

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

EVOLUTIONARY NETWORK DEVELOPMENT  
SERVICE CHANGES, 2006

Docket No. N2006-1

REVISED RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF THE OFFICE OF THE CONSUMER ADVOCATE  
(OCA/USPS-T1-31)  
(July 12, 2006)

The United States Postal Service hereby submits the revised response of witness Shah to the following interrogatory of the OCA: OCA/USPS-T1-31. The original response was filed on June 30, 2006. The revised response contains a more legible copy of the 9-page attachment that accompanies the answer. Although there may be some minor format differences, there are no substantive changes in the attachment. The revised response supersedes the original response.

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  
[michael.t.tidwell@usps.gov](mailto:michael.t.tidwell@usps.gov)

**RESPONSE OF THE UNITED STATES POSTAL SERVICE  
TO INTERROGATORY OF THE OFFICE OF THE CONSUMER ADVOCATE  
Revised: July 12, 2006**

**OCA/USPS-T1-31.** Please refer to OCA/USPS-T1-27. The interrogatory requested a sample copy of the output produced from a run of the END optimization model that led to one of the consolidations in LR-L-N2006-1/5 or 6 or, if not available, a current run with redactions of names and identifying characteristics. The response, “The output was the identification of the opportunity” does not respond to this interrogatory. It is neither a copy of the output nor the alternative, nor does it provide an understanding of the manner in which the output is presented. That is, what is the output (the exact language) that identifies the opportunity. This follow-up interrogatory is to again request a copy of the output of the optimization model in order to determine the extent of the information available to the Postal Service after running this part of the END model.

**RESPONSE:**

The output was described in USPS-L/R-9, the Technical Conference slides.

Attached is an example of how the optimization output is presented.

# Solution Summary

Description	Data
Scenario Name	GeneratedScenario_20050619
Solution Name	solution1
Solver Run Time	01:28:07
Optimization Gap	53.91%
Run Type	Minimize Cost
Profit = Revenue - Cost	XXXX
Income recieved by meeting demand	XXXX
% of demand satisfied	XXXX
Number of Warehouses Picked	XXXX
Number of Primary Warehouses Picked	XXXX
Number of Warehouses Used	XXXX
Number of Pre-Existing Warehouses	XXXX
Number of Active Plants	XXXX
Number of Pre-Existing Plants	XXXX
Number of Plants Picked	XXXX
Number of Plants Used	XXXX
Number of Active Lines	XXXX
Number of Pre-Existing Lines	XXXX
Number of Lines Picked	XXXX
Number of Lines Used	XXXX
Number of Active Customers	XXXX
Customers With Demand	XXXX
Number of Active Products	XXXX
Products With Demand	XXXX
Number of Fixed Plants	XXXX
Number of Fixed Lines	XXXX
Number of Fixed Warehouses	XXXX
Number of Potential Plants	XXXX
Number of Potential Lines	XXXX
Number of Potential Warehouses	XXXX
Number of Potential Plants Picked	XXXX
Number of Pre-Existing Plants Picked	XXXX
Number of Potential Lines Picked	XXXX
Number of Pre-Existing Lines Picked	XXXX
Number of Potential Warehouses Picked	XXXX
Number of Pre-Existing Warehouses Picked	XXXX
Number of Secondary Warehouses Picked	XXXX
Minimum Warehouses	XXXX
Maximum Warehouses	XXXX
Minimum Primary Warehouses	XXXX
Maximum Primary Warehouses	XXXX
Minimum Secondary Warehouses	XXXX
Maximum Secondary Warehouses	XXXX
Maximum Plants	XXXX
Minimum Plants	XXXX
Minimum Lines	XXXX
Maximum Lines	XXXX
Sub-Structure Enhancements Enabled	XXXX
Standard Enhancements Enabled	XXXX
Weighted Avg Dist from Plant to Plant	XXXX
Weighted Avg Dist from Warehouse to Plant	XXXX
Weighted Avg Dist from Plant to WH	XXXX
Weighted Avg Dist from WH to WH	XXXX
Weighted Avg Dist from WH to Cust	XXXX

## Solution Summary

Currency	\$
Model Time	yr
Transit Time	wk
Units	items
Inv Volume	sq ft
Trans Volume	sq ft
Weight	lbs.
Miles or Km	Mile
Plant to Plant Shipping Cost	XXX
Plant to Warehouse Shipping Cost	XXX
Warehouse to Warehouse Shipping Cost	XXX
Warehouse to Customer Shipping Cost	XXX
Warehouse to Plant Shipping Cost	XXX
Warehouse to Plant Var/Hold Cost	XXX
Warehouse to Warehouse Var/Hold Cost	XXX
Warehouse to Customer Var/Hold Cost	XXX
Duty/Tariff Cost	XXX
In Transit Holding Cost	XXX
Production Cost	XXX
Plant Fixed Cost	XXX
Warehouse Fixed Cost	XXX
TOTAL COST	XXX

## Cost Summary

	<b>COST</b>
<b>COST DESCRIPTION</b>	
Plant to Plant Shipping Cost	XXXX
Plant to Warehouse Shipping Cost	XXXX
Warehouse to Warehouse Shipping Cost	XXXX
Warehouse to Customer Shipping Cost	XXXX
Warehouse to Plant Shipping Cost	XXXX
Warehouse to Plant Var/Hold Cost	XXXX
Warehouse to Warehouse Var/Hold Cost	XXXX
Warehouse to Customer Var/Hold Cost	XXXX
Duty/Tariff Cost	XXXX
In Transit Holding Cost	XXXX
Production Cost	XXXX
Plant Fixed Cost	XXXX
Warehouse Fixed Cost	XXXX
TOTAL COST	XXXX

## Warehouse Solution

<b>ID</b>	<b>Warehouse</b>	<b>Status</b>	<b>Type</b>	<b>WH Size</b>	<b>WH S</b>
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	
26030	LPC Facility-RDC Facility	Potential	Secondary	XXXX	

<b>ID</b>	<b>Warehouse</b>	<b>Fixed Opening Cost</b>	<b>Fixed Operating Cost</b>
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX
26030	LPC Facility-RDC Facility	XXXX	XXXX

## Plant Summary

<b>ID</b>	<b>Plant</b>	<b>Status</b>	<b>Units</b>	<b>Shipping Cost</b>	<b>Product</b>
X	LPC Facility-RDC Facility	Potential	XXXX	XXXX	
X	LPC Facility-RDC Facility	Potential	XXXX	XXXX	
X	LPC Facility-RDC Facility	Potential	XXXX	XXXX	
X	LPC Facility-RDC Facility	Potential	XXXX	XXXX	

## Line Summary

<b>Plant ID</b>	<b>Plant Name</b>	<b>Line ID</b>	<b>Line Name</b>
X	LPC Facility-RDC Facility	X	Plant XX-LPC-Regular Capacity
X	LPC Facility-RDC Facility	X	Plant XX-LPC-Feasibility Capacity

## Product Summary

ID	Product Name	Production Cost	Units Produced	Plant>Plant Shipping Cost	Plant>Plant In Transit
----	--------------	-----------------	----------------	---------------------------	------------------------

1	LPC	XXXX	XXXX	XXXX	
---	-----	------	------	------	--

2	RDC	XXXX	XXXX	XXXX	
---	-----	------	------	------	--

## Customer Summary

Customer ID	Customer Name	Product ID	Product Name	Demand	Demand Satisfied	Demand Required
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X
XXX	Zip-XXX	X	LPC	XXX	XXX	X
XXX	Zip-XXX	X	RDC	XXX	XXX	X

## Time Period Summary

Time Period ID	Time Period	Plant to Plant Transportation Cost	Plant to Warehouse Transportation Cost	W
1	Entire span	XXX	XXX	