

BEFORE THE
POSTAL REGULATORY COMMISSION

WASHINGTON, D.C. 20268-0001

MAIL PROCESSING NETWORK RATIONALIZATION

SERVICE CHANGES, 2012

DOCKET No. N2012-1

TESTIMONY OF

WILLIAM WEED

ON BEHALF OF THE

POSTAL REGULATORY COMMISSION

(PRCWIT-T-1)

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AUTOBIOGRAPHICAL SKETCH

My name is William Weed and I am an independent consultant. I have over 45 years of experience in the areas of engineering, manufacturing/postal operations, plant management, and project management. This experience includes postal operational econometric modeling and analysis, postal automation equipment planning, postal facility planning and operational layouts, postal material handling system planning, and postal operating/logistics planning. I have been self-employed since my retirement from the United States Postal Service (USPS) in September 2001. Since my retirement, I have provided consulting services to Canadian Post Corporation as well as to equipment suppliers and consulting companies related to postal operations including Siemens and Northrup Grumman.

I received a Bachelor of Science Degree in Industrial Engineering from Oregon State University. I worked in the private industry for several electronic equipment manufacturing companies until beginning my postal career with the USPS in 1974 as an Industrial Engineer. I have held the following postal management positions: Manager Engineering Technical Unit (ETU), Manager General Mail Facility, Portland, OR; Director Mail Processing, Seattle, WA; Director, Operations Support, Seattle Division; Regional Manager, Automation, Western Region; Plant Manager, Portland, OR; Manager, Major Facility Activation, Executive Program Director, USPS Headquarters.

1 Since November 2009, I have provided consulting services on numerous mail
2 processing projects to support the Postal Transformation¹ (PT) plan for Canada Post
3 Corporation (CPC). I provided CPC postal consulting services to support PT plans
4 for automation, automated tray handling system, Bulk Mail systems redesign, and
5 Exchange Office redesign. I developed a 24-hour volume flow and processing
6 models to simulate the average processing day and the 95th percentile peak day. I
7 led a team to conduct a mail processing service review. I also provided Detailed
8 Work Center Design (DWCD) models for average and peak day volumes to
9 determine equipment scheduling, container flow, and staging requirements for both
10 letter and flat primary operations, and their future PT planned implementation of
11 letter sequencing operation (or Delivery Point Sequence (DPS)).

12 Specific to my testimony I have the following experience. In 1974 I
13 coordinated the mail processing conversion from the Work Load Recording System
14 (WLRS) to Management Operating Data System (MODS) for the Portland Plant.
15 From 1974 through 2001 I was involved in various aspects for the planning and
16 installation of Mechanized and Automated equipment for the plant. In 1976, I was
17 an instructor and taught scheduling and staffing techniques and the use of the
18 Interactive Postal Simulator (IPSIM) model. In 1980, I participated on a national
19 team that developed the scheduling and staffing model, Post Office Scheduler
20 (POSKED). In 1986 I developed the Operational Planning Guide (OPG) model,
21 which was the predecessor to the Business Management Guide (BMG) model. In

¹ <http://www.canadapost.ca/cpo/mc/aboutus/corporate/postaltransformation/default.jsf> Retrieved April 19, 2012.

1 1993, I managed one of the test sites for the SiteMETA model that was used to
2 define the future automation equipment site requirements. In 1987, I initiated the
3 Saturday Area Mail Processing (AMP) of for all Western Washington Plants into the
4 Seattle Plant. In 1988, I initiated the outgoing secondary concentration center AMP
5 by consolidating all Outgoing Secondary operations for four Western Washington
6 plants into the Seattle Air Mail Center (AMC). In 1988, I created the Delivery
7 Distribution Center (DDC) concept to consolidate the automated and manual
8 distribution of incoming secondary operations for the Seattle Metropolitan area. In
9 1989, I was the executive responsible for the creation of the carrier walk sequence
10 data-base, which led to the automated carrier case label program; this then became
11 the data file for the Delivery Point Sequencing (DPS) process.

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PURPOSE AND SCOPE

The purpose of my testimony is to provide an independent evaluation of cost and staffing changes resulting from the Postal Service's proposed Mail Processing Network Rationalization Service Changes. The Postal Regulatory Commission filed a notice of sponsorship of testimony on March 21, 2012, of the potential scope of my and witness Matz's testimony. My testimony will include an evaluation of the Postal Service's assumptions related to productivity gains; a determination of which processing costs are variable and which are fixed, for purposes of network consolidation; and an estimate of the savings, or range of savings, for the proposed consolidation and for an alternate proposal under which a portion of current overnight committed mail would continue to receive overnight service.

I will first evaluate the mail processing labor cost savings, as proposed by witnesses Neri and Bradley, by evaluating their data from the point of view of mail processing productivity expectations. I will then evaluate the anticipated savings due to plant consolidations using the current "Gaining" plants productivity base. I will review the final AMP Post-Implementation Review (PIR) reports to identify the changes in productivity that resulted from the workload transfers. This will provide a comparison of plant consolidation history. I will also review the productivity projections as presented by witness Neri, resulting from the service standard change, proposed plant consolidations, and operating window expansion. I will also review an alternate assumption for the proposed processing window that would preserve a portion of the overnight service.

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ASSOCIATED LIBRARY REFERENCES

I am sponsoring the following Category 2 Library References, which are associated with this testimony:

PRCWIT-LR-N2012-1/1	Savings Evaluation N2012-1
PRCWIT-LR-N2012-1/NP5	Savings Evaluation N2012-1 (Non-Public Version)
PRCWIT-LR-N2012-1/2	Savings Evaluation Final PIRs
PRCWIT-LR-N2012-1/NP1	Savings Evaluation Final PIRs (Non-Public Version)
PRCWIT-LR-N2012-1/3	Savings Evaluation AMP Studies
PRCWIT-LR-N2012-1/NP2	Savings Evaluation AMP Studies (Non-Public Version)

1 **I. EVALUATION OF THE POSTAL SERVICES'S ASSUMPTIONS RELATED TO**
2 **THE ESTIMATED PRODUCTIVITY GAINS**
3

4 The Postal Service has stated that if it were to revise service standards, it could
5 improve operating efficiency and lower its mail processing and network costs.² One of
6 the "...major effects of the proposal would be to facilitate a significant consolidation of
7 the Postal Service's processing and transportation networks."³ The Postal Service
8 states that it has "...vigorously pursued operational consolidation opportunities to
9 reduce excess capacity in its networks."⁴ It also states that further network
10 consolidations are necessary in order to align operating costs with revenues and that
11 this is unachievable without relaxation of certain service standards. The principal
12 strategy to accomplish this cost reduction is to shift the Delivery Point Sequence (DPS)
13 operation for letter mail from its current operating window of 11:00 PM to 7:00 AM to the
14 following day from 12:00 PM to 4:00 AM. The Postal Service believes that the
15 expansion of the processing window will reduce the number of letter automation
16 machines and consolidate mail-processing operations from 500 to less than 200
17 locations.

² Federal Register. Postal Service. *Proposal to Revise Service Standards for First-Class Mail, Periodicals, and Standard Mail*. Vol. 76, No. 183, September 21, 2011.

³ Id. Page 58433

⁴ Id. Page 58434

1 **A. Determine the Required Productivities Expected of the Network**
 2 **Consolidation Proposal**
 3

4 In this section of my testimony I will evaluate the projections of Mail Processing
 5 Labor Cost Changes developed by witness Bradley.⁵ Table 1 is a summary of the mail
 6 processing labor cost changes that the Postal Service expects from the Mail Processing
 7 Network Rationalization Service Changes, 2012 (MPNRSC).⁶ The two components of
 8 Table 1 that I will evaluate are the expected savings due to plant consolidation
 9 (workload transfer) and the productivity gains associated with operating plan changes.

10 **Table 1 – Summary of Mail Processing Labor Cost Savings**

Category	Cost Change
Workload Transfer Cost Change	\$82,559
Productivity Gain Cost Change	\$964,159
Supervisor Cost Change	\$66,423
Plant Management Cost Change	\$18,059
In Plant Support Cost Change	\$48,700
Indirect Cost Change	\$140,823
Premium Pay Reduction	\$71,807
Total Cost Change	\$1,392,529

11 *Source: USPS-LR--N2012-1/20. Dollars in Thousands*

⁵ See, Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service, Docket No. N2012-1, USPS T-10, as corrected March 21, 2012.

⁶ See, USPS-LR-N2012-1/20, Calculating Mail Processing Labor Cost Savings.xls, Tab Summary.

1 In order to evaluate the above savings from an operations standpoint, I created
 2 library references PRCWIT-LR-N2012-1/1 and PRCWIT-LR-N2012-1/NP5. These
 3 library references contain Excel workbooks *PRCWIT-LR-N2012-1_NP5 Savings*
 4 *Analysis.xlsx* and *PRCWIT-LR-N2012-1_1 Savings Analysis (Public Version).xlsx*.
 5 Source data contained in this latter spreadsheet was extracted from Public USPS
 6 Library References. Detailed FY2010 MODS data contained in the “DATA” tab of
 7 *PRCWIT-LR-N2012-1_NP5 Savings Analysis.xlsx* was copied from spreadsheet
 8 FY2010 MODS HOURS.xls.⁷ This data contains all FY2010 MODS hours for all Mail
 9 Processing Facilities by operation. The content of this data source is shown in Table 2
 10 below.

11 **Table 2 – Contents of FY2010 MODS Hours**

Data Header	Contents
Finance Number	392 Unique Finance Numbers
Facility Name	389 Unique Facility Names
Status	Y=Active, N=Inactivate, REC, NDC, ISC
Operation No	679 Unique MODS Operation Numbers
Operation Name	679 Unique MODS Names
LDC	89 Unique LDC Numbers
Cost Pool	49 Unique Cost Pools
Cost Pool Name	49 Unique Names
Hours	Annual hours by MODS Operation by Facility

12
 13 Again, in order to evaluate the estimated productivity gains, FY2010 Total Piece
 14 Handlings (TPH) was imported from USPS-LR-N2012-1/NP20⁸ to the matching Facility
 15 Finance Number and MODS number from both files. A Facility List tab was created to

⁷ See, USPS LR-N2012-1/20, FY2010 MODS HOURS.xls.

⁸ See, USPS LR-N2012-1/NP20, April 16, 2012.

1 show the unique Finance Numbers, Facilities, and Status (Y or N) from witness
2 Bradley's data file. Finance numbers identified as REC, NDC, or ISC were coded as
3 "OUT" or "Excluded" in the appropriate column. An Operations tab was then created
4 and I imported the MODS table, reducing it to match the MODS operation numbers
5 contained in the DATA tab. Based on the Cost Pool, NDS Category, Machine, Sort
6 Type, Mail Shape, and Mail Class, I created my own "Category" names and grouped
7 MODS operations in these category names for the purpose of productivity evaluation.
8 The MODS operations mapped to each category name are displayed in the worksheet
9 tab "Category Table." These Category names were added as data to the Operations
10 worksheet tab.

11 **Exhibit 1**, in the Appendix, is a list of the Category names used, grouped by
12 Volume Measured Operations, Non-Volume Operations, and Non-Mail Processing.
13 These Category codes were added to the DATA tab for each MODS operation for each
14 facility. From the "Facility List" tab, the gaining finance number was added based on the
15 current finance number. The last column in the DATA tab defines the after-
16 consolidation status: "G" for Gaining, "L" for Losing, or "OUT" for facilities not included
17 in the analysis.

18 **Exhibit 2**, in the Appendix, summarizes in detail all FY2010 MODS work hours
19 by Category from the DATA tab, and Table 3 below summarizes Exhibit 2, highlighting
20 the totals from FY2010 MODS. The hours displayed in the NDC, ISC, and REC column
21 are excluded from my evaluation, since they were excluded in witness Bradley's

1 testimony.⁹ The total FY 2010 MODS work hours is 311,129,168. Of this total,
 2 38,508,950 hours are excluded from the evaluation, since they are facilities that are
 3 designated as NDC, ISC, or REC. Also excluded from the evaluation of mail processing
 4 assumptions related to productivity gains, is the “Not Mail Processing” category group,
 5 which totals 89,937,000 work hours. The resulting 182,683,218 work hours is the sum
 6 total of the current “Gaining” and “Losing” Plants’ LDC 11-18 work hours. This total
 7 reconciles with witness Bradley as evidenced in Table 3 below. In reviewing witness
 8 Bradley’s total work hours, two MODS operations (776 and 603) were excluded from his
 9 work hour analysis. They are coded as cost pools 8 and 51, respectively. These were
 10 also excluded from my data files. These two operations total 311,131 hours. The total
 11 Labor Distribution Code (LDC) 11-18 hours is reduced to 182,372,087.

12
 13 **Table 3 – MODS Work-hours Summary**

Category	All Hours	NDC, ISC, REC	Plants
Volume Ops	94,633,655	6,839,475	87,794,180
Non-Volume Ops	111,108,849	16,219,811	94,889,037
Mail Processing LDC 11-18	205,742,504	23,059,286	182,683,218
Not Mail Proc	105,386,664	15,449,664	89,937,000
Total MODS	311,129,168	38,508,950	272,620,217

14 *Source: NWPC Savings Analysis 2012-1.xlsx, Summary Sheet*

15 A new worksheet tab labeled “USPS savings by Ops” was then created. This
 16 worksheet contains all unique MODS operation numbers contained in the FY 2010 data.
 17 For each individual MODS operation number, TPH and hours were summed separately
 18 for both the “Losing” facilities and the “Gaining” facilities. For each MODS operation
 19 number the TPH productivity was calculated for the “Losing” facility as well as for the

⁹ See, “Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service,” Docket No. 2012-1, USPS-T-10, at Section II pages 5 and 9.

1 “Gaining” facility. TPH and hours were combined to create “current combined facilities,”
2 with the resulting TPH productivity calculated.

3 Witness Bradley calculated the direct mail processing labor/cost changes in a
4 two-step process. The first step was to identify the institutional costs associated with
5 the “Losing” facilities, and then to apply a productivity gain for each cost pool. The
6 workload transfer cost change identified in Table 1 are approximately \$82.6 million. The
7 productivity gains were approximately \$964.2 billion for a total of \$1,046.7 billion. In
8 worksheet Tab “USPS Savings by Operation” of Excel file PRCWIT-LR-N2012-
9 1/NP5.xlsx for each operation I imported the PRC variability percentage based on the
10 cost pool associated with each operation for the “Losing” and “Gaining” facilities. The
11 institutional hours from the “Losing” facilities were subtracted from the work hours by
12 operation of the combined facilities resulting total work hours by operation before the
13 anticipated productivity increases were applied.¹⁰

14 The expected productivity gains by cost pool for LDCs 11-14 are shown in
15 witness Bradley’s Table 2.¹¹ His Table 3 shows expected productivity gains by cost
16 pool for LDCs 17-18.¹² These expected productivity increases were imported by
17 operation by cost pool number. The number of work hours after productivity increases
18 were then determined. The resulting net work hours, divided into the combined TPH,
19 determined the “required” productivity expected by operation. PRCWIT-LR-N2012-

¹⁰ See, “Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service,” Docket No. 2012-1, USPS-T-10, at Section I-A pages 6-10.

¹¹ See, “Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service,” Docket No. 2012-1, USPS-T-10, at Section I-B pages 13-14.

¹² See, “Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service,” Docket No. 2012-1, USPS-T-10, at The Section I-A pages 6-10.

1 1/NP5.xlsx, worksheet tab “USPS Savings by Operation,” column W (Required PPH)
2 shows the required productivity for each MODS operation.

3 **Exhibit 3**, in the Appendix, summarizes the expected operational savings by
4 category. This exhibit shows the work hours of the “Gaining” facility after the “Losing”
5 facility’s volumes have been shifted. Exhibit 3 also displays the total work hour change
6 for combined “Losing” and “Gaining” facilities required to accomplish the productivity
7 expectations.

8 Table 4 below displays, by Category Groups, the number of hours remaining
9 after the “Losing” plants have been consolidated into the “Gaining” plants. The total
10 LDC 11-18 work hours is reduced from 182,372,087 hours to 156,356,429 hours. This
11 is a reduction of 26,015,658 work hours, or 14.3 percent. The reduced hours projection
12 is based on witness Bradley’s savings projections from eliminating the institutional cost
13 from the “Losing” facility, and then applying Neri’s cost pool productivity assumptions to
14 the remaining hours. The total change in Table 4 equates to the work hour change
15 presented by witness Bradley.¹³

¹³ See, Library Reference USPS-LR-20, Mail Processing Labor Cost Saving.xls

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Table 4 – Work Hour Change N2012-1

Total Mail Processing LDC 11-18 Savings	Losing Facility	Gaining Facility	Total Combined
FY 2010 Base Work-Hour Base	58,954,969	123,417,117	182,372,087
N2012-1 Proposal	0	156,356,429	156,356,429
Change	-58,954,969	32,939,311	-26,015,658
% Change	-100%	26.7%	-14.3%

2

Source: NWPC Savings Analysis 2012-1.xlsx, Summary Table Sheet

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4

It is important to note from Table 4 that although there is an overall reduction in

5

work hours, gaining plants' work hours will actually grow in total by 26.7 percent. Table

6

5, below, is a summary of the data from **Exhibit 4**, in the Appendix. It shows the

7

gaining plants' current productivity and the resulting productivity expectation of

8

MPNRSC.

1 **Table 5 – Expected Productivity at N2012-1 PPH by Category Group**

Category Groups	After Consolidation with Institutional Savings and Productivity Savings				
	New Gaining Workload at N2010-1 PPH			% PPH Change	
	Hrs	Vol	PPH	GainPlant	CombPlants
Auto Letters Outgoing	6,027,536	48,404,352	8,031	24.6%	22.2%
Auto Letters Incoming	8,661,840	63,038,192	7,278	23.7%	22.2%
Auto Letters Secondary	20,243,117	209,435,016	10,346	25.6%	22.3%
Auto Letters	34,932,492	320,877,560	9,186	26.0%	22.2%
Manual Letters	11,386,096	6,645,691	584	8.2%	3.5%
Total Letters	46,318,588	327,523,252	7,071	23.1%	17.6%
Mech Flats+Prep	16,446,460	22,232,177	1,352	13.8%	13.6%
Manual Flats	4,543,178	1,619,651	357	10.4%	3.4%
Total Flats	20,989,638	23,851,829	1,136	11.7%	11.4%
SPBS	12,102,466	3,898,504	322	3.2%	8.7%
Parcel/Priority	6,729,539	2,193,100	326	10.9%	4.7%
Total Other Dist	18,832,005	6,091,604	323	5.7%	7.3%
Prep	8,096,269	47,575,406	5,876	17.6%	16.5%
Open/Pouching	12,935,785	79,815,370	6,170	19.8%	17.9%
Tray Handling	7,254,487	779,540	107	9.7%	12.8%
Equip Operator	10,075,091				
Dock Operations	19,726,240	285,389	14	25.9%	23.0%
Express/Registry	3,868,798	177,035	46	36.6%	26.8%
Indirect/Support	8,259,527				
Sub-Total Dist	86,140,231	357,466,684	4,150	17.9%	13.8%
Sub-Total Non Dist	70,216,197				
Total LDC 11-18	156,356,429	357,466,684	2,286	20.9%	16.6%

2 *Source: NWPC Savings Analysis 2012-1.xlsx, USPS Savings Summary Sheet*

3 The resulting change in productivity is an overall 16.6 percent improvement for the
 4 combined “Losing” and “Gaining” plants. This represents an overall 20.9 percent
 5 *expected* productivity improvement at the Gaining plant over their base productivity. In
 6 other words, in order to realize the mail processing savings expected from the proposed
 7 Mail Processing Network Rationalization Service Changes, the gaining facilities will have
 8 to achieve a weighted average 20.9 percent increase in overall productivity. This will
 9 require a dramatic improvement in all processing operations, both in volume and non-
 10 volume measured operations.

1 In order to put this expected improvement into perspective, it is important to
2 categorize the types of operational consolidations that occur when facilities are merged.
3 The first category of operations is where volume is simply added to an existing operation,
4 with little or no change to the operation. Mail cancellation and outgoing sortation fall into
5 this group. Savings capture can be significant in this group due to adding volume while
6 absorbing the savings from the elimination of losing plants' fixed costs. Generally,
7 adding volume without changing the operation itself results in higher productivity.

8 The second category of operations is where there is a transfer of workload with
9 little or no absorption – effectively additional new work to the gaining facility. DPS
10 operations fall into this category. It is new work for the gaining plant and will generally be
11 processed at the gaining plant's productivity for that operation. Adding the workload
12 does not in and of itself add any economies of scale, as it is new and independent
13 workload. The opportunities for savings are tied more to the local plant's productivity
14 relative to the losing plant, and to the expectations for productivity improvement.

15 The third category of operations is when volume is merged with the gaining plant's
16 volume, but operational changes are necessary. Incoming Primary falls into this
17 category. The addition of 3-digit ZIPs to Incoming Primary operations means that the
18 sort plans, setup, and possibly floor layout will have to change, and additional staging
19 and dispatch will have to be implemented. While volume is added to the existing
20 operation, the required changes can potentially reduce any expected economies of scale
21 from the additional volume.

22 The final category is operations that do not have a direct productivity
23 measurement. The opportunity to absorb additional volume can be significant,

1 depending on the local situation. This would require a local judgment of the ability to
2 absorb any of the new requirements within the gaining operation. In some cases, tray
3 sortation for example, new workload requires additional work hours. In others, such as
4 dock operations, additional workload can be directly absorbed.

5

6 **B. Review of Current Productivities of the “Losing” and “Gaining” Sites**

7 In this section I will review, in a similar format as above, what the before-
8 consolidation productivities are, for both the “Losing” and “Gaining” plants, based on the
9 FY2010 base data. **Exhibit 5**, in the Appendix, is a summary of the current work hours,
10 TPH or N-TPH volume, and Productivity by Category, for LDC 11-18 mail processing
11 operations for the losing and gaining plants. I included the N-TPH volume data in this
12 summary because the data exists in the data files. The mail processing LDC 11-18
13 hours of the plants to be consolidated is 32.3 percent of the total. The number of plant
14 finance numbers identified in the base data file is 208, and the number of plants that will
15 remain after consolidation is 155. **Exhibit 6**, in the Appendix, further consolidates these
16 category groups into processing groups.

17 A comparison of the productivities in Exhibit 6 shows that the “Losing” plants
18 recorded a higher productivity in all category groupings – with the exception of the SPBS
19 and tray-handling groups. Each of the letter automation groups of the losing plants
20 recorded higher productivities than the gaining plants. The total automation letter
21 productivity in the losing sites is 9.2 percent greater than the gaining sites on average (or
22 the productivity in the gaining plant is 8.4 percent lower). This fact, that smaller plants
23 have historically demonstrated a higher productivity, has been documented in the past.

1 For example, in GAO report 05-261 *Productivity Varies Among Plants*, page 28,
 2 “Average productivity – total pieces processed per hour – varies among the Service’s
 3 Mail Processing and Distribution Plants, which indicates that some plants are not
 4 processing mail as efficiently as others. Postal Service officials have attributed this
 5 variation to several factors, including size of plants as measured by workload, number of
 6 employees, layout of plants, and the use of non-standardized processes.”¹⁴ Table 6
 7 compares the losing plants’ PPH to the gaining plants’ PPH for the FY2010 base period.

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Table 6 – Current Productivity Differences Between “Losing” and “Gaining” Plants

Current PPH of Losing Plant and Gaining Plant Before Consolidation				Losing Plant	Gaining Plant	% Diff
	Cat No	LDC	Category Group	PPH	PPH	Gain/Lose
Volume Measured Operations TPH	1,2	11	Auto Letters Outgoing	6,931	6,447	-7.0%
	3	11	Auto Letters Incoming	6,118	5,882	-3.9%
	4,5	11	Auto Letters Secondary	8,857	8,239	-7.0%
	1,2,3,4,5	11	Auto Letters	7,963	7,293	-8.4%
	12	14	Manual Letters	628	539	-14.1%
			Total Letters	6,577	5,746	-12.6%
	6,7,8,20	12,17	Mech Flats+Prep	1,195	1,188	-0.5%
	13	14	Manual Flats	390	323	-17.2%
			Total Flats	1,026	1,018	-0.8%
	9,10	13	SPBS	264	312	18.0%
11,14,15	13,14	Parcel/Priority	339	294	-13.3%	
		Total Other Dist	293	306	4.5%	
Non-Volume Operations N-TPH	16,17,18,19	17	Prep	5,170	4,995	-3.4%
	21,22,23	13,17	Open/Pouching	5,379	5,151	-4.2%
	24,25	13,17	Tray Handling	87	98	12.4%
	27	17	Equip Operator			
	26,28,29	17	Dock Operations	12	11	-6.2%
	31,32	18	Express/Registry	41	34	-18.3%
33,34	18	Indirect/Support				
		Sub-Total Dist	3,904	3,521	-9.8%	
		Sub-Total Non Dist				
		Total LDC 11-18	2,106	1,890	-10.2%	

11 Source: NWPC Savings Analysis 2012-1.xlsx, Plants Gain Lose Base Sheet

¹⁴ See, GAO-05-261 *Productivity Varies Among Plants*. Page 28
<http://www.gao.gov/assets/250/245967.pdf>

1 My review of Table 6 above confirms my past observations of plant operations
2 and my past cost evaluations of plant processes. For example, the incoming secondary
3 productivity in the gaining plants is 7 percent less than in the losing plants; the work
4 elements of feeding and sweeping on a Delivery Bar Code Sorter (DBCS) machine
5 remain the same; but the travel distance from the final Delivery Point Sequencing (DPS)
6 sweep of the machine to the dock is generally a greater distance in larger facilities.

7 In a recent study I performed for CPC, I evaluated the feasibility of utilizing the
8 tray handling system, motorized power vehicles, or manual transport to move trays from
9 the final sweep of the sequence run (DPS) to the dock. As one would expect, the row of
10 machines closest to the dispatch dock had a much lower material handling cost than
11 machines that were farther from the dock or required elevator transport in order to reach
12 the dock. The study determined that the cost-driving variable was distance, and the
13 larger the facility, the greater the distance to get to the dock.

14 My observations of USPS facilities are that the final dispatch of DPS is manual
15 from the machines to the dock (or to a consolidation point where an equipment operator
16 transports the containers of DPS to the dock) - which is a greater distance in larger
17 facilities. The mechanized flats processing rates appear to be nearly equal at the
18 category group level. If one looks at the difference in productivities between the losing
19 plants and the gaining plants in Exhibit 4, the gaining plants posted a higher productivity
20 in the distribution categories for all three distribution processes of outgoing primary,
21 incoming primary, and incoming secondary. However, when flats prep work is added,
22 the "Losing Plant" flat group in the category group "Mechanized Flats + Flats Prep"
23 posted a higher processing rate. A separate analysis of the processing rates of the

1 different types of flats processing equipment and their enhancements (such as
2 automated tray handling systems) would better define the differences between the losing
3 facilities' and gaining facilities' processing rates.

4 The Mail Processing Network Rationalization Service Changes proposal is to
5 move volume from the losing plants to gaining plans. In this proposal there is an
6 assumption that the gaining plants will process the losing plants' volume at least at the
7 losing plants' processing rates after accounting for institutional cost. The next sections
8 will look at the possible outcome of moving volume from a losing plant to a gaining plant.

9

10 **C. Likely Worst Case Outcome – Current Plant Productivities**

11 **Exhibit 7**, in the Appendix, displays the potential outcome if the losing plants'
12 volume of 124.2 billion Total Piece Handling (TPH) is moved into the gaining plants, and
13 this volume is processed at the gaining plants' current Pieces Per Hour (PPH)
14 processing rates (or in cases of non-volume operations, if the hours in the losing plants
15 move). I would describe this as the worst possible outcome, as the total Mail Processing
16 work hours for LDC 11-18 would increase. If the gaining plants absorb this new volume
17 at their current processing rates, they will experience a 2.3-percent increase in total
18 combined work-hours, or an increase of 4.2 million work-hours. Table 7 below
19 summarizes this outcome and **Exhibit 8**, in the Appendix, displays the results by
20 category groups. This potential increase in hours is driven by the gaining plants' lower
21 processing rates, as described earlier in Exhibit 5. For example, the PPH for the DPS
22 operation in the losing plants is 8,991 compared to 8,349 in the gaining plants.

1

Table 7 – Likely Worst Case Outcome Gaining Plant PPH

Total Mail Processing LDC 11-18 Savings	Losing Facility	Gaining Facility	Total Combined
FY 2010 Base Work-Hour Base	58,954,969	123,417,117	182,372,087
Worst Outcome Gaining Plant PPH	0	186,581,533	186,581,533
Change	-58,954,969	63,164,416	4,209,447
% Change	-100%	51.2%	2.3%

2

Source: NWPC Savings Analysis 2012-1.xlsx, Summary Table Sheet

3

4

D. Combine Plants at Combined Productivity

5

The next possible outcome is moving the losing plants’ volume to the gaining plants, and processing that volume at the losing plants’ historical processing rate.

7

Exhibit 9, in the Appendix, summarizes this outcome. As one would expect, there is

8

no change in the total mail processing LDC 11-17 work hours after combining the losing

9

and gaining plants. In order to accomplish this, however, the gaining plant must

10

assume the processing rates of the losing plants for this new volume. **Exhibit 10**, in the

11

Appendix, summarizes this outcome in the “category groups” format.

12

Table 8 below, defines the percentage increase in processing rates that the

13

gaining plants would be required to achieve in order to ensure the new added volume is

14

processed (within the losing plants’ hours). This required increase in processing rates

15

by the gaining plant is an underlying assumption in the saving calculation methodology

1 used by witness Bradley before he applied the elimination of the losing plants’
 2 institutional cost savings or productivity induced cost savings.¹⁵

3 The two outcomes above can be compared to the historical results the USPS has
 4 achieved, in terms of productivity changes in partial plant consolidations. This will be
 5 further discussed in the following section.

6

7 **Table 8 – Productivity Increase Required by “Gaining” Plant by Category Group**

Combine Losing Plants Volume and Hours into Gaining Plant				Gaining Base	Gaining Combined	Inc/Dec Required
	Cat No	LDC	Category	PPH	PPH	%
Volume Measured Operations TPH	1,2	11	Auto Letters Outgoing	6,447	6,573	1.9%
	3	11	Auto Letters Incoming	5,882	5,955	1.2%
	4,5	11	Auto Letters Secondary	8,239	8,463	2.7%
	1,2,3,4,5	11	Auto Letters	7,293	7,515	3.0%
	12	14	Manual Letters	539	564	4.6%
			Total Letters	5,746	6,012	4.6%
	6,7,8,20	12,17	Mech Flats+Prep	1,188	1,190	0.2%
	13	14	Manual Flats	323	345	6.8%
			Total Flats	1,018	1,020	0.3%
	9,10	13	SPBS	312	296	-5.1%
11,14,15	13,14	Parcel/Priority	294	311	5.9%	
		Total Other Dist	306	302	-1.5%	
Non-Volume Operations N-TPH	16,17,18,19	17	Prep	4,995	5,044	1.0%
	21,22,23	13,17	Open/Pouching	5,151	5,233	1.6%
	24,25	13,17	Tray Handling	98	95	-2.8%
	27	17	Equip Operator			
	26,28,29	17	Dock Operations	11	12	2.3%
	31,32	18	Express/Registry	34	36	7.7%
33,34	18	Indirect/Support				
		Sub-Total Dist	3,521	3,645	3.5%	
		Sub-Total Non Dist				
		Total LDC 11-18	1,890	1,960	3.7%	

8 *Source: NWPC Savings Analysis 2012-1.xlsx, Plants Combined Curr PPH Sheet*

¹⁵ See, USPS LR-20, Mail Processing Labor Cost Savings.xls, Hours by Status from Hours Tab.

1 **II. Evaluation of Productivity Changes Achieved in Past Final PIRs**

2 In this section I will review historical data of combining plants and determine what
 3 changes in processing rates have occurred, in order to give a comparison as to how the
 4 gaining processing plants' productivities have changed. The USPS submitted AMP
 5 studies for the period 2008-2011 containing twenty-four final Post Implementation
 6 Reviews (PIRs).¹⁶ Table 9 is a listing of these PIRs and the AMP type: originating only,
 7 destinating only, or both originating and destinating.

8
 9

Table 9 - Completed AMPs with Final PIR Reports

No.	AMP Final PIR Report	AMP Type		
		Orig	Dest	Orig/Dest
1	Kansas City KS_OD_Kansas City MO_FinalPIR_09-28-2010			X
2	Watertown_OD_Syracuse_FinalPIR_08-12-11			X
3	Winchester_OD_Dulles_FinalPIR_05-13-11			X
4	Jackson TN_O_Memphis_FinalPIR_12-09-11	X		
5	Detroit_O_Michigan Metroplex_FinalPIR_12-02-11	X		
6	Binghamton_O_Syracuse_Final PIR_08-12-11	X		
7	Athens_O_North Metro_FinalPIR_9-16-11	X		
8	Long Beach_O_Santa Ana_FinalPIR_05-13-2011	X		
9	Cape Cod_O_Brockton_Final PIR_08-19-11	X		
10	Portsmouth_O_Manchester_Final PIR_05-13-11	X		
11	Queens_O_Brooklyn_FinalPIR_05-22-2011	X		
12	Manasota_O_Tampa_FinalPIR_08-19-11	X		
13	Newark_D_Dominick V Daniels_FinalPIR_08-19-11		X	
14	Oxnard_O_Santa Clarita-VanNuys_Final PIR_05-13-11	X		
15	Western Nassau_O_Mid-Island_FinalPIR_05-27-11	X		
16	Lakeland_O_Tampa_FinalPIR_03-11-2011	X		
17	Hickory_O_Greensboro_Final PIR_08-12-11	X		
18	Flint_O_Michigan Metroplex_FinalPIR_05-23-2011	X		
19	Canton_O_Akron_FinalPIR_06-28-2010	X		
20	Wilkes-Barre_OD_Scranton & Lehigh Valley_FinalPIR_12-02-11			X
21	Staten Island_O_Brooklyn_FinalPIR_01-21-11	X		
22	St Petersburg_O_Tampa_FinalPIR_1-21-11	X		
23	South Florida_O_Ft Lauderdale & Miami_FinalPIR_04-29-11	X		
24	Mojave_D_Bakersfield_FinalPIR_10-28-11	X		

10

¹⁶ See, USPS-LR-N2012-1/NP12, USPS AMP Studies (2008-2011)

1 **A. Productivities of the “Gaining” Sites due to AMPs**

2 I reviewed the volumes, work hours, and productivities for nineteen of the twenty-
3 four Final PIRs listed in Table 9 above. The other five PIRs were unreadable, not
4 complete, or in a format from which I could not extract the data. The PIRs contain data
5 for both the losing and gaining facilities, both individually and combined. For each
6 MODS operation, the PIR reports data for FHP, TPH (or N-TPH), work hours,
7 productivity, and labor cost. For each of the data types, the PIR reports data from the
8 study period or “Pre-AMP,” the AMP proposal (or “Proposed”), and the post
9 implementation study period (or “Final PIR”). Both study periods contain one year’s
10 worth of data. This data was extracted from each of the nineteen Final PIRs into
11 separate excel files, and then consolidated into the Category names and Category
12 groups I’ve created. These excel files are provided in my Library Reference PRCWIT-
13 LR-N2012-1/NP1.¹⁷ Public versions of the summaries are filed in Library Reference
14 PRCWIT-LR-N2012-1/2.¹⁸

15 **Exhibit 11**, in the Appendix, is a comparison summary of the “Pre AMP” and the
16 “Final PIR” for the First Handling Piece (FHP), TPH, Work Hours, TPH PPH, and Work
17 Hour Cost of the nineteen Final PIR studies, while **Exhibit 12**, in the Appendix, is a
18 summary of the differences between the Pre-AMP study period and the Final PIR study
19 period. The time differences between the original study period and the final PIR study
20 period vary for each PIR. After the initial AMP study is initiated, the AMP proposal goes
21 through a review and approval process prior to implementation. After the AMP is

¹⁷ See, PRCWIT-LR-N2012-1/NP1 Savings Evaluation Final PIRs (Non-Public Version)

¹⁸ See, PRCWIT-LR-N2012-1/2 Savings Evaluation Final PIRs

1 completely implemented, the start of the “after-cost-period” begins and continues for a
2 one-year period. This result is the time difference between the before and after-start-of-
3 the-study period, and is approximately 18 months to 24 months.

4 Table 10 shows the reported volume decrease and the associated hours
5 decrease. However, there was a recorded decrease in productivity for the Automated
6 Letter, Automated Flats, and SPBS consolidated category groups. Manual Letters,
7 Manual Flats, and Mech/Manual Parcel and Priority consolidated category groups
8 posted an increase in productivity. The total non-measured operations hours decreased
9 by 27.7 percent during this comparison period - this is significant. A number of the AMP
10 studies noted that that there was a change in volume, and that the savings were also
11 the result of local management initiatives and other concurrent operational changes and
12 compressions.

13

14 **B. Productivity Change OND Final PIR**

15 As noted above in Table 9, there were three (3) total plant consolidations of both
16 Originating and Destination volumes in which the losing plant was discontinued and the
17 volume and distribution responsibilities were transferred to the gaining plant. **Exhibit**
18 **13**, in the Appendix, is a summary of these three gaining plants comparing the before
19 and after volume, hours, and productivities. Table 10 below, is a percentage
20 comparison of the data in Exhibit 13. Despite an 11.4 percent increase in TPH volume
21 for the automation letters, the productivity decreased by 12 percent. Mechanized Flats
22 showed little change in PPH. The AMP documents noted that two of these three

1 gaining plants received Flat Sequencing System (FSS) deployments, but these were not
2 included in the post implementation review. Likewise, the same two gaining plants had
3 other distribution changes that were not included in the original AMP study, but instead
4 were implemented during the post implementation study time period. The other
5 changes are discussed in the studies. However, the AMP documentation does not
6 record the impact of these changes associated with other deployments and volume
7 shifts to other neighboring facilities.

1

Table 10 – Comparison of “Gaining” Plants Productivity Pre-AMP and Final PIR

Three_O/D_AMP's Gaining Plant Only

	Cat No	LDC	Category	Pre AMP to PIR		TPH Productivity			% Chg		% Chg	
				%FHP	%TPH	Pre AMP	Proposed	Final PIR	Planned	Hours	Planned	PPH
Volume Measured Operations	1,2,3,4,5	11	Auto Letters Outgoing	-16.6%	-22.0%	7986	8407	7531	4.2%	-17.3%	5%	-6%
			Auto Letters Incoming	1.5%	4.5%	7261	7156	6031	9.2%	25.8%	-1%	-17%
			Auto Letters Secondary	65.2%	27.2%	8963	9854	7792	16.0%	46.3%	10%	-13%
			Auto Letters Total	9.2%	11.4%	8255	8789	7238	11.5%	27.0%	6%	-12%
	12	14	Manual Letters	11.3%	-0.4%	484	516	661	8.0%	-27.1%	7%	37%
			Total Letters	9.3%	11.1%	5777	6209	5845	10.4%	9.8%	7%	1%
	6,7,8,20 13	12,17 14	Mech Flats+Prep	-8.1%	-8.0%	1230	1324	1240	13.4%	-8.7%	8%	1%
			Manual Flats	-9.9%	-17.1%	296	349	226	10.2%	8.5%	18%	-24%
			Total Flats	-8.2%	-8.5%	1038	1128	1002	12.8%	-5.2%	9%	-3%
	9,10 11,14,15	13 13,14	SPBS	-16.7%	13.2%	423	416	301	15.0%	59.1%	-2%	-29%
Parcel/Priority			102.6%	89.4%	185	239	469	4.8%	-25.1%	29%	153%	
Total Other Dist			25.2%	39.9%	292	322	363	9.4%	12.7%	10%	24%	
Non-Volume Operations	16,17,18,19	17	Prep						8.3%	12.3%		
	21,22,23	13,17	Open/Pouching						7.4%	-32.8%		
	24,25	13,17	Tray Handling						0.7%	1.4%		
	27	17	Equip Operator						9.9%	1.2%		
	26,28,29	17	Dock Operations						8.6%	2.4%		
	31,32	18	Express/Registry							-0.3%		
	33,34	18	Indirect/Support						-0.4%	-58.2%		
			Sub-Total Dist	7.4%	9.8%	3515	3771	3645	10.9%	5.9%	7%	4%
			Sub-Total Non Dist						5.5%	-13.8%		
			Total LDC 11-18	7.4%	9.8%	1641	1808	1888	8.0%	-4.6%	10%	15%

Source: NP12 N2012 PIR Worksheet Summary 3_OD_Plants Gaining Only.xlsx Category Summary tab

2

3

1 **III. Evaluation of Operating Plan Change Productivity Assumptions**

2 In this section I will review the productivity improvement assumptions provided by
3 witness Neri¹⁹ that were used to estimate the mail processing cost reduction. Witness
4 Neri stated, "Revision of service standards and the opportunity to streamline and
5 consolidate facilities throughout the network are expected to generate productivity
6 gains. The main sources for productivity improvements include smoothing the
7 processing profile, less and more efficient use of mail processing equipment, sorting to
8 fewer destinations, and eliminating redundant process."²⁰ The estimated productivity
9 improvements by cost pool group are shown on pages 29 and 30 of witness Neri's
10 testimony. In response to presiding officer's information request 1, question 7, witness
11 Neri filed two library references, USPS-LR-N2012-1/49 and USPS-LR-N2012-1/50.
12 These two library references provide background data for Figure 11 of his direct
13 testimony.²¹ Library Reference 50 states, "The purpose of this file is to represent the
14 excess scheduling of employees that occur due to the hourly processing profile and the
15 constraint that employees work a full 8 hour shift."

16 Each library reference contains an Excel data file. I reviewed witness Neri's
17 testimony, his response to the presiding officer's question 7, and the two library
18 references with their two Excel files. In my opinion, the data presented does not identify
19 the amount of idle time that may or may not exist in current processing operations. I will
20 further expand on my opinion.

¹⁹ See, Direct Testimony of Frank Neri on behalf of the USPS (USPS-T-4), Pages 24-31.

²⁰ Id. Page 27.

²¹ Id. Page 28.

1 The identification of current idle time in existing operations (that is, time that can
2 be observed) is normally measured with the use of standard “Work Sampling”
3 techniques. There is no evidence that such a study was conducted. The USPS does
4 IOCS sampling and should be able to identify the total percentage of a cost component
5 that contains observations of (waiting for mail) idle time. I would think that if this time
6 were in the neighborhood of the 28 percent found by witness Neri, it would have been
7 reported in the past.

8 Figure 11 of witness Neri’s testimony displays the percentage of letter volume
9 processed by hour, based on data contained in USPS-LR-N2012-1/49. In response to
10 presiding officer information request 1 question 7, witness Neri stated the method of
11 extracting End of Run (EOR) data and averaging the volume over the time between
12 machine start and stop to get a “general sense of the operational profile.”²² Witness
13 Neri’s Figure 11, adds three tour-staffing lines to the chart to represent the 8-hour tour
14 staffing requirements and to identify the 8-hour peak staffing requirements. The area
15 beneath the three 8-hour staffing lines was determined to be the amount of idle time.
16 Witness Neri stated in his response to question 7 that work hours by hour is not
17 provided by MODS.²³ Work hours by hour, however, are provided in library reference
18 USPS-LR-N2012-1/20, Night Diff Calcs.By LDC.xls. This data was extracted from the
19 USPS’s Time and Attendance Collection System for the September 2011 time period.²⁴
20 The data is by mail processing operation groups by hour of the day for all Function 1

²² See, Response of USPS Witness Neri to POIR No. 1 Q 7, January 24, 2012 page 1987 of Official Transcript of Proceedings before the PRC.

²³ Id. Page 1987.

²⁴ See, Response of USPS Witness Neri to POIR No. 1 Q 7, January 24, 2012 page 2232 of Official Transcript of Proceedings before the PRC.

1 facilities. I used this data to determine the percentage of hours clocked into the
 2 Automation Letter groups and created a new worksheet "Auto LTR," in my Savings
 3 Analysis Work Book in PRCWIT-LR-N2012-1/1. This worksheet applied the hourly
 4 profile against the average day volume for FY 2010 for the automated letter categories
 5 to determine total work hours by hour. This hourly profile was compared to the hours
 6 profile plotted on page 28 of witness Neri's testimony. The data in Table 11 below
 7 shows the work-hour profile by hour for the letter automation groups automated letters
 8 incoming, automated letters outgoing, and automated letters incoming secondary
 9 (DPS).

10

11 **Table 11 – Current DBCS Hours (by Hour) for Average-Day Volume**

Hours by Hour of Day					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00	105	139	235	479
8:00	9:00	106	176	136	418
9:00	10:00	102	188	70	360
10:00	11:00	110	198	41	349
11:00	12:00	142	200	36	378
12:00	13:00	441	244	46	731
13:00	14:00	1,090	416	96	1,602
14:00	15:00	2,009	756	160	2,925
15:00	16:00	2,650	1,035	252	3,936
16:00	17:00	3,009	1,404	286	4,699
17:00	18:00	2,903	1,619	286	4,809
18:00	19:00	2,844	2,006	307	5,156
19:00	20:00	2,802	2,372	347	5,520
20:00	21:00	2,670	2,567	592	5,829
21:00	22:00	2,369	2,615	1,718	6,703
22:00	23:00	2,285	2,352	6,596	11,233
23:00	0:00	1,872	1,587	8,240	11,699
0:00	1:00	1,507	1,007	8,744	11,258
1:00	2:00	1,278	703	8,686	10,667
2:00	3:00	985	515	8,431	9,930
3:00	4:00	865	477	9,638	10,980
4:00	5:00	801	458	9,979	11,238
5:00	6:00	756	437	9,482	10,675
6:00	7:00	448	288	5,430	6,166

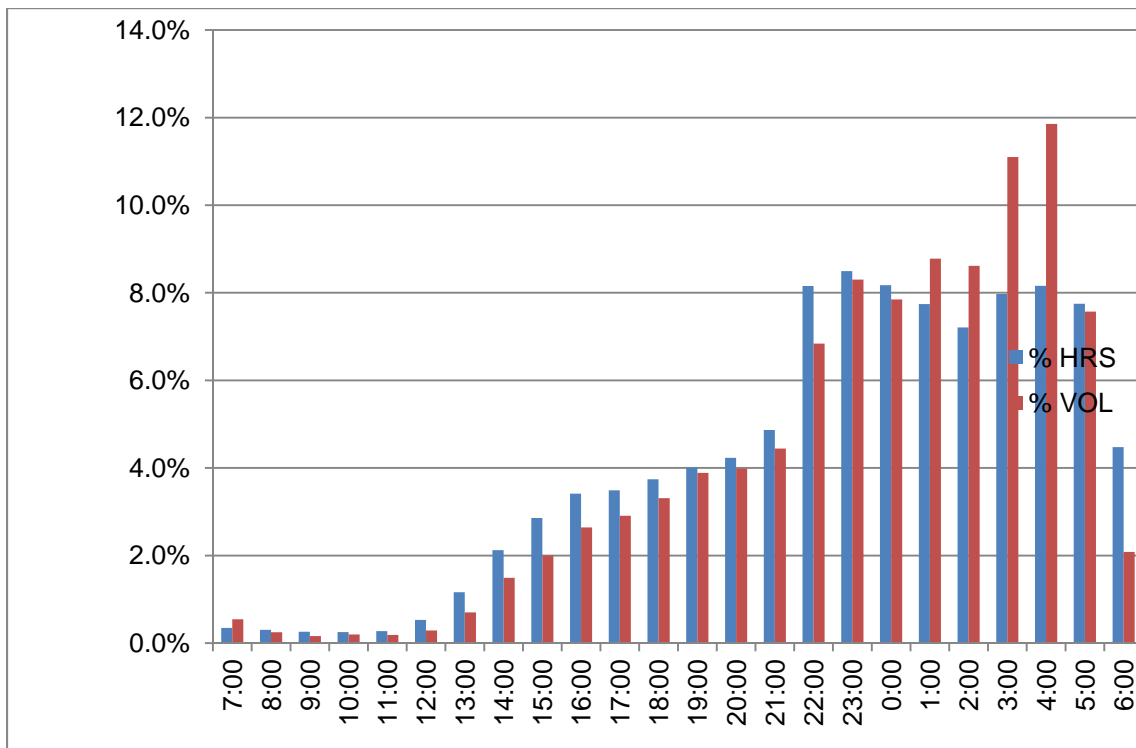
12

Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

1 Figure 1 below, compares the percent of hours to the percent of volume plotted
2 by hour of the day. The red bars represent the automation letter volume percent by
3 hour and are the same plot values as in Figure 11 on page 28 of witness Neri's
4 testimony. The blue bars represent the work-hour percent by hour and were extracted
5 from the September 2011 labor hours for automation letters in my Table 11 above.

6 My evaluation of this data is that there is little difference between the volumes
7 processed and mail processing hours scheduled. In my opinion, the larger gaps
8 between the hour percentage and volume percentage can be explained, in general, for
9 the time period between 22:00 and 07:00. The 22:00 hour shows a higher percentage
10 of hours than volume. I expect that the outgoing primary machines being swept down
11 and incoming secondary machines being set up cause this. Likewise, the final sweep of
12 incoming secondary (DPS) is the likely cause for the volume-to-hour gap during the
13 06:00 hour.

1 **Figure 1 – Automation Letters Volume and Hours Percentage Usage**



2

3 I would not try to make too many detailed conclusions from the other percentage

4 differences between volume and hours because of the data assumptions. As stated

5 above, spreading the total volume among the machines' overall start and stop time

6 created the volume percentage profile. This means that the volume processed is

7 averaged over lunch periods, while the work-hour data excludes the lunch periods.

8 My review of how witness Neri determined an idle time percentage that led him to

9 make an estimate of available potential productivity improvement leads me to conclude

10 that his estimate has no factual support. At best, he provided a hypothetical example of

11 how much idle time would be available if one were to arbitrarily use a single data point

1 (busiest hour)²⁵ to determine the number of employees required to work during each
2 eight-hour tour. Witness Neri discusses a number of mail processing scheduling and
3 staffing opportunities that will exist in the new operating windows. He cites
4 "...smoothing the processing profile..." and states, "As processing windows are
5 expanded and the workload is balanced across the mail processing day, the Postal
6 Service would be able to manage processing operations effectively, match work-hours
7 to workload, and plan for peak load issues."²⁶ These scheduling and staffing
8 management opportunities are not new to the USPS, and I would question why the
9 USPS does not apply scheduling and staffing tools to current operations, rather than
10 wait for a change in the processing window.

11 Witness Neri and witness Smith both discuss peak load issues. Witness Smith
12 states that the problem has gotten worse since 1987 because standard mail was
13 combined with FCM for Delivery Point Sequencing.²⁷ I would argue that it was more
14 difficult to schedule employees in 1987 than it is now.

15 In 1987, the incoming processing operations for letters, in a plant for example,
16 had four different processes: automated selector/segment, automated sort to route,
17 MPLSM city secondary, and manual city secondary. The latter two required scheme
18 knowledge. Today, city secondary operations are, for the most part, automated and no
19 scheme knowledge is required at the plant level, except for plants that still distribute
20 letters in MODS operation 160.

²⁵ See, Response of USPS Witness Neri to POIR No. 1 Q 7, January 24, 2012 page 1988 of Official Transcript of Proceedings before the PRC.

²⁶ Direct Testimony of Frank Neri on behalf of the USPS (USPS-T-4), page 27.

²⁷ See, Direct Testimony of Marc A. Smith on behalf of the USPS (USPS-T-9). Pages 3-6.

1 In the past, I utilized scheduling and staffing tools such as POSKED or
2 SiteMETA²⁸ to simulate the mail flows and processing simulations to determine
3 employee schedules that would be “smoothed,” in an effort to minimize the effect of
4 peak loads caused by volume fluctuations. In my work with Canada Post, which is
5 implementing its version of DPS (called Sequencing) for letter operations, I was able to
6 develop scheduling and staffing tools to establish automation machine schedules in
7 order to meet operating plans that vary from peak day to average day volumes. The
8 scheduling methodology and techniques are the same today as they were in the 80s,
9 except that now one can perform this analysis on a laptop.

10 When IPSIM was the USPS’s simulation tool for scheduling and staffing, the first
11 activity was to perform an idle-time study to determine the productivity rates that would
12 be expected as a result of matching staff with mail arrivals. These idle-time studies
13 generally identified a 3 to 5 percent productivity improvement opportunity. The
14 smoothing technique was to schedule employees at the earliest possible start time and
15 not run out of mail, then to structure employee start-time groups. These tools were
16 designed to schedule a full seven days, not just a single day, and were presented in
17 Docket No. N2001-1. Those traditional studies have not been done for this proceeding.
18 I therefore cannot support any of the estimated productivity improvements listed in
19 Figure 12 of witness Neri’s testimony.

20

21

²⁸ <http://www.orms-today.org/orms-12-96/delivery.html>.

1 **IV. Evaluation of Processing Window**

2 **A. Proposed Processing Window Operating Plan Change**

3 In this section I will review the current operating window of the processing
4 environment, the operating window of the Mail Processing Network Rationalization
5 proposal, as well as an alternative processing window that would preserve overnight
6 service standards for some subset of current overnight committed mail. Using the data
7 for the automated letter processing that was presented in Table 11 above, I converted
8 the work hour by hour data into number of automated letter machines that are required
9 to process automated letter mail over a 24-hour period. This is a Rough Order of
10 Magnitude (ROM) macro analysis and is provided to visually display the differences
11 between the three alternatives, using the FY2010 base data and looking at the total
12 machine requirements as if there was only one plant. This ROM will compare both
13 average-day and peak-day volume data for the operating window processing alternative
14 side-by-side.

15 The current processing of automation letters average day volume over a 24-hour
16 period is displayed in Table 12. The number of machines used (or required), is
17 displayed in this and the following tables. Table 13 is the number of machines required
18 to process the "peak" volume based on the peak factors of 1.55 for outgoing letters, and
19 1.20 for incoming letters and incoming secondary letters. Table 12 also shows the
20 maximum number of machines required for an average day is 3,356 machines at the
21 2300-2400 hour, while Table 13 shows the maximum number to be 4,184 machines at

1 the same hour. The number of automation letter machines in all plants is currently
2 5,916 machines.²⁹

3 Table 14 displays the number of machines required, using the N2012-1 proposed
4 operating plan, for the typical P&DC/F³⁰ for the average daily volume. Table 15 shows
5 the peak-day total machine requirements (using the peak volume factors) to be 3,253
6 machines. This is similar to the 3,165 total machines as identified in the USPS N2012-1
7 modeling of DBCS machines.³¹ It should be noted that the number of machines
8 required to process the average daily volume of incoming automation letters is currently
9 772. This will increase to 2,191 under the new compressed four-hour operating
10 window. Witness Matz will discuss this in further detail in his discussion of incoming
11 primary operating window and light tray analysis.

²⁹ See, Direct Testimony of Mark A. Smith, On Behalf of the USPS (USPS – T-9, Page 13).

³⁰ See, USPS Notice of Filing Errata to USPS-T-4, March 5, 2012 Revised. Pages 22 and 23.

³¹ USPS-T-9, Page 13.

1

Table 12 – ADV DBCS Current

Table 13 – Peak DBCS Current

Based on Average Daily Volume FY 2010

Based on Peak Day Factors Applied to FY 2010 ADV

Total DBCS run by Hour of Day, Based on PPH and Staff Index					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00	27	39	69	135
8:00	9:00	27	50	40	117
9:00	10:00	26	53	21	100
10:00	11:00	28	56	12	96
11:00	12:00	37	57	11	104
12:00	13:00	113	69	14	196
13:00	14:00	280	118	28	426
14:00	15:00	516	214	47	777
15:00	16:00	680	293	74	1,047
16:00	17:00	772	398	84	1,254
17:00	18:00	745	459	84	1,288
18:00	19:00	730	568	90	1,388
19:00	20:00	719	672	102	1,493
20:00	21:00	685	727	174	1,587
21:00	22:00	608	741	506	1,855
22:00	23:00	586	666	1,942	3,194
23:00	0:00	480	450	2,426	3,356
0:00	1:00	387	285	2,574	3,246
1:00	2:00	328	199	2,557	3,084
2:00	3:00	253	146	2,482	2,880
3:00	4:00	222	135	2,837	3,194
4:00	5:00	205	130	2,937	3,273
5:00	6:00	194	124	2,791	3,109
6:00	7:00	115	82	1,598	1,795

Total DBCS run by Hour of Day, Based on PPH and Staff Index					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00	32	61	83	176
8:00	9:00	33	77	48	158
9:00	10:00	31	82	25	139
10:00	11:00	34	87	15	135
11:00	12:00	44	88	13	144
12:00	13:00	136	107	16	259
13:00	14:00	336	183	34	552
14:00	15:00	619	332	56	1,007
15:00	16:00	816	454	89	1,359
16:00	17:00	927	616	101	1,644
17:00	18:00	894	711	101	1,706
18:00	19:00	876	881	108	1,865
19:00	20:00	863	1,041	123	2,027
20:00	21:00	822	1,127	209	2,159
21:00	22:00	730	1,148	607	2,485
22:00	23:00	704	1,033	2,330	4,067
23:00	0:00	577	697	2,911	4,184
0:00	1:00	464	442	3,089	3,995
1:00	2:00	393	309	3,068	3,770
2:00	3:00	303	226	2,978	3,507
3:00	4:00	267	209	3,404	3,880
4:00	5:00	247	201	3,525	3,973
5:00	6:00	233	192	3,349	3,774
6:00	7:00	138	126	1,918	2,182

2

Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

3

1 **Table 14 – ADV Network Consolidation DBCS Plan**

Based on Average Daily Volume FY 2010

Total DBCS run by Hour of Day Current PPH + SI + New Window					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00				0
8:00	9:00	2,191			2,191
9:00	10:00	2,191			2,191
10:00	11:00	2,191			2,191
11:00	12:00	2,191			2,191
12:00	13:00			1,469	1,469
13:00	14:00			1,469	1,469
14:00	15:00			1,469	1,469
15:00	16:00			1,469	1,469
16:00	17:00			1,469	1,469
17:00	18:00		481	1,469	1,949
18:00	19:00		961	1,469	2,430
19:00	20:00		961	1,469	2,430
20:00	21:00		961	1,469	2,430
21:00	22:00		961	1,469	2,430
22:00	23:00		961	1,469	2,430
23:00	0:00		961	1,469	2,430
0:00	1:00		481	1,469	1,949
1:00	2:00			1,469	1,469
2:00	3:00			1,469	1,469
3:00	4:00			1,469	1,469
4:00	5:00				0
5:00	6:00				0
6:00	7:00				0

2 Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

Table 15 – Peak Network Consolidation DBCS Plan

Based on Peak Day Factors Applied to FY 2010 ADV

Total DBCS run by Hour of Day, Based on PPH and Staff Index					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00	0	0	0	0
8:00	9:00	2,630	0	0	2,630
9:00	10:00	2,630	0	0	2,630
10:00	11:00	2,630	0	0	2,630
11:00	12:00	2,630	0	0	2,630
12:00	13:00	0	0	1,762	1,762
13:00	14:00	0	0	1,762	1,762
14:00	15:00	0	0	1,762	1,762
15:00	16:00	0	0	1,762	1,762
16:00	17:00	0	0	1,762	1,762
17:00	18:00	0	745	1,762	2,508
18:00	19:00	0	1,490	1,762	3,253
19:00	20:00	0	1,490	1,762	3,253
20:00	21:00	0	1,490	1,762	3,253
21:00	22:00	0	1,490	1,762	3,253
22:00	23:00	0	1,490	1,762	3,253
23:00	0:00	0	1,490	1,762	3,253
0:00	1:00	0	745	1,762	2,508
1:00	2:00	0	0	1,762	1,762
2:00	3:00	0	0	1,762	1,762
3:00	4:00	0	0	1,762	1,762
4:00	5:00	0	0	0	0
5:00	6:00	0	0	0	0
6:00	7:00	0	0	0	0

Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

1 **B. Alternative Processing Window to Retain OND Subset**

2 The Postal Regulatory Commission asked us as part of our scope of work to
3 evaluate the feasibility, or desirability, of preserving overnight service standards for
4 some subset of current overnight committed mail. Witness Matz and I have developed
5 an alternative that maintains a subset of OND committed mail, while simultaneously
6 providing an opportunity to improve operations by eliminating the wait time for the last
7 tray of mail to arrive and reducing equipment usage requirements. We reviewed the
8 N2012-1 objectives and the proposal, then reviewed the OND ODIS data of Intra-Plant
9 and Inter-Plant OND commitments. The processing alternative is to eliminate the Inter
10 OND commitment, but maintain the Intra OND service commitment for a plant. Witness
11 Matz will discuss the impact on OND service and I will discuss the operational feasibility
12 of this alternative.

13 Our alternative is to continue to process local originating mail in the current
14 operating plan window for the outgoing primary. For the typical plant, this operation
15 would still end at 11:00 PM. Incoming Primary would remain in the same operating
16 window and would also have a scheduled end time of 11:00 PM. Table 16 shows these
17 two automation letter functions and machine requirements of 974 and 961, for a total of
18 1,935 machines for the average-day volume. Table 17 displays the peak day machine
19 requirements for these two functions as 2,659 DBCS machines, which is below the
20 proposed 3,165 DBCS machine plan. Next, the machine requirements for the incoming
21 secondary were added to the current operating plan window after the completion of the
22 outgoing and incoming primary operations. Thus, 100 percent of the Intra-plant OND
23 mail would be available for secondary processing. For the average day, the machine

1 requirement, as shown in Table 16, is 2,937 DBCS machines, which is below the plan to
2 retain 3,165 machines. In Table 17 the incoming secondary peak-volume requirements
3 exceed the planned capacity of 3,165 by 360 machines. This requirement would have
4 to be processed the following day. Or one could increase the overall number of
5 machines by 360, for a total of 3,525 - which is still a significant reduction from the
6 current 5,916 total machines. Again, this is only a feasibility review at the macro-level.
7 In order to fully evaluate this alternative, plant level modeling of current individual plants
8 and possible plant consolidation should be used with local plant arrival profiles, local
9 plant operating plans to define equipment requirements, and Intra/Inter OND
10 opportunities on a seven-day schedule.

1 **Table 16 – ADV Alternative DBCS Processing Plan**

Based on Average Daily Volume FY 2010

Total DBCS run by Hour of Day Tour-1/2 using 3165 machines					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00			0	0
8:00	9:00			0	0
9:00	10:00			0	0
10:00	11:00			0	0
11:00	12:00			0	0
12:00	13:00			0	0
13:00	14:00			0	0
14:00	15:00	974		0	974
15:00	16:00	974			974
16:00	17:00	974	961		1,935
17:00	18:00	974	961		1,935
18:00	19:00	974	961		1,935
19:00	20:00	974	961		1,935
20:00	21:00	974	961		1,935
21:00	22:00	974	961		1,935
22:00	23:00	974	961		1,935
23:00	0:00			2,937	2,937
0:00	1:00			2,937	2,937
1:00	2:00			2,937	2,937
2:00	3:00			2,937	2,937
3:00	4:00			2,937	2,937
4:00	5:00			2,937	2,937
5:00	6:00			2,937	2,937
6:00	7:00			2,937	2,937

2 Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

Table 17 – Peak Alternative DBCS Processing Plan

Based on Peak Day Factors Applied to FY 2010 ADV

Total DBCS run by Hour of Day Tour-1/2 using 3165 machines					
Hour		Automation Letters			
From	To	INP	OUT	INS	TOTAL
7:00	8:00			360	360
8:00	9:00			360	360
9:00	10:00			360	360
10:00	11:00			360	360
11:00	12:00			360	360
12:00	13:00			360	360
13:00	14:00			360	360
14:00	15:00	1,169		360	1,529
15:00	16:00	1,169			1,169
16:00	17:00	1,169	1,490		2,659
17:00	18:00	1,169	1,490		2,659
18:00	19:00	1,169	1,490		2,659
19:00	20:00	1,169	1,490		2,659
20:00	21:00	1,169	1,490		2,659
21:00	22:00	1,169	1,490		2,659
22:00	23:00	1,169	1,490		2,659
23:00	0:00			3,165	3,165
0:00	1:00			3,165	3,165
1:00	2:00			3,165	3,165
2:00	3:00			3,165	3,165
3:00	4:00			3,165	3,165
4:00	5:00			3,165	3,165
5:00	6:00			3,165	3,165
6:00	7:00			3,165	3,165

Source: NWPC Savings Analysis 2012-1.xlsx, Auto Ltr Sheet

1 **V. Review of the AMP Studies Supporting N2012-1**

2 On February 23, 2012, the USPS filed LR 73/N16, which included a large
3 number of approved AMP studies pending the Mail Processing Network Rationalization
4 Service Changes 2012 decision. We reviewed and extracted the same category format
5 I developed above for several AMP studies. The AMP studies' current work hours for
6 the gaining and losing plants for the 203 AMPs submitted in Library Reference NP16
7 and the work hour savings are summarized in my library reference PRCWIT-LR-N2012-
8 1/NP2. For these 203 AMPs, the projected net work-hour reduction is 7.9 percent from
9 the combined total current work hours of both the gaining and losing facilities. Since not
10 all plants were included in LR 73/NP16, I will not be able to summarize the total results
11 for a consistent analysis.

12 On March 30, 2012, witness Williams filed a response to a question that
13 Commissioner Taub asked during the March 20, 2012 oral cross-examination.³²
14 Witness Williams stated that not all facilities were required to complete the AMP study
15 form if they were not a gaining or losing facility. On pages five through nine of the
16 response witness Williams provided specific descriptions of AMP savings calculations
17 when moving from a losing site to a gaining site.

18 Applying these LDC productivity assumptions to the combined volume of the
19 losing and gaining plants for FY2010 MODS data provides work hours required by
20 category. Table 18 below summarizes the expected work hours for the gaining plants,
21 after the losing plants' volume has been transferred. The work hours are based on

³² See, Response of USPS witness Williams to question from commissioner Taub during March 20, 2012 oral cross-examination, March 30, 2012.

1 witness Williams’s response to Commissioner Taub, and what he indicated to be his
 2 expected three to eight percent productivity improvement for volume operations, a 50-
 3 percent absorption factor for LDC 17, and a five-percent reduction in LDC 18. Table 18
 4 shows a total work-hour projection of 165,720,808, which represents a 16.7 million hour
 5 reduction, or 9.1 percent of the FY 2010 MODS work hour base.

6

7

Table 18 – Gaining plant Work-Hours N2012-1

Category	Combined Vol Gaining Plant PPH + AMP PPH % Inc			PPH % Chg
	Hrs	Vol (1,000)	PPH	
Auto Letters Outgoing	6,950,991	48,404,352	6,964	8%
Auto Letters Incoming	9,923,848	63,038,192	6,352	8%
Auto Letters Secondary	23,522,727	209,435,016	8,904	8%
Auto Letters	40,397,566	320,877,560	7,943	8%
Manual Letters	11,964,692	6,645,691	555	3%
Total Letters	52,362,258	327,523,252	6,255	7%
Mech Flats+Prep	16,278,296	22,232,177	1,366	15%
Manual Flats	4,871,351	1,619,651	332	3%
Total Flats	21,149,647	23,851,829	1,128	12%
SPBS	11,578,635	3,898,504	337	8%
Parcel/Priority	7,160,182	2,193,100	306	3%
Total Other Dist	18,738,817	6,091,604	325	6%
Prep	8,739,218	47,575,406	5,444	9%
Open/Pouching	12,759,559	79,815,370	6,255	26%
Tray Handling	7,259,082	779,540	107	10%
Equip Operator	10,551,743			
Dock Operations	20,080,206	285,389	14	29%
Express/Registry	4,671,035	177,035	38	11%
Indirect/Support	9,409,243			
Sub-Total Dist	92,250,722	357,466,684	3,875	8%
Sub-Total Non Dist	73,470,086			
Total LDC 11-18	165,720,808	357,466,684	2,157	13%

8

Source: PRCWIT_LR-N2012-1-NP4.xlsx, Plants Combined Base Sheet

1 **VI. Conclusion**

2 This section will summarize the range of projected work-hour usage for mail
 3 processing LDC 11-18 of the proposed consolidation of the losing plants into gaining
 4 plants. Table 19 below is a summary of the total work hours based on various
 5 processing rate assumptions as discussed above. All of the data summarized below
 6 have been discussed in above sections, and the data calculations are included in my
 7 submitted library references.

8 **Table 19 – Range of Savings in LDC 11-18 for N2012-1**

Total Mail Processing LDC 11-18 Range of Savings	Mail Processing LDC 11-18 Work-Hour Summary					\$Change
	Losing Facility	Gaining Facility	Total Combined	Change from Base	% Change From Base	(x\$1,000)
FY 2010 Work-Hour Base	58,954,969	123,417,117	182,372,087			
N2012-1 Proposal	0	156,356,429	156,356,429	-26,015,658	-14.3%	-\$1,046,718
Worst Outcome Gaining Plant PPH	0	186,581,533	186,581,533	4,209,447	2.3%	\$169,363
Move Volume at Losing Plant PPH	0	182,372,087	182,372,087	0	0.0%	\$0
5% Increase in Current Plant PPH	0	176,191,238	176,191,238	-6,180,849	-3.4%	-\$248,681
AMP Process Described	0	165,720,808	165,720,808	-16,651,279	-9.1%	-\$669,950

9 *Source: PRCWIT-LR-N2012-1-NP4.xlsx, Summary Table*

10

11 **A. FY 2010 Base Work Hours**

12 The “FY 2010 Base Work-Hour Base” is from the MODS data for the plants
 13 identified as either “Losing” or “Gaining” only Mail Processing LDC 11-18 operations.
 14 The only modification, as noted earlier, was to remove the same two MODS operations
 15 from the database in order to be consistent with the data presented by Witness Bradley.
 16 The total usage may be lower at the present time because of continued volume declines

1 or processing changes the USPS has introduced since the end of FY 2010, but I think it
2 is important to look at a comparative analysis of differing assumptions on a consistent
3 base, and modified later with updated data.

4

5 **B. N2012-1 Proposal**

6 The second line in Table 18, "N2012-1 Proposal" is the summary of the
7 necessary work-hour reduction required to achieve the cost savings identified by
8 witness Bradley.³³ As discussed earlier, this requires a 14.3-percent decrease in the
9 base hours. The two-step process that witness Bradley used was to first identify the
10 cost savings for the transfer of workload and then apply the productivity gains.³⁴

11 I provided my opinion of the anticipated productivity gains that were expected by
12 the change in operating window. I think the proposed operating window change for the
13 cancellation of outgoing primary will differ little from its current operation. The change in
14 operating window for the incoming primary is planned to be compressed into a four-hour
15 window. This change will cause more machines to operate for a shorter period of time,
16 generate more partially filled trays and require additional set-up and sweep time (as
17 displayed when Table 12 and Table 14 are compared side by side).

18 This process is not the same as the AMP process. One of the unintended
19 consequences of this approach is that when estimating a potential productivity gain that
20 would be expected from combining volume into an existing facility, the expectation

³³ See, USPS-LR-N2010-1/20, Calculating Mail Processing Labor Cost Savings.xls, Tab Summary

³⁴ See, Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service, Docket No. N2012-1, USPS T-10, pages 5-17

1 might yield fewer hours than what is currently being used. This is precisely what
2 happened in the combining of the losing plants' registry operations into the gaining
3 plants' registry operations. Exhibit 5 summarizes the total current Registry work hours
4 for all gaining plants as 1,596,456 annual work hours and the losing plants' as 852,177
5 annual work hours. The registry hours for the gaining plant after consolidation are
6 1,412,845 annual work hours. Therefore, the gaining plant not only must absorb all the
7 losing plants' volume, it also must eliminate 183,611 annual hours from its current
8 usage. Another unintended consequence I noted after reviewing the automation letter
9 outgoing secondary savings' operational detail is that the workload transfer factor and
10 the productivity improvement for the operations were included in the total labor cost
11 changes. This saving amounted to \$8.9 million. Then later in the cost savings analysis
12 summarized in Table 16 of Witness Bradley's testimony, the Work Load Reduction Cost
13 Changes eliminated the outgoing secondary sorting operations and estimated the
14 savings by another \$22.8 million³⁵. The automation letter outgoing secondary saving is
15 in PRCWIT-LR-N2012-1/NP5, Savings Analysis 2012-1.xlsx, worksheet tab "USPS
16 Savings by Operation, " column AA.

17 As I noted earlier, in Table 5, the total productivity improvement expectation of
18 the proposed work-hour reduction resulted in an overall productivity improvement of
19 20.9 percent for the gaining plant over its current processing rates. The largest
20 combined operation group, automated letters, will have to achieve a 26-percent
21 increase in its processing rate. In my review of the three total facility consolidations,

³⁵ See, Direct Testimony of Michael D. Bradley on behalf of the United States Postal Service, Docket No. N2012-1, USPS T-10, page 41.

1 summarized in Table 10 above, the gaining plant experienced a 12 percent decrease in
2 the automated letters processing rate with an 11.4 percent increase in volume.

3

4 **C. Likely Worst Outcome Gaining Plant PPH**

5 If the losing plants' volume is transferred into a new gaining plant and this volume
6 is worked at the current plant's processing rates, the Postal Service runs the risk that
7 this change could increase work hours by 2.3 percent, or cost \$169 million. In my
8 opinion this is not likely to happen, but a review of the results posted in Table 10 above,
9 shows that it can happen.

10

11 **D. Five Percent Increase in Gaining Plant PPH**

12 At a minimum, the gaining plant must achieve at least an overall 3.7-percent
13 productivity improvement in order to break even, as shown in Table 8. If the gaining
14 plant achieves a five-percent improvement over its current combined processing rate,
15 this will achieve a reduction in work hours from the total combined base of 6.2 million
16 hours – for a savings of \$249 million for Direct Mail Processing LDC 11-18.

1 **E. AMP Process Described**

2 Table 18 above, summarizes the results of the productivity assumptions as
3 described by Witness Williams³⁶ which projects a 16.7 million work hour reduction, or
4 9.1-percent reduction from base, which equates to an estimated savings of \$670 million.

5

6 **F. Going Forward**

7 As I stated earlier, I would expect to see a range of three to five percent
8 improvement in processing rates of distribution type operations. There is no doubt that
9 there is excess DBCS capacity in current Plant inventory that consumes space and is
10 expensive to maintain. This is an issue that needs to be addressed. The first step is to
11 identify opportunities to consolidate plants and modify OND-inter pairs that would allow
12 the expansion of the operating window of the incoming secondary automated process.
13 Therefore, the completion of the first pass is not dependent on waiting for the last
14 committed tray to arrive from an inter OND paired facility. This would allow the DPS
15 operations to be scheduled immediately after the completion of the outgoing primary.
16 These opportunities should first be studied in the current plant structure

17

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³⁶ See, Response of USPS witness Williams to question from commissioner Taub during March 20, 2012 oral cross-examination, March 30, 2012.

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APPENDIX

Table of Exhibits

Exhibit 1 – NWPC Category Names A

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Exhibit 7 – Combined “Losing” Plants’ Volume at “Gaining” Plants Current
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Exhibit 9– Move “Losing” Plant Volume into “Gaining” Plant at “Losing” Plant
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Exhibit 11 – Summary of Final PIRs (19 Plants) K

Exhibit 12 – Productivity Comparison of Pre-AMP to Final PIR (19 Plants) L

Exhibit 13 – Summary of 3 O/D AMPs “Gaining” Plants M

1

Exhibit 1 – NWPC Category Names

	Cat No	LDC	Category Name	Category Description
Volume Measured Operations	1	11	L-OTG	Auto Letters Outgoing
	2	11	L-RTS	Auto Letters RTS
	3	11	L-INC	Auto Letters Incoming Primary
	4	11	L-INS	Auto Letters Incoming Secondary
	5	11	L-DPS	Auto Letters DPS
	6	12	F-OTG	Mech Flats Outgoing
	7	12	F-INC	Mech Flats Incoming Primary
	8	12	F-INS	Mech Flats Incoming Secondary
	9	13	SPBS Non-Pri	SPBS Non Priority
	10	13	SPBS Priority	SPBS Priority
	11	13	Mech Parcel	Mech Parcel
	12	14	Manual Letters	Manual Letters
	13	14	Manual Flats	Manual Flats
	14	14	Manual Parcels	Manual Parcels
	15	14	Manual Priority	Manual Priority
Non-Volume Operations	16	17	Presort	Presort
	17	17	Mail Prep	Mail Prep and Cancellation
	18	17	MeterPrep	Meter Prep
	19	17	Other Prep	Other Prep
	20	12/17	FLATPREP	Flats Prep
	21	17	Opening	Opening Units
	22	17	Pouching	Pouching Units
	23	13/17	Sack Outside	Sack and Outsides
	24	13	Tray Sort	Tray Sort
	25	17	SWYB-ACDCS	SWYB-ACDCS
	26	17	Dispatch	Dispatch
	27	17	Equip Operator	Equipment Operator
	28	17	Expediter	Expediter
	29	17	PLATFORM	Platform Operations
	30	15/17/18	Opns Other	Other Operations
	31	18	Express	Express Mail
	32	18	Registry	Registry
33	18	MP Indirect	Mail Processing Indirect	
34	18	MP Support	Mail Processing Support	
Not Mail Processing	35	1	PLANT IPS	In plant Support
	36	10	PLANT SUPV	Mail Processing Plant Supervision
	37	3A	Vech Serv	Vehicle Services
	38	3B	Maint	Plant and Equipment Maintenance
	39	15	REC	Remote Encoding Center
	40	FN4	Cust Serv	Customer Service
	41	FN2	Del Serv	Delivery Service
	42	FN5-FN9	NON-PLANT	Non Plant Administration

2

Source: NWPC Savings Analysis 2012-1.xlsx, Category Table Sheet

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Exhibit 2 – NWPC Category Work-hours Summary

	Cat. No	LDC	Category	All Hours	NDC, ISC, REC	Plants
Volume Measured Operations	1	11	L-OTG	6,261,763	47,503	6,214,260
	2	11	L-RTS	1,150,406	-	1,150,406
	3	11	L-INC	10,615,113	28,674	10,586,439
	4	11	L-INS	1,536,166	388	1,535,777
	5	11	L-DPS	23,212,785	34	23,212,750
	6	12	F-OTG	1,179,855	67,922	1,111,932
	7	12	F-INC	2,902,979	29,074	2,873,905
	8	12	F-INS	4,422,792	-	4,422,792
	9	13	SPBS Non-Pri	8,007,991	1,246,998	6,760,992
	10	13	SPBS Priority	6,589,333	193,942	6,395,391
	11	13	Mech Parcel	4,222,836	4,007,044	215,792
	12	14	Manual Letters	11,890,608	107,949	11,782,659
	13	14	Manual Flats	4,706,574	7,071	4,699,503
	14	14	Manual Parcels	1,805,764	930,863	874,901
	15	14	Manual Priority	6,128,691	172,010	5,956,681
Non-Volume Operations	16	17	Presort	1,964,491	34,418	1,930,073
	17	17	Mail Prep	6,490,963	10,998	6,479,965
	18	17	MeterPrep	537,033	-	537,033
	19	17	Other Prep	485,774	-	485,774
	20	12/17	FLATPREP	10,329,482	60,550	10,268,933
	21	17	Opening	12,743,995	1,098,817	11,645,177
	22	17	Pouching	1,817,233	324,592	1,492,641
	23	13/17	Sack Outside	3,110,222	995,941	2,114,280
	24	13	Tray Sort	7,525,264	892,396	6,632,868
	25	17	SWYB-ACDCS	1,627,182	75,656	1,551,526
	26	17	Dispatch	3,854,513	84,610	3,769,902
	27	17	Equip Operator	16,486,631	4,103,500	12,383,131
	28	17	Expediter	8,572,816	1,252,618	7,320,198
	29	17	PLATFORM	17,296,136	4,114,022	13,182,113
	30	15/17/18	Opns Other	588,962	277,831	311,131
	31	18	Express	3,198,786	742,833	2,455,953
	32	18	Registry	2,606,721	158,087	2,448,634
33	18	MP Indirect	5,975,260	1,295,363	4,679,898	
34	18	MP Support	5,897,386	697,579	5,199,807	
Not Mail Processing	35	1	PLANT IPS	3,768,274	380,575	3,387,698
	36	10	PLANT SUPV	13,172,255	1,579,030	11,593,225
	37	3A	Vech Serv	17,021,319	1,716,055	15,305,264
	38	3B	Maint	57,400,367	6,822,652	50,577,715
	39	15	REC	4,113,366	4,106,881	6,485
	40	FN4	Cust Serv	1,124,064	150	1,123,914
	41	FN2	Del Serv	3,950,309	-	3,950,309
	42	FN5-FN9	NON-PLANT	4,836,709	844,320	3,992,389
		Volume	94,633,655	6,839,475	87,794,180	
		Non-Volume	111,108,849	16,219,811	94,889,037	
		Mail Processing	205,742,504	23,059,286	182,683,218	
		Not Mail Proc	105,386,664	15,449,664	89,937,000	
		Total MODS	311,129,168	38,508,950	272,620,217	

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Source: NWPC Savings Analysis 2012-1.xlsx, Summary Sheet

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Exhibit 3– Productivity Change of USPS Plant Consolidation by Category

				After Consolidation with Projected Institutional Savings and Productivity Savings							Cost Reduction
							Work Hour Change		% PPH Change		LDC (11-18)
	Cat No	LDC	Category	Hrs	Vol (1,000)	PPH	+/- Hrs	%Hrs	GainPlant	CombPlants	(\$1000)
Volume Measured Operations	1	11	L-OTG	5,085,945	41,201,788	8,101	-1,128,315	-18.2%	25.3%	22.2%	-\$48,970
	2	11	L-RTS	941,590	7,202,565	7,649	-208,815	-18.2%	20.4%	22.2%	-\$9,063
	3	11	L-INC	8,661,840	63,038,192	7,278	-1,924,599	-18.2%	23.7%	22.2%	-\$83,529
	4	11	L-INS	1,256,316	10,221,030	8,136	-279,461	-18.2%	22.9%	22.2%	-\$12,129
	5	11	L-DPS	18,986,801	199,213,986	10,492	-4,225,949	-18.2%	25.7%	22.3%	-\$183,406
	6	12	F-OTG	963,438	2,979,765	3,093	-148,495	-13.4%	12.8%	15.4%	-\$6,347
	7	12	F-INC	2,486,854	7,008,893	2,818	-387,051	-13.5%	7.5%	15.6%	-\$16,563
	8	12	F-INS	3,826,543	12,243,519	3,200	-596,249	-13.5%	12.9%	15.6%	-\$25,420
	9	13	SPBS Non-Pri	6,216,170	1,775,569	286	-544,822	-8.1%	7.6%	8.8%	-\$22,994
	10	13	SPBS Priority	5,886,295	2,122,936	361	-509,096	-8.0%	-1.2%	8.6%	-\$21,496
	11	13	Mech Parcel	195,577	14,511	74	-20,215	-9.4%	-31.6%	10.3%	-\$663
	12	14	Manual Letters	11,386,096	6,645,691	584	-396,563	-3.4%	8.2%	3.5%	-\$16,284
	13	14	Manual Flats	4,543,178	1,619,651	357	-156,325	-3.3%	10.4%	3.4%	-\$6,471
	14	14	Manual Parcels	831,606	417,068	502	-43,295	-4.9%	48.4%	5.2%	-\$1,780
	15	14	Manual Priority	5,702,356	1,761,521	309	-254,325	-4.3%	5.5%	4.5%	-\$10,504
Non-Volume Operations	16	17	Presort	1,536,101	2,267,252	1,476	-393,972	-20.4%	22.2%	25.6%	-\$15,908
	17	17	Mail Prep	5,607,235	22,604,082	4,031	-872,730	-13.5%	17.8%	15.6%	-\$35,596
	18	17	MeterPrep	532,924	22,591,133	42,391	-4,109	-0.8%	0.0%	0.8%	-\$165
	19	17	Other Prep	420,009	112,940	269	-65,765	-13.5%	28.8%	15.7%	-\$2,682
	20	12/17	FLATPREP	9,169,625	22,863,199	2,493	-1,099,307	-10.7%	15.9%	12.0%	-\$46,680
	21	17	Opening	10,042,724	79,424,024	7,909	-1,602,454	-13.8%	18.8%	16.0%	-\$65,191
	22	17	Pouching	1,174,962	187,193	159	-317,678	-21.3%	68.3%	27.0%	-\$12,825
	23	13/17	Sack Outside	1,718,099	204,153	119	-396,181	-18.7%	27.7%	23.1%	-\$16,297
	24	13	Tray Sort	5,708,703	642,475	113	-924,165	-13.9%	13.0%	16.2%	-\$38,464
	25	17	SWYB-ACDCS	1,545,785	137,065	89	-5,742	-0.4%	-1.1%	0.4%	-\$232
	26	17	Dispatch	3,123,667	243,549	78	-646,235	-17.1%	28.9%	20.7%	-\$26,273
	27	17	Equip Operator	10,075,091			-2,308,040	-18.6%			-\$93,783
	28	17	Expediter	5,944,883			-1,375,315	-18.8%			-\$55,883
	29	17	PLATFORM	10,657,690	41,839	4	-2,524,423	-19.2%	37.0%	23.7%	-\$102,575
	30	15/17/18	Opns Other	0			0	0.0%			\$0
	31	18	Express	2,455,953	117,739	48	0	0.0%	14.3%	0.0%	\$0
	32	18	Registry	1,412,845	59,296	42	-1,035,789	-42.3%	67.9%	73.3%	-\$38,997
	33	18	MP Indirect	4,293,064			-386,834	-8.3%			-\$12,564
	34	18	MP Support	3,966,463			-1,233,344	-23.7%			-\$16,985
			Volume	76,970,606	357,466,684	4,644	-10,823,574	-12.3%	17.3%	14.1%	-\$465,617
			Non-Volume	79,385,823			-15,192,084	-16.1%			-\$581,101
			Total Plants	156,356,429	357,466,684	2,286	-26,015,658	-14.3%	20.9%	16.6%	-\$1,046,718

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Source: NWPC Savings Analysis 2012-1.xlsx, USPS Savings Summary Sheet

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Exhibit 4 - Productivity Change of USPS Plant Consolidation by Category Group

				After Consolidation with Projected Institutional Savings and Productivity Savings						Cost Reduction	
				New Gaining Workload at N2010-1 PPH			Work Hour Change		% PPH Change		LDC (11-18)
	Cat No	LDC	Category Groups	Hrs	Vol	PPH	+/- Hrs	%Hrs	GainPlant	CombPlants	(\$1000)
Volume Measured Operations	1,2	11	Auto Letters Outgoing	6,027,536	48,404,352	8,031	-1,337,130	-18.2%	24.6%	22.2%	-\$58,032
	3	11	Auto Letters Incoming	8,661,840	63,038,192	7,278	-1,924,599	-18.2%	23.7%	22.2%	-\$83,529
	4,5	11	Auto Letters Secondary	20,243,117	209,435,016	10,346	-4,505,411	-18.2%	25.6%	22.3%	-\$195,535
	1,2,3,4,5	11	Auto Letters	34,932,492	320,877,560	9,186	-7,767,140	-18.2%	26.0%	22.2%	-\$337,096
	12	14	Manual Letters	11,386,096	6,645,691	584	-396,563	-3.4%	8.2%	3.5%	-\$16,284
			Total Letters	46,318,588	327,523,252	7,071	-8,163,703	-15.0%	23.1%	17.6%	-\$353,380
	6,7,8,20	12,17	Mech Flats+Prep	16,446,460	22,232,177	1,352	-2,231,102	-11.9%	13.8%	13.6%	-\$95,010
	13	14	Manual Flats	4,543,178	1,619,651	357	-156,325	-3.3%	10.4%	3.4%	-\$6,471
			Total Flats	20,989,638	23,851,829	1,136	-2,387,426	-10.2%	11.7%	11.4%	-\$101,481
	9,10	13	SPBS	12,102,466	3,898,504	322	-1,053,918	-8.0%	3.2%	8.7%	-\$44,489
	11,14,15	13,14	Parcel/Priority	6,729,539	2,193,100	326	-317,834	-4.5%	10.9%	4.7%	-\$12,947
			Total Other Dist	18,832,005	6,091,604	323	-1,371,752	-6.8%	5.7%	7.3%	-\$57,436
Non-Volume Operations	16,17,18,19	17	Prep	8,096,269	47,575,406	5,876	-1,336,576	-14.2%	17.6%	16.5%	-\$54,351
	21,22,23	13,17	Open/Pouching	12,935,785	79,815,370	6,170	-2,316,313	-15.2%	19.8%	17.9%	-\$94,313
	24,25	13,17	Tray Handling	7,254,487	779,540	107	-929,907	-11.4%	9.7%	12.8%	-\$38,696
	27	17	Equip Operator	10,075,091			-2,308,040	-18.6%			-\$93,783
	26,28,29	17	Dock Operations	19,726,240	285,389	14	-4,545,974	-18.7%	25.9%	23.0%	-\$184,731
	31,32	18	Express/Registry	3,868,798	177,035	46	-1,035,789	-21.1%	36.6%	26.8%	-\$38,997
	33,34	18	Indirect/Support	8,259,527			-1,620,178	-16.4%			-\$29,549
		Sub-Total Dist	86,140,231	357,466,684	4,150	-11,922,881	-12.2%	17.9%	13.8%	-\$512,297	
		Sub-Total Non Dist	70,216,197			-14,092,777	-16.7%			-\$534,421	
		Total LDC 11-18	156,356,429	357,466,684	2,286	-26,015,658	-14.3%	20.9%	16.6%	-\$1,046,718	

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Source: NWPC Savings Analysis 2012-1.xlsx, USPS Savings Summary Sheet

1 **Exhibit 5 – Current “Losing” and “Gaining” Plant Productivity by Category**

				Before Consolidations					
				Losing Plants			Gaining Plant		
	Cat No	LDC	Category	Hrs	Vol (1,000)	PPH	Hrs	Vol (1,000)	PPH
Volume Measured Operations THP	1	11	L-OTG	1,620,875	11,505,390	7,098	4,593,385	29,696,397	6,465
	2	11	L-RTS	287,151	1,719,883	5,989	863,255	5,482,681	6,351
	3	11	L-INC	3,271,351	20,013,337	6,118	7,315,087	43,024,854	5,882
	4	11	L-INS	528,900	3,556,572	6,724	1,006,877	6,664,458	6,619
	5	11	L-DPS	8,422,967	75,731,574	8,991	14,789,783	123,482,412	8,349
	6	12	F-OTG	278,630	694,578	2,493	833,303	2,285,188	2,742
	7	12	F-INC	960,493	1,991,570	2,073	1,913,412	5,017,323	2,622
	8	12	F-INS	1,587,851	4,211,440	2,652	2,834,940	8,032,078	2,833
	9	13	SPBS Non-Pri	2,093,750	536,533	256	4,667,243	1,239,036	265
	10	13	SPBS Priority	2,273,365	618,497	272	4,122,026	1,504,439	365
	11	13	Mech Parcel	119,907	4,106	34	95,885	10,405	109
	12	14	Manual Letters	3,292,219	2,067,103	628	8,490,439	4,578,588	539
	13	14	Manual Flats	1,528,954	596,195	390	3,170,548	1,023,456	323
	14	14	Manual Parcels	386,248	251,954	652	488,653	165,114	338
	15	14	Manual Priority	2,202,487	661,748	300	3,754,194	1,099,772	293
Non-Volume Operations N-TPH	16	17	Presort	364,366	375,450	1,030	1,565,707	1,891,801	1,208
	17	17	Mail Prep	1,941,384	7,072,361	3,643	4,538,581	15,531,721	3,422
	18	17	MeterPrep	144,670	5,954,523	41,159	392,363	16,636,610	42,401
	19	17	Other Prep	150,180	42,863	285	335,595	70,076	209
	20	12/17	FLATPREP	2,945,866	7,113,212	2,415	7,323,067	15,749,987	2,151
	21	17	Opening	4,122,799	29,326,599	7,113	7,522,378	50,097,425	6,660
	22	17	Pouching	695,868	111,747	161	796,772	75,445	95
	23	13/17	Sack Outside	666,666	69,425	104	1,447,614	134,728	93
	24	13	Tray Sort	1,528,379	133,915	88	5,104,489	508,561	100
	25	17	SWYB-ACDCS	526,753	45,167	86	1,024,773	91,898	90
	26	17	Dispatch	1,143,716	84,643	74	2,626,186	158,907	61
	27	17	Equip Operator	3,662,777			8,720,354		
	28	17	Expediter	2,329,232			4,990,966		
	29	17	PLATFORM	4,911,067	18,133	4	8,271,046	23,706	3
	30	15/17/18	Opns Other	0			0		
	31	18	Express	846,385	50,233	59	1,609,568	67,506	42
	32	18	Registry	852,177	19,386	23	1,596,456	39,911	25
	33	18	MP Indirect	1,575,947			3,103,950		
	34	18	MP Support	1,691,588			3,508,219		
Volume				28,855,149	124,160,482	4,303	58,939,031	233,306,202	3,958
Non-Volume				30,099,821			64,478,086		
Total Plants				58,954,969	124,160,482	2,106	123,417,117	233,306,202	1,890

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Source: NWPC Savings Analysis 2012-1.xlsx, Plants Gain Lose Base Sheet

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Exhibit 6 - Current "Losing" and "Gaining" Plant Productivity by Category Group

Current Hours TPH Volume of Losing Plant and Gaining Plant Before Consolidation				Before Consolidations						
				Losing Plants			Gaining Plant			
	Cat No	LDC	Category	Hrs	Vol	PPH	Hrs	Vol	PPH	
Volume Measured Operations TPH	1,2	11	Auto Letters Outgoing	1,908,026	13,225,274	6,931	5,456,640	35,179,079	6,447	
	3	11	Auto Letters Incoming	3,271,351	20,013,337	6,118	7,315,087	43,024,854	5,882	
	4,5	11	Auto Letters Secondary	8,951,867	79,288,146	8,857	15,796,661	130,146,870	8,239	
	1,2,3,4,5	11	Auto Letters	14,131,244	112,526,757	7,963	28,568,388	208,350,803	7,293	
	12	14	Manual Letters	3,292,219	2,067,103	628	8,490,439	4,578,588	539	
				Total Letters	17,423,464	114,593,860	6,577	37,058,827	212,929,391	5,746
	6,7,8,20	12,17		Mech Flats+Prep	5,772,840	6,897,588	1,195	12,904,722	15,334,589	1,188
	13	14		Manual Flats	1,528,954	596,195	390	3,170,548	1,023,456	323
				Total Flats	7,301,794	7,493,783	1,026	16,075,270	16,358,045	1,018
	9,10	13		SPBS	4,367,115	1,155,030	264	8,789,269	2,743,474	312
	11,14,15	13,14		Parcel/Priority	2,708,641	917,808	339	4,338,732	1,275,291	294
				Total Other Dist	7,075,756	2,072,839	293	13,128,001	4,018,766	306
Non-Volume Operations N-TPH	16,17,18,19	17	Prep	2,600,600	13,445,198	5,170	6,832,245	34,130,208	4,995	
	21,22,23	13,17	Open/Pouching	5,485,333	29,507,771	5,379	9,766,765	50,307,598	5,151	
	24,25	13,17	Tray Handling	2,055,132	179,082	87	6,129,263	600,458	98	
	27	17	Equip Operator	3,662,777			8,720,354			
	26,28,29	17	Dock Operations	8,384,015	102,776	12	15,888,198	182,613	11	
	31,32	18	Express/Registry	1,698,562	69,619	41	3,206,024	107,417	34	
	33,34	18	Indirect/Support	3,267,535			6,612,170			
			Sub-Total Dist	31,801,014	124,160,482	3,904	66,262,098	233,306,202	3,521	
			Sub-Total Non Dist	27,153,955			57,155,019			
			Total LDC 11-18	58,954,969	124,160,482	2,106	123,417,117	233,306,202	1,890	

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Source: NWPC Savings Analysis 2012-1.xlsx, Plants Gain Lose Base Sheet

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Exhibit 7 – Combined “Losing” Plants’ Volume at “Gaining” Plants Current Productivity by Category

				Combine Losing Plants Volume into Gaining Plant at Gaining Plants Base Productive						
				Losing Plant Vol	Gaining Plant Current Base			Gaining Plant with +Vol at Base PPH		
	Cat No	LDC	Category	Vol (1,000)	Hrs	Vol (1,000)	PPH	Hrs	Vol (1,000)	PPH
Volume Measured Operations	1	11	L-OTG	11,505,390	4,593,385	29,696,397	6,465	6,373,017	41,201,788	6,465
	2	11	L-RTS	1,719,883	863,255	5,482,681	6,351	1,134,053	7,202,565	6,351
	3	11	L-INC	20,013,337	7,315,087	43,024,854	5,882	10,717,756	63,038,192	5,882
	4	11	L-INS	3,556,572	1,006,877	6,664,458	6,619	1,544,210	10,221,030	6,619
	5	11	L-DPS	75,731,574	14,789,783	123,482,412	8,349	23,860,335	199,213,986	8,349
	6	12	F-OTG	694,578	833,303	2,285,188	2,742	1,086,583	2,979,765	2,742
	7	12	F-INC	1,991,570	1,913,412	5,017,323	2,622	2,672,920	7,008,893	2,622
	8	12	F-INS	4,211,440	2,834,940	8,032,078	2,833	4,321,378	12,243,519	2,833
	9	13	SPBS Non-Pri	536,533	4,667,243	1,239,036	265	6,688,273	1,775,569	265
	10	13	SPBS Priority	618,497	4,122,026	1,504,439	365	5,816,653	2,122,936	365
	11	13	Mech Parcel	4,106	95,885	10,405	109	133,724	14,511	109
	12	14	Manual Letters	2,067,103	8,490,439	4,578,588	539	12,323,633	6,645,691	539
	13	14	Manual Flats	596,195	3,170,548	1,023,456	323	5,017,491	1,619,651	323
	14	14	Manual Parcels	251,954	488,653	165,114	338	1,234,309	417,068	338
	15	14	Manual Priority	661,748	3,754,194	1,099,772	293	6,013,144	1,761,521	293
Non-Volume Opeations	16	17	Presort	375,450	1,565,707	1,891,801	1,208	1,876,440	2,267,252	1,208
	17	17	Mail Prep	7,072,361	4,538,581	15,531,721	3,422	6,605,221	22,604,082	3,422
	18	17	MeterPrep	5,954,523	392,363	16,636,610	42,401	532,797	22,591,133	42,401
	19	17	Other Prep	42,863	335,595	70,076	209	540,867	112,940	209
	20	12/17	FLATPREP	7,113,212	7,323,067	15,749,987	2,151	10,630,405	22,863,199	2,151
	21	17	Opening	29,326,599	7,522,378	50,097,425	6,660	11,925,913	79,424,024	6,660
	22	17	Pouching	111,747	796,772	75,445	95	1,976,926	187,193	95
	23	13/17	Sack Outside	69,425	1,447,614	134,728	93	2,193,561	204,153	93
	24	13	Tray Sort	133,915	5,104,489	508,561	100	6,448,607	642,475	100
	25	17	SWYB-ACDCS	45,167	1,024,773	91,898	90	1,528,442	137,065	90
	26	17	Dispatch	84,643	2,626,186	158,907	61	4,025,044	243,549	61
	27	17	Equip Operator	0	8,720,354	0	0	12,383,131	0	0
	28	17	Expediter	0	4,990,966	0	0	7,320,198	0	0
	29	17	PLATFORM	18,133	8,271,046	23,706	3	14,597,607	41,839	3
	30	15/17/18	Opns Other	0	0	0	0	0	0	0
	31	18	Express	50,233	1,609,568	67,506	42	2,807,284	117,739	42
	32	18	Registry	19,386	1,596,456	39,911	25	2,371,906	59,296	25
	33	18	MP Indirect	0	3,103,950	0	0	4,679,898	0	0
	34	18	MP Support	0	3,508,219	0	0	5,199,807	0	0
				124,160,482	58,939,031	233,306,202	3,958	88,937,480	357,466,684	4,019
					64,478,086			97,644,054		
Total Plants				124,160,482	123,417,117	233,306,202	1,890	186,581,533	357,466,684	1,916

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Source: NWPC Savings Analysis 2012-1.xlsx, Plants Combined Base Sheet

Exhibit 8 – Combined “Losing” Plants’ Volume at “Gaining” Plants’ Current Productivity by Category Group

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				Combine Losing Plants Volume into Gaining Plant at Gaining Plants Base Productive						
				Losing Plant Vol	Gaining Plant Current Base			Gaining Plant with +Vol at Base PPH		
				Vol (1,000)	Hrs	Vol (1,000)	PPH	Hrs	Vol (1,000)	PPH
Cat No	LDC	Category								
Volume Measured Operations	1,2	11	Auto Letters Outgoing	13,225,274	5,456,640	35,179,079	6,447	7,507,070	48,404,352	6,448
	3	11	Auto Letters Incoming	20,013,337	7,315,087	43,024,854	5,882	10,717,756	63,038,192	5,882
	4,5	11	Auto Letters Secondary	79,288,146	15,796,661	130,146,870	8,239	25,404,545	209,435,016	8,244
	1,2,3,4,5	11	Auto Letters	112,526,757	28,568,388	208,350,803	7,293	43,629,371	320,877,560	7,355
	12	14	Manual Letters	2,067,103	8,490,439	4,578,588	539	12,323,633	6,645,691	539
			Total Letters	114,593,860	37,058,827	212,929,391	5,746	55,953,004	327,523,252	5,854
	6,7,8,20	12,17	Mech Flats+Prep	6,897,588	12,904,722	15,334,589	1,188	18,711,285	22,232,177	1,188
	13	14	Manual Flats	596,195	3,170,548	1,023,456	323	5,017,491	1,619,651	323
			Total Flats	7,493,783	16,075,270	16,358,045	1,018	23,728,776	23,851,829	1,005
	9,10	13	SPBS	1,155,030	8,789,269	2,743,474	312	12,504,926	3,898,504	312
	11,14,15	13,14	Parcel/Priority	917,808	4,338,732	1,275,291	294	7,381,178	2,193,100	297
			Total Other Dist	2,072,839	13,128,001	4,018,766	306	19,886,104	6,091,604	306
Non-Volume Operations	16,17,18,19	17	Prep	13,445,198	6,832,245	34,130,208	4,995	9,555,325	47,575,406	4,979
	21,22,23	13,17	Open/Pouching	29,507,771	9,766,765	50,307,598	5,151	16,096,400	79,815,370	4,959
	24,25	13,17	Tray Handling	179,082	6,129,263	600,458	98	7,977,049	779,540	98
	27	17	Equip Operator		8,720,354			12,383,131		
	26,28,29	17	Dock Operations	102,776	15,888,198	182,613	11	25,942,849	285,389	11
	31,32	18	Express/Registry	69,619	3,206,024	107,417	34	5,179,190	177,035	34
	33,34	18	Indirect/Support		6,612,170			9,879,705		
		Sub-Total Dist	124,160,482	66,262,098	233,306,202	3,521	99,567,884	357,466,684	3,590	
		Sub-Total Non Dist		57,155,019			87,013,649			
		Total LDC 11-18	124,160,482	123,417,117	233,306,202	1,890	186,581,533	357,466,684	1,916	

Source: NWPC Savings Analysis 2012-1.xlsx, Plants Combined Base Sheet

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Exhibit 9 – Move “Losing” Plant Volume into “Gaining” Plant at “Losing” Plant Productivity by Category

				Combine Losing Plants Volume and Hours into Gaining Plant Combined Productive						
				Losing Plant Vol	Gaining Plant Current Base			Gaining Plant with +Vol at Base PPH		
	Cat No	LDC	Category	Vol (1,000)	Hrs	Vol (1,000)	PPH	Hrs	Vol (1,000)	PPH
Volume Measured Operations	1	11	L-OTG	11,505,390	4,593,385	29,696,397	6,465	6,214,260	41,201,788	6,630
	2	11	L-RTS	1,719,883	863,255	5,482,681	6,351	1,150,406	7,202,565	6,261
	3	11	L-INC	20,013,337	7,315,087	43,024,854	5,882	10,586,439	63,038,192	5,955
	4	11	L-INS	3,556,572	1,006,877	6,664,458	6,619	1,535,777	10,221,030	6,655
	5	11	L-DPS	75,731,574	14,789,783	123,482,412	8,349	23,212,750	199,213,986	8,582
	6	12	F-OTG	694,578	833,303	2,285,188	2,742	1,111,932	2,979,765	2,680
	7	12	F-INC	1,991,570	1,913,412	5,017,323	2,622	2,873,905	7,008,893	2,439
	8	12	F-INS	4,211,440	2,834,940	8,032,078	2,833	4,422,792	12,243,519	2,768
	9	13	SPBS Non-Pri	536,533	4,667,243	1,239,036	265	6,760,992	1,775,569	263
	10	13	SPBS Priority	618,497	4,122,026	1,504,439	365	6,395,391	2,122,936	332
	11	13	Mech Parcel	4,106	95,885	10,405	109	215,792	14,511	67
	12	14	Manual Letters	2,067,103	8,490,439	4,578,588	539	11,782,659	6,645,691	564
	13	14	Manual Flats	596,195	3,170,548	1,023,456	323	4,699,503	1,619,651	345
	14	14	Manual Parcels	251,954	488,653	165,114	338	874,901	417,068	477
	15	14	Manual Priority	661,748	3,754,194	1,099,772	293	5,956,681	1,761,521	296
Non-Volume Opeations	16	17	Presort	375,450	1,565,707	1,891,801	1,208	1,930,073	2,267,252	1,175
	17	17	Mail Prep	7,072,361	4,538,581	15,531,721	3,422	6,479,965	22,604,082	3,488
	18	17	MeterPrep	5,954,523	392,363	16,636,610	42,401	537,033	22,591,133	42,067
	19	17	Other Prep	42,863	335,595	70,076	209	485,774	112,940	232
	20	12/17	FLATPREP	7,113,212	7,323,067	15,749,987	2,151	10,268,933	22,863,199	2,226
	21	17	Opening	29,326,599	7,522,378	50,097,425	6,660	11,645,177	79,424,024	6,820
	22	17	Pouching	111,747	796,772	75,445	95	1,492,641	187,193	125
	23	13/17	Sack Outside	69,425	1,447,614	134,728	93	2,114,280	204,153	97
	24	13	Tray Sort	133,915	5,104,489	508,561	100	6,632,868	642,475	97
	25	17	SWYB-ACDCS	45,167	1,024,773	91,898	90	1,551,526	137,065	88
	26	17	Dispatch	84,643	2,626,186	158,907	61	3,769,902	243,549	65
	27	17	Equip Operator	0	8,720,354	0	0	12,383,131	0	0
	28	17	Expediter	0	4,990,966	0	0	7,320,198	0	0
	29	17	PLATFORM	18,133	8,271,046	23,706	3	13,182,113	41,839	3
	30	15/17/18	Opns Other	0	0	0	0	0	0	0
	31	18	Express	50,233	1,609,568	67,506	42	2,455,953	117,739	48
	32	18	Registry	19,386	1,596,456	39,911	25	2,448,634	59,296	24
	33	18	MP Indirect	0	3,103,950	0	0	4,679,898	0	0
	34	18	MP Support	0	3,508,219	0	0	5,199,807	0	0
			Volume	124,160,482	58,939,031	233,306,202	3,958	87,794,180	357,466,684	4,072
			Non-Volume		64,478,086			94,577,906		
			Total Plants	124,160,482	123,417,117	233,306,202	1,890	182,372,087	357,466,684	1,960

Source: NWPC Savings Analysis 2012-1.xlsx, Plants Combined Curr PPH Sheet

1 **Exhibit 10 - Move “Losing” Plant Volume into “Gaining” Plant at “Losing” Plant Productivity by Category Group**

				Combine Losing Plants Volume and Hours into Gaining Plant Combined Productive						
				Losing Plant Vol	Gaining Plant Current Base			Gaining Plant with +Vol at Base PPH		
	Cat No	LDC	Category	Vol (1,000)	Hrs	Vol (1,000)	PPH	Hrs	Vol (1,000)	PPH
Volume Measured Operations	1,2	11	Auto Letters Outgoing	13,225,274	5,456,640	35,179,079	6,447	7,364,666	48,404,352	6,573
	3	11	Auto Letters Incoming	20,013,337	7,315,087	43,024,854	5,882	10,586,439	63,038,192	5,955
	4,5	11	Auto Letters Secondary	79,288,146	15,796,661	130,146,870	8,239	24,748,528	209,435,016	8,463
	1,2,3,4,5	11	Auto Letters	112,526,757	28,568,388	208,350,803	7,293	42,699,632	320,877,560	7,515
	12	14	Manual Letters	2,067,103	8,490,439	4,578,588	539	11,782,659	6,645,691	564
			Total Letters	114,593,860	37,058,827	212,929,391	5,746	54,482,291	327,523,252	6,012
	6,7,8,20	12,17	Mech Flats+Prep	14,010,801	12,904,722	15,334,589	1,188	18,677,562	22,232,177	1,190
	13	14	Manual Flats	596,195	3,170,548	1,023,456	323	4,699,503	1,619,651	345
			Total Flats	14,606,996	16,075,270	16,358,045	1,018	23,377,065	23,851,829	1,020
	9,10	13	SPBS	1,155,030	8,789,269	2,743,474	312	13,156,384	3,898,504	296
	11,14,15	13,14	Parcel/Priority	917,808	4,338,732	1,275,291	294	7,047,374	2,193,100	311
			Total Other Dist	2,072,839	13,128,001	4,018,766	306	20,203,757	6,091,604	302
Non-Volume Operations	16,17,18,19	17	Prep	13,445,198	6,832,245	34,130,208	4,995	9,432,845	47,575,406	5,044
	21,22,23	13,17	Open/Pouching	29,507,771	9,766,765	50,307,598	5,151	15,252,098	79,815,370	5,233
	24,25	13,17	Tray Handling	179,082	6,129,263	600,458	98	8,184,394	779,540	95
	27	17	Equip Operator		8,720,354			12,383,131		
	26,28,29	17	Dock Operations	102,776	15,888,198	182,613	11	24,272,214	285,389	12
	31,32	18	Express/Registry	69,619	3,206,024	107,417	34	4,904,586	177,035	36
	33,34	18	Indirect/Support		6,612,170			9,879,705		
		Sub-Total Dist	131,273,695	66,262,098	233,306,202	3,521	98,063,113	357,466,684	3,645	
		Sub-Total Non Dist		57,155,019			84,308,974			
		Total LDC 11-18	131,273,695	123,417,117	233,306,202	1,890	182,372,087	357,466,684	1,960	

Source: NWPC Savings Analysis 2012-1.xlsx, Plants Combined Curr PPH Sheet

Exhibit 11 – Summary of Final PIRs (19 Plants)

Final PIR 19 Plants

	Cat No	LDC	Category	Annual FHP Volume		Annual TPH or NATPH Volume		Annual Workhours		Annual TPH Productivity	
				Pre AMP	Final PIR	Pre AMP	Final PIR	Pre AMP	Final PIR	Pre AMP	Final PIR
Volume Measured Operations	1,2	11	Auto Letters Outgoing	7,642,427,253	6,806,914,997	9,640,486,964	8,591,292,330	1,390,488	1,270,889	6,933	6,760
	3	11	Auto Letters Incoming	12,483,627,315	9,915,104,382	12,962,736,596	10,445,616,189	2,198,059	1,859,567	5,897	5,617
	4,5	11	Auto Letters Secondary	9,568,757,910	10,029,333,987	35,577,425,948	34,374,307,852	4,137,666	4,060,463	8,598	8,466
	1,2,3,4,5	11	Auto Letters Total	29,694,812,478	26,751,353,366	58,180,649,508	53,411,216,371	7,726,213	7,190,919	7,530	7,428
	12	14	Manual Letters	904,843,861	995,656,665	1,184,343,926	1,181,323,284	2,694,519	1,813,230	440	652
			Total Letters	30,599,656,339	27,747,010,031	59,364,993,434	54,592,539,655	10,420,732	9,004,149	5,697	6,063
	6,7,8,20	12,17	Mech Flats+Prep	3,272,753,431	2,603,140,869	4,613,597,416	3,496,961,917	3,853,246	2,964,489	1,197	1,180
	13	14	Manual Flats	303,421,456	355,768,630	370,202,575	397,432,505	962,513	799,673	385	497
			Total Flats	3,576,174,887	2,958,909,499	4,983,799,991	3,894,394,422	4,815,759	3,764,162	1,035	1,035
	9,10	13	SPBS	103,624,639	86,983,440	483,009,724	398,849,946	1,461,622	1,314,653	330	303
11,14,15	13,14	Parcel/Priority	114,830,278	110,527,091	139,039,426	140,747,744	606,399	425,101	229	331	
		Total Other Dist	218,454,917	197,510,531	622,049,150	539,597,690	2,068,021	1,739,754	301	310	
Non-Volume Operations	16,17,18,19	17	Prep					2,030,022	1,577,834		
	21,22,23	13,17	Open/Pouching					4,336,495	2,503,619		
	24,25	13,17	Tray Handling					1,134,593	1,464,212		
	27	17	Equip Operator					1,972,307	1,663,257		
	26,28,29	17	Dock Operations					5,191,592	3,960,681		
	31,32	18	Express/Registry					889,805	687,584		
	33,34	18	Indirect/Support					2,710,752	1,356,757		
		Sub-Total Dist	34,394,286,143	30,903,430,061	64,970,842,575	59,026,531,767	17,304,512	14,508,065	3,755	4,069	
		Sub-Total Non Dist					18,265,566	13,213,944			
		Total LDC 11-18	34,394,286,143	30,903,430,061	64,970,842,575	59,026,531,767	35,570,078	27,722,009	1,827	2,129	

Source: NP12 N2012 PIR Worksheet Summary Final 19 Plants.xlsx Category Summary tab

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Exhibit 12– Productivity Comparison of Pre-AMP to Final PIR (19 Plants)

Final PIR 19 Plants

	Cat No	LDC	Category	Pre AMP to PIR		TPH Productivity		% Chg Hr	% Chg in PPH
				%FHP	%TPH	Pre AMP	Final PIR	Actual	Actual
Volume Measured Operations	1,2	11	Auto Letters Outgoing	-10.9%	-10.9%	6933	6760	-8.6%	-2%
	3	11	Auto Letters Incoming	-20.6%	-19.4%	5897	5617	-15.4%	-5%
	4,5	11	Auto Letters Secondary	4.8%	-3.4%	8598	8466	-1.9%	-2%
	1,2,3,4,5	11	Auto Letters Total	-9.9%	-8.2%	7530	7428	-6.9%	-1%
	12	14	Manual Letters	10.0%	-0.3%	440	652	-32.7%	48%
			Total Letters	-9.3%	-8.0%	5697	6063	-13.6%	6%
	6,7,8,20	12,17	Mech Flats+Prep	-20.5%	-24.2%	1197	1180	-23.1%	-1%
	13	14	Manual Flats	17.3%	7.4%	385	497	-16.9%	29%
			Total Flats	-17.3%	-21.9%	1035	1035	-21.8%	0%
	9,10	13	SPBS	-16.1%	-17.4%	330	303	-10.1%	-8%
11,14,15	13,14	Parcel/Priority	-3.7%	1.2%	229	331	-29.9%	44%	
		Total Other Dist	-9.6%	-13.3%	301	310	-15.9%	3%	
Non-Volume Operations	16,17,18,19	17	Prep					-22.3%	
	21,22,23	13,17	Open/Pouching					-42.3%	
	24,25	13,17	Tray Handling					29.1%	
	27	17	Equip Operator					-15.7%	
	26,28,29	17	Dock Operations					-23.7%	
	31,32	18	Express/Registry					-22.7%	
	33,34	18	Indirect/Support					-49.9%	
		Sub-Total Dist	-10.1%	-9.1%	3755	4069	-16.2%	8%	
		Sub-Total Non Dist					-27.7%		
		Total LDC 11-18	-10.1%	-9.1%	1827	2129	-22.1%	17%	

Source: NP12 N2012 PIR Worksheet Summary Final 19 Plants.xlsx Category Summary tab

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1 **Exhibit 13 – Summary of 3 O/D AMPs “Gaining” Plants**

Three_O/D_AMP's Gaining Plant Only

	Cat No	LDC	Category	Annual FHP Volume		Annual TPH or NATPH Volume		Annual Workhours		Annual TPH Productivity	
				Pre AMP	Final PIR	Pre AMP	Final PIR	Pre AMP	Final PIR	Pre AMP	Final PIR
Volume Measured Operations	1,2,3,4,5	11	Auto Letters Outgoing	796,785,066	664,874,332	1,026,444,607	800,624,016	128,523	106,308	7,986	7,531
			Auto Letters Incoming	1,294,012,293	1,313,871,785	1,336,036,031	1,395,781,231	183,989	231,448	7,261	6,031
			Auto Letters Secondary	543,778,177	898,468,608	2,749,091,718	3,496,961,535	306,700	448,812	8,963	7,792
			Auto Letters Total	2,634,575,536	2,877,214,725	5,111,572,356	5,693,366,782	619,212	786,568	8,255	7,238
	12	14	Manual Letters	98,024,126	109,063,948	140,430,383	139,807,579	289,908	211,444	484	661
			Total Letters	2,732,599,662	2,986,278,673	5,252,002,739	5,833,174,361	909,120	998,012	5,777	5,845
	6,7,8,20 13	12,17 14	Mech Flats+Prep	357,937,909	328,921,482	475,667,804	437,741,135	386,851	353,014	1,230	1,240
			Manual Flats	23,994,649	21,626,777	29,642,616	24,571,716	100,099	108,590	296	226
			Total Flats	381,932,558	350,548,259	505,310,420	462,312,851	486,950	461,604	1,038	1,002
	9,10 11,14,15	13 13,14	SPBS	34,022,939	28,337,473	50,136,313	56,763,161	118,447	188,411	423	301
Parcel/Priority			18,387,090	37,254,096	26,941,423	51,032,749	145,317	108,913	185	469	
Total Other Dist			52,410,029	65,591,569	77,077,736	107,795,910	263,764	297,324	292	363	
Non-Volume Operations	16,17,18,19	17	Prep					159,384	179,053		
	21,22,23	13,17	Open/Pouching					282,863	190,191		
	24,25	13,17	Tray Handling					186,582	189,286		
	27	17	Equip Operator					208,624	211,150		
	26,28,29	17	Dock Operations					569,580	583,010		
	31,32 33,34	18 18	Express/Registry Indirect/Support					134,337 353,707	133,890 147,719		
			Sub-Total Dist	3,166,942,249	3,402,418,501	5,834,390,895	6,403,283,122	1,659,834	1,756,940	3,515	3,645
			Sub-Total Non Dist					1,895,077	1,634,299		
			Total LDC 11-18	3,166,942,249	3,402,418,501	5,834,390,895	6,403,283,122	3,554,911	3,391,239	1,641	1,888

Source: NP12 N2012 PIR Worksheet Summary 3_OD_Plants Gaining Only.xlsx Category Summary tab