

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

EVOLUTIONARY NETWORK DEVELOPMENT  
SERVICE CHANGES, 2006

Docket No. N2006-1

RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO APWU INTERROGATORIES APWU/USPS-T1-1-4 AND 6-8  
(February 27, 2006)

The United States Postal Service hereby submits the response of witness Shah to the following interrogatories of the American Postal Workers Union, AFL-CIO, filed on February 17, 2006: APWU/USPS-T1-1 through 4 and 6 through 8.

The interrogatories are stated verbatim and followed by the responses. Interrogatory APWU-T1-5 has been redirected to witness Williams for response. Objections to APWU/USPS-T1-9 were filed on February 23, 2006.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux  
Chief Counsel, Ratemaking

---

Michael T. Tidwell

475 L'Enfant Plaza West, S.W.  
Washington, D.C. 20260-1137  
(202) 268-2998; Fax -5402  
February 27, 2006

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-1.** On page 1 of your testimony, you state your purpose is to “provide an overview of the Postal Services’ Evolutionary Network Development (END) strategy.

- a) Are END models the major tool used for the END strategy? If there are other tools, please identify them.
- b) Are all END decisions being initiated due to recommendations provided by END model runs? If not, what other avenues can lead to the initiation of a consolidation under the END program?

**RESPONSE:**

[a] Yes.

[b] No, the END models are decision support tools not decision making tools.

The models provide recommendations, which are vetted through Local and Area analysis, which are also means by which consolidations may be initiated.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION, AFL-CIO**

**APWU/USPS-T1-2.** On page i of your testimony, you identify yourself as the Manager of Network Operations Development and identify the five major subgroups of that group.

- a) What is the purpose of the Network Modeling and Development sub group and what activities does it perform?
- b) What is the purpose of the Logistics Systems subgroup and what activities does it perform?
- c) What is the purpose of the Integrated Network Development subgroup and what activities does it perform?
- d) What is the purpose of the Business Opportunity Development subgroup and what activities does it perform?
- e) What is the purpose of the Logistics Quality Support subgroup and what activities does it perform?

**RESPONSE:**

[a] Network Modeling and Development is a cross-functional team that is leading an unprecedented effort to model current distribution and transportation networks, simulate proposed scenarios, and establish an optimized network plan.

[b] Logistics Systems is the bridge that integrates IT into the business, providing frameworks for organizing and understanding the myriad of operational details and information related to logistics services, transportation management, and cost control. Logistics Systems is the focal point for development of national data and transactional processing systems, establishing a central information source.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-2 (continued)**

- [c] Integrated Network Development works to refine and redirect expedited product networks and support tools to achieve service and growth objectives. This group provides strategic guidance in the development of infrastructure to supply operational data and information for network management. Integrated Network Development works to integrate logistics network capabilities with service standards, mail classification and pricing strategies.
- [d] Business Opportunity Development is responsible for understanding the needs of major customers in the mailing industry and working with the Marketing group to develop logistics services that better meet their needs. Business Opportunity Development also works with the larger transportation industry to recommend new logistics business opportunities, such as supply chain management services, and collaborative relationships to promote reliability and lower costs. [e] Logistics Quality Support works to ensure the integrity of Express Mail data and produces service performance and diagnostic reports vital to field users and managers. Logistics Quality Support has created and continues to expand and maintain a suite of diagnostic reports for the expedited products, Express and Priority Mail. This group works with major mailers to develop

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-2 (continued)**

service performance and diagnostics using the mail tracking service  
known as Confirm.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-3.** On page 9 of your testimony you discuss the END modeling approach and the two different types of models involved.

- a) How many different END models are there? Please identify them.
- b) What types of computer software and hardware are used to run them?
- c) Please identify the primary sources of data used in each model and indicate how often those data are updated.
- d) Please provide a listing of all variables included in these models and a description of each variable.
- e) Which data produced from the AMP process are used in the END models?

**RESPONSE:**

[a] There are two END models; the Optimization model is a custom solution developed using LogicNet software and the Simulation model is custom solution developed using ARENA Simulation software and standard Microsoft Access databases.

[b] Optimization Software:

- LogicNet Plus  
Version 3.1.14.4  
Copyright (C) 19952003 LogicTools, Inc.  
Commercial License with Solver  
Release Date 8/6/2003
- System Requirements LogicNet Plus:
  - RAM 256 MB minimum RAM is recommended
  - Pentium processor 1 GHz speed or faster is recommended
  - 5070 MB of hard drive space
  - Windows 98/ME/NT/2000/XP

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-3 (continued)**

Simulation Software:

- ARENA 5.0  
Copyright 2000 Rockwell Software, Inc.  
Microsoft Access Version 2000
- System Requirements ARENA:
  - Windows 98, Windows Me, Windows 2000 (Service Pack 3 or later), Windows Server 2003, or Windows XP (Service Pack 1 or later)
  - Hard drive with 75250 MB free disk space (depending on options installed).
  - Minimum 64 MB RAM (recommended higher, depending on operating system Windows XP recommended 128+ MB RAM).
  - Minimum Pentium Processor, 300 Mhz

Hardware utilized to run models:

Compaq Evo W8000 Intel ® XEO Dual Processor, CPU 2.00 GHZ

- 3.73 GB RAM
- 67.8 GB Hard drive

Compaq Evo W8000 Intel ® XEO ™ Processor, CPU 2.00 GHZ

- 3.9 GB of RAM
- 33.9 GB Hard Drive

HP Workstation XW8000 Intel ® Xenon ™ Processor, CPU 3.06 GHZ

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-3 (continued)**

- 3.12 GB of RAM
- 33.9 GB Hard Drive

[c] The data used to run each model is updated at a minimum annually.

Primary data sources include: ODIS, RPW, PSFR, EOR, MODS, TIMES, Service Standard Directory, PC Miler, and facility specific information collected through field survey.

[d] The primary variable for each model include:

Optimization:

- Feasible Paths – list of operationally feasible ZIP Code to processing facility and processing facility to consolidation center assignments.  
This list frames the possible alternatives to be evaluated within optimization.
- Available Capacity – The available square footage of a facility that can be utilized for mail processing.
- Required Capacity – The amount of equipment square footage required for the mail processing.
- Cost – The mail processing costs associated with a given amount of workload, as well as the fixed costs of a given facility.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-3 (continued)**

Simulation:

- Network Design – Predefined distribution concept and facility assignments.
- Service Standards – 3digit ZIP origin to 3digit destination ZIP Code service standards by mail class.
- Volume Arrival Profiles – The time mail is inducted into our mail stream for processing
- Workload – The expected amount of mail to be processed at each facility by operation
- 3digit Origin to 3digit Destination Volume Distribution – The percent distribution of mail flowing from 3digit Origin to 3digit Destination by product
- Capacity – Is made up of a number of facility specific factors including: the number and type of mail processing equipment and the associated throughputs and reject rates, mail flows to subsequent operations, material handling times, and detailed operation plans.
- Transportation – a set of network routings connecting the network facilities developed to ensure Critical Entry Times (CETs) are met.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**RESPONSE to APWU/USPS-T1-3 (continued)**

- Distances – Derived from PC Miler, the distance from a ZIP to a facility, as well as facility to facility.

[e] The AMP process does not produce data inputs for the END model. Implementation of AMP decisions can lead to network changes that can later be factored into the model.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-4.** On page 11 of your testimony you discuss the strategy of building a 'backbone' network infrastructure of Regional Distribution Centers (RDCs).

- a) Please provide a list of all current facilities that, based on current analysis, will become Regional Distribution Centers.
- b) If not all Regional Distribution Centers have been identified, list all current facilities that are being considered for use as Regional Distribution Centers.
- c) When do you expect to establish this backbone Regional Distribution Center network infrastructure?
- d) Will any Regional Distribution Centers not come from facilities already in the USPS' network? If so, where will they come from?

**RESPONSE:**

- [a] The location of all future RDCs has not yet been determined.
- [b] All major mail processing facilities are potential candidates.
- [c] It is estimated that it will take at least five years.
- [d] The primary objective is to better utilize existing infrastructure, however new facilities may be required as we move through the transition.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-6.** Other points in this redesigned network are identified as Local Processing Centers and Surface Transfer Centers.

- a) Please provide a list of current facilities that will, based on current analysis, become Local Processing Centers.
- b) Please provide a list of current facilities that may, based on current analysis, become Local Processing Centers.
- c) Please provide a list of current facilities that will, based on current analysis, become Surface Transfer Centers.
- d) Please provide a list of current facilities that may, based on current analysis, become Surface Transfer Centers.
- e) Will any facilities not currently in the USPS network become Local Processing Centers or Surface Transfer Centers? If so, where will those facilities come from?
- f) Please describe Multipurpose Centers and their role in the reconfigured network. Please provide a list of current facilities that will, based on current analysis, become Multipurpose Centers.

**RESPONSE:**

- [a] The location of all future LPCs has not yet been determined
- [b] All major mail processing facilities are under evaluation.
- [c] All Regional Distribution Centers in the future will act as Surface Transfer Centers. Transportation consolidation is a fundamental role of an RDC.
- [d] The location of all future STCs has yet to be determined.
- [e] The primary objective is to better utilize existing infrastructure, however new facilities may be required as we move through the transition.
- [f] The only multi-purpose facilities that will exist in the future will be those that perform both the Regional Distribution Center and Local Processing Center or Destination Processing Center role under one roof. The location of such facilities is not known at this time.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-7.** What is your role in the decision making process related to END consolidations? Who makes the final decision for such consolidations?

**RESPONSE:**

I am responsible for developing network recommendations based on model, Area and local input. These recommendations are considered as part of the AMP review process. Under that process, the Senior Vice President, Operations, at headquarters, makes the final decisions.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF AMERICAN POSTAL WORKERS UNION**

**APWU/USPS-T1-8** You state on page 14 of your testimony that at this time, “the Postal Service expects that service changes are likely to be most pronounced for First-Class Mail and Priority Mail.”

On what is that expectation based? Have there been studies conducted on this topic? If so please identify those studies and provide them for the record.

Would it be correct to state that the service changes for First Class Mail will be mostly for collection mail or other First Class Mail that is not eligible for barcode or carrier route presort discounts?

**RESPONSE**

The expectation that service changes are likely to be most pronounced for First-Class Mail and Priority Mail reflects the collective wisdom of headquarters personnel who have been involved in implementing service changes resulting from the AMP reviews for decades. Mail processing and transportation changes of the type expected to result from the END initiative can be expected to have a greater impact on mail with shorter ranges of delivery expectations (e.g., 1-3 days) than on mail classes with longer ranges (e.g., 2-9 or 3-10 days).

The First-Class Mail service changes that occur for any particular 3-digit ZIP Code pair will apply uniformly to all First-Class Mail, irrespective of rate category.