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UNITED STATES OF AMERICA POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

Postal Rate and Fee Changes

Docket No. R2000-1

PRESIDING OFFICER'S RULING DENYING MOTION
TO STRIKE FROM THE RECORD MATERIALS SPONSORED
BY POSTAL SERVICE WITNESSES BARON AND RAYMOND

(July 14, 2000)

Postal Service witnesses Raymond and Baron have sponsored testimony and related materials in this docket that use work sampling data collected by the Engineered Standards/Delivery Redesign (ES) study to divide accrued city carrier street time into the six functional components that have traditionally been analyzed for variability. These components are foot and curb runtime, load time, driving time, collection time, and street support time. From Docket No. R87-1 until this docket, the Postal Service and the Commission have relied on data collected by the Street Time Survey (STS) conducted in 1986 to calculate the relative proportions of these street time components.

On June 20, 2000, a coalition of mailers filed a motion to strike the material sponsored by Postal Service witnesses Baron and Raymond that uses ES data to

calculate these proportions.¹ The coalition's Motion discusses the standards that govern the admission of material into evidence in administrative hearings. It describes instances in two prior dockets in which the Commission struck material from the record, and attempts to draw parallels between those factual situations and the one surrounding the use of ES data in this docket. The Motion argues that the ES data do not satisfy even the very liberal admissibility standards that apply in administrative hearings. It also argues that the ES data raise the same concerns that caused the Commission to strike material in the two prior instances that it describes. For reasons discussed below, I conclude that the material sponsored by witnesses Raymond and Baron that use ES data satisfies the liberal standards that govern admission of material into administrative records. I also conclude that the ES data do not raise the same concerns that caused the Commission to strike material from the record in the prior instances that the Motion cites.

Background. The ES project was a carrier street time study designed by witness Raymond as a subcontractor for A. T. Kearney. Its purpose was to produce a system for managing city delivery carrier workload by developing preferred methods and time standards for accomplishing the detailed tasks required of city carriers. Between 1996 and 1998, data collectors observed carriers covering their routes on specific days and recorded their activities. They measured the time and effort that various carrier tasks required to complete, took videos of carriers performing those

¹ Motion to Strike Testimony of Postal Service Witnesses Baron (USPS-T-12) and Raymond (USPS-T-13) in Behalf of ADVO, Inc., Alliance of Nonprofit Mailers, American Business Media, Association for Postal Commerce, Association of American Publishers, Coalition of Religious Press Associations, Direct Marketing Association, Dow Jones & Company, Inc., Magazine Publishers of America, National Newspaper Association, the McGraw-Hill Companies, Inc., Parcel Shippers Association, and Time Warner, Inc., filed June 20, 2000. (Motion). In response, on June 27, 2000, the Postal Service filed its Opposition of United States Postal Service to MPA Motion to Compel Answers to Interrogatories MPA/USPS-T13-6, 7, 10, 12, 14. 17, 19, 45-47, 50 and 56 to Witness Raymond (Opposition). Also on June 27, 2000, the Newspaper Association of America filed its Newspaper Association of America Comments on Motion of ADVO, Inc., *et al.*, to Strike Testimony of Postal Service Witnesses Baron (USPS-T12) and Raymond (USPS-T13) (NAA Comments).

tasks, and sampled the activities in which the carriers were engaged throughout the carrier's workday.

Worksampling employed a complex hierarchy of carrier activity characteristics. Every six minutes, the data collector would observe the activity in which the carrier was engaged, determine its characteristics, and record them, resulting in a "tally." For each activity characteristic observed, the data collector would scan a corresponding barcode. The ES study was undertaken with the intent of using the results in collective bargaining negotiations, but was abruptly terminated prior to the most recent round of collective bargaining with city carriers.

The Data Quality Study prepared for Congress by A. T. Kearney in 1999 characterized the STS survey results as "highly imprecise," and recommended that its ES project data be considered as a long term replacement.² Responding to the suggestion in the Data Quality Study, the Postal Service asked witness Raymond to update the STS street time proportions using ES worksampling data.

Discovery directed toward witness Raymond has been difficult and prolonged. It focused on the route-day sample design, the training of the data collectors, and the reasoning underlying witness Raymond's mapping of ES tally data to the STS functional street time categories. Much of the discovery directed to witness Raymond was answered more than a month after it was due, and some not until a month after witness Raymond left the stand. He was unable to respond to discovery in a timely manner, in part, because he had not organized and catalogued the massive ES database until after the discovery period was well underway. Another factor delaying discovery responses was witness Raymond's reluctance to respond to requests to articulate general guidelines that governed his mapping of ES data into STS categories. See P.O. Ruling No. R2000-1/35.

² See Opposition at 2-6; A. T. Kearney, Data Quality Study, Technical Report #4: Alternative Approaches For Data Collection (April 16, 1999) at 53-56.

Because the ES project collected a wealth of data that appeared to be highly relevant to analyzing carrier street time costs, the Presiding Officer directed the Postal Service to take unusual measures to make up for the difficulties encountered by the participants seeking discovery on the Raymond testimony. The Postal Service was directed to guide interested parties through the ES database in informal technical conferences held at the site where the data was warehoused. See P.O. Ruling No. R2000-1/27 at 7-8. Witness Raymond was also directed to articulate the general guidelines that he followed in mapping types of ES tallies to the various STS categories. See Presiding Officer's Information Request No. 8, issued April 1, 2000. To mitigate the impact of tardy discovery responses, the Commission extended the date for cross-examination of witnesses Raymond and Baron, and the date for filing testimony responding to the their analyses of ES data. See P.O. Ruling No. R2000-1/54.

Apparently because the purpose of the ES project was to develop preferred methods and time standards to apply to the various carrier street functions, rather than to measure theoretical cost concepts, it differed in significant ways from a carrier cost survey. As witness Raymond concedes, data collection included an exploratory phase in which collection procedures evolved. Tr. 18/7484. Training of data collectors was largely by example rather than preconceived plan. Tr. 18/7388. Its sampling of sites and routes involved both preselection and random selection. USPS-T13 at 7-9. Theoretical concerns that are usually prominent in costing studies such as the representativeness of the sample, definition of the dataset, and procedures used to edit and scrub the data, were a secondary consideration. The exact size and nature of the original dataset was not consistently explained until witness Raymond was orally cross-examined on May 9 and 10, 2000. Tr. 18/7948-50, 7987, 7992, 7998-99. This compressed the time available to other participants to prepare responsive testimony.

Legal standards and precedents governing admissibility. In its Motion, the coalition acknowledges that the Administrative Procedures Act, rather than the Federal

Rules of Evidence, governs the admissibility of evidence in Commission hearings, and, as a result, the Commission has wide discretion in determining what material will be received. Usually, the Motion notes, deficiencies in the quality of proffered evidence can be adequately taken account of in determining what weight to give to the evidence. Motion at 2, citing PRC Order No. 1143 in Docket No. MC96-3, at 3-4. The Motion also notes that deficiencies in the foundation for or the documentation of evidence often can be remedied by extraordinary procedural mechanisms such as extending discovery and allowing supplemental testimony. It quotes the following observation of the Presiding Officer in Docket No R94-1, at Tr. 4731 "[i]t is the purpose of the Commission to evaluate evidence and we will exclude potentially probative materials only in exceptional circumstances."

The Motion points out, however, that there are circumstances in which a study has such severe foundational defects that it would violate the due process rights of opposing parties to accept it on the theory that its defects can be reflected in the weight to which the study is entitled. Motion at 3, citing PRC Order No. 562 in Docket No. R84-1. The Motion argues that these circumstances exist

1) where the reliability or probative value of the evidence is so irremediably uncertain or unclear that it is impossible to give it any weight, or impossible to determine how much weight to give it [citing Order No. 1024 at 3, and Order No, 562 at 3], and 2) where, because of the running of the clock or for other reasons, it is impossible within the compass of the case to cure fundamental defects in the foundation of the testimony or to afford participants a fair opportunity to test and to rebut the testimony.

[citing Order No. 1024 at 12, and Order No. 562 at 3.

In sum, the Motion argues, precedent indicates that the Commission will strike the results of a study where its foundation is so lacking, or continuing revisions are so drastic, that they effectively prevent other participants from evaluating the study's methods or results in the time available. Motion at 4-5, citing Order No. 562 at 20 and at its Appendix at 1, and Order No. 1024 at 12.

Coalition arguments. The Motion filed by the coalition argues that its members have not been able to evaluate the Raymond and Baron analyses of ES data in the time provided them in this docket. They are unable to do so, the Motion contends, because the ES study was not designed for the purpose of estimating street time costs. The Motion argues that this provides two broad grounds that in the past have prompted the Commission to strike evidence from the record.

The first broad ground for striking the ES data, according to the Motion, is that the foundation offered for the statistical properties of the ES data is fatally defective. The Motion, at 5-6, argues that

No sample for the purpose of [a carrier cost] study was ever selected, no data of the kind relevant and essential for such a study was ever described, defined, or collected, no training for a study of carrier costs was ever conducted, no contemporaneous documentation exists of such a study ever having been undertaken, and no data or statistical analysis have been produced that have any measurable level of confidence or independently verifiable statistical significance with respect to the subject allegedly studied.

The Motion concludes that the lack of a foundation establishing the statistical properties of the ES data violate Rule 31(k)(1), (2), and (2)(ii)(b) of the Commision's Rules of Practice. Id.

Analysis. The fact that cost estimation was not the original purpose for which the ES project collected data on carrier street time activities does not, by itself, establish that the ES data cannot yield information that is useful in estimating costs. Whether a study that focuses on other things can be used to reliably estimate costs is an empirical question that ordinarily should be debated on the merits. The Motion overstates the coalition's case when it asserts that the Postal Service has provided no sample, no documentation, and no statistical analysis of the accuracy the ES data that is relevant to cost estimation. As the Postal Service points out (Opposition at 7), witness Raymond's testimony and interrogatory responses provide a substantial amount of

information about the ES sample's design, the characteristics being measured and counted, and the procedures used to collect and edit the data. See, e.g., USPS-T-13 at 7-12; Tr. 18/7407-09, 7797-7801. Witness Baron has also provided an analysis that purports to calculate standard errors and confidence intervals for witness Raymond's estimates of the relative proportions of the six traditional street time functions. See Response of United States Postal Service Witness Baron to Interrogatory ADVO/USPS-T13-23(c), filed April 11, 2000.

This information, though belatedly provided, furnishes the minimum foundation needed to satisfy the Commission's rules. The ES worksampling data identifies in extreme detail the activity characteristics being sampled. This detail does not resolve the debate as to which of the traditional street time functions individual ES tallies belong, but it stands in stark contrast to the BRMAS study struck from the record in Docket No. R94-1. There, so little documentation was provided for the BRMAS study that the Commission could not determine whether it measured features covering ordinary First-Class mail processing rather than BRMAS processing.

With respect to the foundation provided for the ES sample design, the extent to which the sample was preselected and the extent to which it was randomly selected was adequately described, despite some initial confusion. The Motion questions whether the scrubbing of observations on the grounds that they were incomplete was legitimate, but the Postal Service has a plausible response. This merely demonstrates that this is another issue that should be resolved on the merits rather than on procedural grounds. See Motion at 13, Opposition at 14. The salient issue is not whether participants can ascertain how the sample was selected and edited. It is the extent to which witness Baron has demonstrated that the partly-random ES sample can still be considered sufficiently representative for costing purposes. See Response of United States Postal Service Witness Baron to Interrogatory ADVO/USPS-T13-23(c), filed April 11, 2000, at 5. His analysis is not implausible per se, and should be debated on the merits, rather than resolved on procedural grounds.

The second broad ground for striking the ES data, according to the Motion, is that the manner in which the Raymond analysis is presented makes it impossible to test or rebut. Motion at 7-14. The Motion argues that the lack of a written survey plan, written training guidelines for data collectors, and articulated decision rules for mapping ES tallies to STS functions, makes the Raymond analysis too subjective to be independently evaluated.

Here too, the Motion overstates the coalition's case. The heart of the coalition's complaint is that witness Raymond has not provided a coherent explanation of why he mapped ES tallies to the various STS street time functions as he did. Witness Raymond has individually analyzed some 39,000 worksampling tallies to determine in which of the six STS street time functions they belong. He initially insisted that most individual tallies could not be assigned to an STS function without referencing the entire scan sequence of which they were a part, and refused to identify general criteria that he used to assign types or groups of tallies. In response to POIR No. 8, however, he provided frequency distributions of common tally types, and general guidelines for how they should be mapped to STS functions. He also answered a large number of complex interrogatories about why he assigned specific ES tallies to particular STS functions. Consequently, MPA et al. was able to understand, test, and rebut witness Raymond's mapping analysis in depth, as the testimony of witness Crowder (MPA-T-5) amply demonstrates.

For the most part, witness Raymond's explanations appear to reflect a good grasp of the traditional definitions of the various STS functions, and his mapping guidelines and specific mapping decisions are not prima facie unreasonable.

Consequently, the validity of his mapping analysis is a matter to be debated on the merits, rather than resolved on procedural grounds.

This contrasts sharply with the peak load cost study that the Commission struck from the record in Docket No. R84-1. The peak load study was based on the output of a complex computerized simulation model called the Mail Processing Cost Model

(MPCM). The Postal Service refused to provide the source code for the MPCM. This had the effect of concealing the decision rules that produced the output in a "black box." The Commission struck the output of the MPCM from the record, commenting that the documentation withheld was

necessary to independently discern what the MPCM does, and how it does it. The absence of such information does more than detract from the weight to which the MPCM is entitled. Without it, neither the parties, nor the Commission, know whether the MPCM is entitled to any weight at all.

Order No. 562 at 3. The documentation and explanations provided by witness Raymond for his mapping of the ES tallies to STS functions were sufficient to enable the coalitions' witnesses to analyze his mapping procedure and to rebut it in depth.

The Motion also argues that witness Raymond's study was a moving target, primarily because his discovery responses did not always indicate the number of observations that had been deleted as incomplete or otherwise suspect from the database that he referenced.

The ES database consisted initially of some 1,020 route days, which was edited to 981 route days, and ultimately to 844 route days, before it was provided to witness Baron. This confusion was not eliminated until May 9, 2000, when witness Raymond was orally cross-examined. Motion at 12. See USPS-T-13 at 14; Tr. 18/7941; and Tr. 18/7992. Although this increased the difficulty of preparing responding testimony, participants had three weeks to incorporate this information in their testimony. The Motion fails to discuss what potential impact including the additional observations would have made on witness Raymond's results, or alleged how it might have handicapped participant's analysis of his results.

The contrast with the BRMAS study that the Commission struck from the record in Docket No. R94-1 is clear. There the Postal Service amend its study continually, even after the due date for responsive testimony. The Commission concluded that this

truly was a moving target that effectively prevented participants from analyzing the study and preparing responsive testimony. Order No. 1024 at 13.

The Motion asserts other grounds for striking the Raymond and Baron analyses of ES data from the record. Principal among them is it argument that the STS street time proportions derived from the ES data are self discrediting, since they differ so markedly from those derived from the STS survey conducted 14 years earlier. As the Newspaper Association of America points out, this argument is based on an unverified assumption that these differences reflect infirmities in the ES data rather than obsolescence or other infirmities in the STS survey results. As with the other grounds offered in the Motion for striking the ES data, this issue should be resolved on its merits rather than on procedural grounds. NAA Comments at 6-7.

In Docket No. R84-1 the Commission expressed its "extreme reluctance to exclude apparently relevant and material evidence that might advance the analysis of postal rates." Order No. 562 at 2. That reluctance remains. The Commission generally will not grant a motion to strike evidence where, as here, the main complaint of the moving parties is the reliability of data or the quality of the analysis at issue. As an expert body on costing and ratemaking issues, the Commission is capable of evaluating the weaknesses of such evidence and affording it the appropriate weight. Only when data or analyses are submitted for the record with documentation that is so lacking, or is provided so late in the hearing process, as to effectively disable participants from testing or rebutting them, will the Commission strike them from the record.

The foundational information that was provided for witness Raymond's estimate of STS proportions was sometimes ambiguous and often tardy. Aided by extraordinary discovery measures and adjustments to the schedule, however, the coalition demonstrated its ability to evaluate and rebut the Raymond analysis with admirable thoroughness. Accordingly, the essence of the coalition's complaint appears to be the substantive defects that it perceives in the ES data and witness Raymond's analysis of those data, rather than the procedural unfairness that it allegedly would suffer from

allowing it into to remain in he record. For the reasons discussed above, its substantive defects should be litigated on their merits, rather than disposed of on procedural grounds.

RULING

The Motion to Strike Testimony of Postal Service Witnesses Baron (USPS-T-12) and Raymond (USPS-T-13) in Behalf of ADVO, Inc., Alliance of Nonprofit Mailers, American Business Media, Association for Postal Commerce, Association of American Publishers, Coalition of Religious Press Associations, Direct Marketing Association, Dow Jones & Company, Inc., Magazine Publishers of America, National Newspaper Association, the McGraw-Hill Companies, Inc., Parcel Shippers Association, and Time Warner, Inc., filed June 20, 2000, is denied.

Edward J. Gleiman
Presiding Officer