states that doing a proper study is complicated. The Postal Service says it will investigate ways to improve the accuracy of its estimate, but notes that any new methods would not yield results in time for this ACR. Postal Service Reply Comments at 6.

The Commission accepts Modification 8 as proposed by the Postal Service. As Time Warner and the Public Representative point out, however, the system average

ratio of flat TPH to non-carrier route RPW volume is an imperfect proxy for the mechanization rate for the incoming secondary flat bundle sorting operation. The Postal Service assumes that there is a close correlation between the incidence of mechanized bundle sorting and the incidence of mechanized piece sorting of flats, but does not thoroughly analyze this correlation. As Time Warner points out, bundles broken prematurely reduce the degree of this correlation. Factors that determine the machinability of bundles differ in some important respects from the factors that determine the machinability of pieces. Although TPH is meant to represent piece volume, there are discrepancies between piece handlings (TPH) and piece volume. All three phenomena reduce the degree of the correlation. The Postal Service should take further steps to verify that there is a close correlation between the mechanization rate for bundle sorting and the mechanization rate for piece sorting of flats.

I. Proposed Modification 9

In this proposed modification, the Postal Service seeks approval to use a single CRA adjustment factor rather than to continue to rely upon the accepted principle whereby the piece sorting adjustment factor is set equal to 1, and the non-piece adjustment factor bears all the burden of bringing total modeled costs into alignment with CRA costs.

Time Warner supports a single CRA adjustment factor for this ACR. It believes this would improve upon what is, in effect, an adjustment factor only for non-piece related costs. Time Warner Comments at 18. However, because more disaggregated cost pools may improve cost modeling, and eventually improve efficiency, Time Warner hopes the Postal Service will make progress in that direction.

In contrast, the Public Representative appears to oppose this proposal, arguing that a single adjustment factor distorts Periodical worksharing discounts to an unknown degree. Public Representative Comments at 2. He recommends that the entire issue

of the proper use of CRA adjustment factors be re-examined before the FY 2009 ACR is submitted. [10]

In its reply comments at 2, Time Warner opposes the Public Representative's apparent recommendation to reject this proposed modification for this ACR. It argues that the current method does not use two adjustment factors in the manner the Public Representative supports, which would bring modeled piece costs into alignment with CRA piece costs, and modeled non-piece costs into alignment with CRA non-piece costs. It asserts that if this were done, piece costs would increase by 35 percent. It states that a single adjustment factor of 18 percent would shift some of the burden of reconciling modeled costs to CRA costs onto piece-related costs, but would have a smaller impact on pure piece costs than if two adjustment factors were properly applied. Time Warner Reply Comments at 3.

While the Postal Service recognizes the drawbacks of using a single CRA adjustment factor that the Public Representative and Time Warner point out, it also opposes the apparent recommendation of the Public Representative to continue the current method of applying CRA adjustment factors until cost pools become more disaggregated, and more accurate adjustment factors are developed for both piece and non-piece related costs. The Postal Service also seeks to dissuade both commenters from advocating more disaggregated cost pools to develop more accurate cost modeling. It states that it does not believe that mail processing activities are "sufficiently isolated within each cost pool" to correlate them with specific modeling components. Postal Service Reply Comments at 6.

The Commission accepts this proposed modification, but with some concerns.[11] The potential impact of the CRA adjustment factor on cost avoidance estimates is

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[10] Public Representative Comments at 3. The Public Representative's position could also be interpreted to mean it accepts the use of a single CRA adjustment factor only for this ACR, but that the Postal Service should develop CRA adjustment factors that appropriately bring different types of modeled cost into alignment with their corresponding CRA costs.

[11] For example, the proposed change causes non-barcoded, non-machinable pieces and therefore unit costs in MADC containers at MMP to increase by 78 percent. One can observe this by

greater than all of the other modifications that comprise Proposal Twelve. It is therefore important that it be applied in a non-arbitrary way, and with knowledge of its potential impact. For example, because the Commission has accepted a refinement of proposed Modification 4, a single CRA adjustment factor would increase the piece-related adjustment factor to 23 percent, not the 18 percent Time Warner refers to in its reply comments.[12]

To help reduce its reliance on the CRA adjustment factor, the Postal Service should continue to investigate methods that accurately identify weight-related piece costs. It should also develop more refined Periodical mail processing cost pools, where possible.

J. Proposed Modification 10

The Postal Service proposes to treat the coverage factors for Outgoing Primary, Outgoing Secondary, and Managed Mail Program operations as fully mechanized, since automated sorting equipment is available at all ADCs. No party opposes this proposal.

While this modification would have little overall impact on piece-related costs, the Commission is concerned that it produces a counterintuitive result. For this set of operations, UFSM 1000 sorting is more expensive than manual sortation. Nevertheless, the modified model predicts an increased feeding of non-machinable pieces to the UFSM 1000. Compared to the FY 2007 ACR results, this modification causes a large increase in the volume of non-machinable Periodicals sorted on the Universal Flat Sorting Machine (UFSM) 1000, and a significant decline in the volume of non-machinable Periodicals sorted manually. This changes the relative weight of mechanized and manual processing of this mail, which increases its unit processing

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turning on the switch for proposed Modification 10, and examine cells AM134 and AU134 in Worksheet MADC, and compare them to the same cells with the switch turned off.

[12] This result is obtained by turning all the “switches” in the model ON, and changing the value of the pure keying adjustment in cell G81 of worksheet “ACR 2008 MODIFICATIONS,” to 86.63 percent.

costs. This result is counterintuitive. The Commission accepts Modification 10, but urges the Postal Service to examine the causes of, and the reasonableness of, this result.

K. Proposed Modification 11

The Postal Service states that in APPS and SPBS operations, bundles are mis-keyed and placed in reject bins to be reworked as bundles. The effect of this is to overstate the productivity of APPS and SPBS operations. *Periodicals Mail Cost Model Modifications* at 4. First, the reject rate for incoming and outgoing APPS and SPBS operations is calculated using the ratio of TPF to TPH. Then, productivities for bundle sorting equipment are divided by 1 plus this reject rate to obtain a productivity that measures only bundle sorting.

No party opposes this modification. MPA/ANM and Time Warner support it. MPA/ANM Comments at 2; and Time Warner Comments at 20. Because this proposed modification improves the accuracy of bundle sorting productivities, the Commission accepts proposed Modification 11.

L. Proposed Modification 12

In previous models, the Postal Service used engineering estimates of what the productivity of AFSM 100s would be with the Automatic Tray Handling System (ATHS) installed. With the widespread adoption of ATHS, the Postal Service states it is now confident that MODS data will accurately estimate the productivity of the AFSM 100 without the need to perform special engineering studies. *See Periodicals Mail Cost Model Modifications* at 4.

Two commenters support this modification. MPA/ANM Comments at 2; and Time Warner Comments at 20. No party opposes it. While many parties have identified various limitations of MODS data, the Commission accepts Modification 12, in part, because it will allow annual updates to AFSM productivity.

M. Proposed Modification 13

Similar to circumstances that led to proposed Modification 11, bundles sorted on APPS and SPBS machines sometimes break, allowing single pieces to be counted as sorted bundles. This overstates bundle sorting productivity, since a single broken bundle typically has many pieces. The Postal Service determines this adjustment factor by calculating the rate at which bundles break, adjusted by the proportion of bundle sorts in which single pieces are found. Dividing MODs productivity by 1 plus the percent of flats that are sorted as single pieces due to bundle breakage rate reduces the MODS productivity figure. With this adjustment, the MODS productivity of incoming and outgoing operations on the APPS and SPBS machines yields a pure bundle sorting productivity measure.

No party opposes this modification. One notes that the Field Study determined that 3.71 percent of bundles sorted by an APPS machine, and 5.81 percent of bundles sorted by an SPBS machine are single pieces, not bundles. Removing this productivity mis-measurement will make the model results more accurate. Time Warner Comments at 21. The Commission accepts proposed Modification 13.

## IV. MISCELLANEOUS ISSUES

All of the commenters' suggestions that are reviewed below propose future research that is expected to lead to improvements in the analytical principles that the Postal Service applies in its Periodicals or letter-mail cost avoidance models. The Commission has issued proposed rules for periodic data reporting that describe a framework for a process of reviewing proposed changes in analytical principles. This framework contemplates that where a significant new analysis of an analytical area is proposed by the Postal Service—such as Periodicals' cost avoidance—a study plan would be publicly discussed with an opportunity for public input before the study is

implemented. *See* Docket No. RM2008-4, Order No. 104 (August 22, 2008) at 30-35.[13] Thus, the suggestions described below are to be considered before another significant study of Periodicals or letter cost models is undertaken.

### A. Using Billing Determinants to Modify Model Estimates of AFSM 100 Coverage

In its comments, Time Warner states that a prior version of the Periodicals model showed a higher percentage of flats receiving a mechanized piece sort on the AFSM 100 than indicated by the billing determinants. As a result, the prior model appeared to overstate the total costs of mechanized and understate the total cost of manual sortation. Docket No. RM2008-2, Time Warner Comments, Appendix C, at 2. In this proceeding, it states that if billing determinant data continue to show that a lower percent of flats receive a mechanized sort than the model shows, the Postal Service should bring AFSM 100 mechanization rates in line with the those indicated by the billing determinants. Time Warner Comments at 22.

In response, the Postal Service asserts that, in general, model volumes are now calibrated to billing determinant data. The exception, it states, is in the estimation of the machinability of 5-digit bundles. In anticipation of Flats Sequencing System deployment, it states, it is granting machinability status to an unspecified amount of non-AFSM 100 compatible flats. Postal Service Reply Comments at 8. It also states that it will continue to examine ways of identifying non-machinable mail that is treated as machinable without resorting to what it characterizes as "hastily designed studies, educated guesses, or undocumented assumptions that could potentially produce results that distort modeled costs further than the estimates they replace." *Id.*

The Postal Service recognizes that its machinability ratios are inaccurate to an unknown extent. The Commission hopes that it and other interested parties will closely

[13] The procedures for reviewing proposed changes to analytical principles outlinedin Docket No. RM2008-4 were esstentially unopposed.

examine the recently filed ACR for evidence of inaccurate machinability ratios. This is one of the topics that should be investigated as part of the implementation of section 708 of the PAEA.

B. Developing Updated Measurements of Container Handling Productivity

Time Warner notes that productivity estimates of container handling are outdated and no longer accurately reflect operational reality. It urges the Postal Service to undertake a field study of container handling similar to the one it has just completed for the 2008 ACR. Time Warner Comments at 21. The Postal Service does not oppose this recommendation. It simply notes that performing a study in different plants is difficult and must account for the different conditions in those plants. *Id*. at 7.

The Commission agrees that the Postal Service should perform a field study when key model parameters are outdated or no longer reflect operational reality. It understands that it takes a significant amount of time, effort, funding, and planning to properly control for different plant conditions. This seems to be precisely what the current bundle Field Study accomplished.

C. Including Allied Costs in Cost Avoidance Estimates

While it supports all of the Postal Service's proposed modifications, MPA/ANM offers several reasons why allied piece-related costs should be included in cost avoidance estimates. MPA/ANM Comments at 4-5. The Postal Service observes that this goal need not stand in the way of adopting the improvements to other aspects of the costs avoidance models that make up Proposal Twelve. *Id*. at 8.

The Commission agrees. Proposals to properly reflect differences in allied costs in cost avoidance calculations would be welcome in future cost methodology rulemakings.

D. Applying Separate CRA Adjustment Factors for Letters Receiving Incoming and Non-Incoming Secondary Sorts

Pitney Bowes develops separate CRA adjustment factors for letters receiving an incoming secondary sort and letters not receiving an incoming secondary sort. It uses responses to IOCS questions to disaggregate MODS cost pools into those that involve incoming secondary operations and those that do not. Pitney Bowes concludes that using multiple CRA adjustment factors leads to a smaller one for letter mail receiving an incoming secondary sort than letter mail not receiving one. Based on this observation, it concludes that using a single adjustment factor overassigns unmodeled costs to letters receiving an incoming secondary sort. It recommends separate CRA adjustment factors for letters receiving an incoming secondary sort and letters not receiving an incoming secondary sort. Pitney Bowes Reply Comments at 3. It urges the Postal Service and the Commission take this approach when "designing and evaluating discounts for First-Class Mail and Standard Regular automation letters." *Id.* at 5.

Since other interested parties have not had an opportunity to comment on Pitney Bowes' proposal, the Commission does not address it on the merits.

*It is Ordered:*

1. For purposes of the Postal Service's periodic reporting to the Commission, the Commission accepts the cost method changes identified as Modifications 1 through 3 and 5 through 13 in Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Further Proposed Methodology Changes for the FY 2008 ACR (Proposal Twelve), filed November 4, 2008.

2. The cost method change identified as Modification 4 in Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Further Proposed Methodology Changes for the FY 2008 ACR (Proposal Twelve), filed

November 4, 2008, is accepted as refined by the proposal of Time Warner Inc. identified in the body of this Order.

By the Commission.

Steven W. Williams
Secretary