

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000-1

UNITED STATES POSTAL SERVICE
INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS TO
UNITED PARCEL SERVICE WITNESS NEELS
(USPS/UPS-T1-34-37)

Pursuant to rules 25 and 26 of the Rules of Practice and procedure, the United States Postal Service directs the following interrogatories and requests for production of documents to United Parcel Service witness Neels: USPS/UPS-T1-34-37.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking



Susan M. Duchek

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2990 Fax -5402
June 16, 2000

USPS/UPS-T1-34. Please refer to your response to USPS/UPS-T1-2(c). The interrogatory read, in part, "if you contend the 100 percent variabilities represent the elasticity of 'X' with respect to 'Y,' provide a precise definition of 'X' and 'Y.'" You responded, "'X' equals mail processing labor cost for a specific MODS pool. 'Y' represents the number of pieces of mail of a specific subclass delivered by the Postal Service." Please also refer to your response to USPS/UPS-T1-4.

- a. Please confirm that the "variabilities" defined in your response to USPS/UPS-T1-2(c), in mathematical notation, are the elasticities $\partial \ln C_i / \partial \ln DV_j$, where C_i denotes the labor cost for mail processing cost pool i and DV_j denotes the pieces of mail of subclass j "delivered by the Postal Service." If you do not confirm, please provide the formula you believe to be correct and a full explanation of how it relates to your response to USPS/UPS-T1-2(c).
- b. Please confirm that "100 percent variabilities" as defined in your response to USPS/UPS-T1-2(c) imply, in mathematical notation, $\partial \ln C_i / \partial \ln DV_j = 1$, where the variables are defined as in part (a) of this interrogatory. If you do not confirm, please provide a detailed derivation of the mathematical relationship between the elasticity $\partial \ln C_i / \partial \ln DV_j$ and the "100 percent variabilities" you believe to be correct.

USPS/UPS-T1-35. Please refer to your response to USPS/UPS-T1-2(d). The interrogatory requested that you provide the "precise economic interpretation(s) of the distribution key shares used by Mr. Sellick to compute mail processing "costs" by cost pool and subclass." You responded, "Mr. Sellick's IOCS-based

distribution key shares represent the shares of costs, by MODS pool, accounted for by the various mail subclasses." Please also refer to your response to USPS/UPS-T1-2(b), where you state, "Dividing Mr. Sellick's subclass costs by the corresponding RPW volumes does give the best approximations of the partial derivatives of mail processing labor costs with respect to subclass volumes that are available in this record." Please also refer to Mr. Sellick's response to USPS/UPS-T2-1(c), in which Mr. Sellick confirms that the subclass costs he computes can be expressed as "the product of total cost for the pool, a volume-variability factor equal to (or nearly equal to) one (or 100 percent), and a distribution key share for the cost pool and subclass derived from IOCS data."

- a. Please confirm that the "costs" to which you refer in your response to USPS/UPS-T1-2(d) are volume-variable costs, by MODS pool. If you do not confirm, please explain fully.
- b. Please confirm that the "volume-variability factor" employed, explicitly or implicitly, by Mr. Sellick would be defined, in mathematical notation, by the formula you confirmed or provided in response to USPS/UPS-T1-34(a). If you do not confirm, please explain fully.
- c. Please confirm that the formula confirmed by Mr. Sellick can be represented, in mathematical notation, as $VVC_{ij} = C_i \cdot \epsilon_i \cdot d_{ij}$, where VVC_{ij} is the volume-variable cost in cost pool i for subclass j , C_i is defined in interrogatory USPS/UPS-T1-34(a), ϵ_i is the volume-variability factor (elasticity) you confirmed or provided in response to USPS/UPS-T1-34(a), and d_{ij} is the IOCS-based distribution key share computed by Mr. Sellick. If you do not

confirm, please provide the formula you believe to be correct, and explain its derivation fully.

- d. Please confirm that your response to USPS/UPS-T1-2(b) implies, in mathematical notation, $VVC_{ij} / V_j^{RPW} = C_i \cdot \varepsilon_i \cdot d_{ij} / V_j^{RPW} \cong \partial C_i / \partial V_j^{RPW}$, where V_j^{RPW} is the RPW volume of subclass j, and the symbol \cong denotes "approximately equals." If you do not confirm, please provide the formula you believe to be correct, and explain its derivation fully.
- e. Please describe in detail all assumptions needed for the approximation $C_i \cdot \varepsilon_i \cdot d_{ij} / V_j^{RPW} \cong \partial C_i / \partial V_j^{RPW}$ to hold. For each assumption, please describe in detail and provide all quantitative evidence you have to validate the assumption. If you have no quantitative evidence to validate an assumption, please so indicate.

USPS/UPS-T1-36. Please refer to your response to USPS/UPS-T1-3(c). You state, "The relationship between incremental RPW volume and incremental FHP volume will depend upon routing, and, for a given routing, the two will generally vary in direct proportion." You subsequently describe some ways in which "exceptions to direct proportionality between RPW volume and FHP volume may sometimes occur," but contend "Any departures from direct proportionality between FHP volume and RPW volume would have an equal or greater effect on the relationship between TPF and RPW volume."

- a. If "routing" is defined as the routing of a piece of mail *within* a mail processing facility, would it be correct to say, "The relationship between incremental FHP

volume and incremental TPF (or TPH) volume will depend upon routing, and, for a given routing, the two will generally vary in direct proportion"? If not, please explain fully why not.

- b. Please confirm that some of the possible "exceptions to direct proportionality" you describe may have the effect of decreasing FHP per RPW piece (e.g., increased presorting and/or drop-shipping of mail). If you do not confirm, please explain fully.
- c. Please indicate whether you have any quantitative evidence to support your contention that, "Any departures from direct proportionality between FHP volume and RPW volume would have an equal or greater effect on the relationship between TPF and RPW volume." If so, please provide and describe in detail all such evidence.
- d. Please explain whether there are possible exceptions to your statement, "Any departures from direct proportionality between FHP volume and RPW volume would have an equal or greater effect on the relationship between TPF and RPW volume." For instance, could a "reconfiguration of the network" add an intermediate processing step without necessarily increasing the number of sorts required to "finalize" a piece of mail to its destination? Please explain.

USPS/UPS-T1-37. Please refer to your responses to USPS/UPS-T1-5(c) and (d). The interrogatories asked you to explain how "increases in cost associated with growth in the number of addresses" are "causally attributable to a subclass of mail" as volume-variable (or marginal) cost (in USPS/UPS-T1-5(c)) and

incremental cost (in USPS/UPS-T1-5(d)). Your response to USPS/UPS-T1-5(c) discusses the cost effects of “[a]ccommodating the volumes associated with such new delivery points” and states, “Costs associated with these modifications are causally related to the volume growth caused by the creation of new households and businesses.” Your response to USPS/UPS-T1-5(d) reads, “See my response to part (c), above.”

- a. Please explain whether your response implies that you believe there are no cost consequences of growth in delivery points *independent* of any associated mail volumes.
- b. Your response to USPS/UPS-T1-5(c) does not indicate how the “[c]osts associated with these modifications” are causally attributable to a subclass of mail as volume-variable (or marginal) cost. Please explain fully how, if at all, “[c]osts associated with these modifications” are causally attributable to a subclass of mail as volume-variable (or marginal) cost” as originally requested in interrogatory USPS/UPS-T1-5(c).
- c. Your response to USPS/UPS-T1-5(c) does not indicate how the “[c]osts associated with these modifications” are causally attributable to a subclass of mail as incremental cost. Please explain fully how, if at all, “[c]osts associated with these modifications” are causally attributable to a subclass of mail as volume-variable (or marginal) cost” as originally requested in interrogatory USPS/UPS-T1-5(c).
- d. If your response to part (a) indicates that you believe there are, or may be, cost consequences of growth in delivery points *independent* of any

associated mail volumes, please explain fully how, if at all, such costs are causally attributable to a subclass of mail as volume-variable (or marginal) cost.

- e. If your response to part (a) indicates that you believe there are, or may be, cost consequences of growth in delivery points *independent* of any associated mail volumes, please explain fully how, if at all, such costs are causally attributable to a subclass of mail as incremental cost.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



Susan M. Duchek

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2990 Fax -5402
June 16, 2000