COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION INTO THE ELIMINATION OF SWITCHED ACCESS SERVICES DISCOUNTS AND ADOPTION OF TIME-OF-DAY SWITCHED ACCESS RATES	))))	ADMINISTRATIVE CASE NO. 336

O R D E R

INTRODUCTION

This investigation was opened on December 4, 1990 to determine whether:

1. Rates for local switching 1 and local switching 2 should be equalized.

2. Rates for all switched access services used to originate or terminate traffic in non-equal access end offices should be equalized.

3. Time-of-day rates for switched access services should be adopted.

In part, this investigation was opened in response to a motion filed by AT&T Communications of the South Central States, Inc. ("AT&T) in another case.[1] AT&T's motion, responses and replies were incorporated into this investigation. All providers of telecommunications services subject to the jurisdiction of the Commission that might be affected by the outcome of the

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[1] Case No. 90-057, The Tariff Filing of South Central Bell Telephone Company to Revise its Access Services Tariff.

investigation were served with a copy of the notice and allowed adequate time to file intervention petitions, including local exchange carriers, interexchange carriers, resellers, and alternative operator service providers. Intervention petitions were filed by AmeriCall Systems of Louisville ("AmeriCall") on December 17, 1990; the Attorney General of the Commonwealth of Kentucky, by and through his Utility and Rate Intervention Division ("Attorney General") on December 19, 1990; MCI Telecommunications Corporation ("MCI") and South Central Bell Telephone Company ("South Central Bell") on December 20, 1990; Cincinnati Bell Telephone Company ("Cincinnati Bell") and GTE South Incorporated ("GTE South") on January 2, 1991; AT&T, Contel of Kentucky, Inc. ("Contel") and LDDS of Indiana, Inc. and LDDS of Kentucky, Inc. (jointly "LDDS") on January 3, 1991; the Independent Telephone Group[2] on January 4, 1991; US Sprint Communications Company Limited Partnership ("US Sprint") on January 17, 1991; and the Kentucky Telephone Association on January 22, 1991. These petitions were granted in Orders dated January 2, January 7, and January 28, 1991.

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[2] Ballard Rural Telephone Cooperative Corporation, Inc.; Brandenburg Telephone Company, Inc.; Duo County Telephone Cooperative Corporation, Inc.; Foothills Rural Telephone Cooperative Corporation, Inc.; Harold Telephone Company, Inc.; Logan Telephone Cooperative, Inc.; Mountain Rural Telephone Cooperative Corporation; North Central Telephone Cooperative, Inc.; Peoples Rural Telephone Cooperative Corporation, Inc.; South Central Rural Telephone Cooperative Corporation, Inc.; Thacker-Grigsby Telephone Company, Inc.; and West Kentucky Rural Telephone Cooperative Corporation, Inc.

An informal conference was held on April 2, 1991, at which various issues relative to the investigation were discussed, including but not limited to its resolution through stipulations agreed to among the parties. Subsequent to the informal conference, on April 9, 1991, a schedule of procedure was issued allowing for the filing of any stipulations, comments and reply comments on such stipulations, and comments and reply comments on other issues. Also, any party seeking a public hearing was required to petition for a public hearing. LDDS was the only party to petition for a public hearing.

A Joint Stipulation was filed on April 15, 1991. AT&T and MCI were signatories to the Joint Stipulation. Cincinnati Bell, Contel, GTE South, and South Central Bell concurred in but were not signatories to the Joint Stipulation. Statements attesting their concurrence were attached to the Joint Stipulation.

Various interrogatories were propounded by the Commission and among the parties. All responses to these interrogatories have been filed. A public hearing has not been held and the Commission finds that none is needed to conclude this investigation. Therefore, LDDS's motion for a public hearing is denied.

DISCUSSION

The Joint Stipulation

The Joint Stipulation provides that:[3]

1. In situations where a local exchange carrier's access services tariff contains separate rate elements for local switching, line termination, and line intercept, the difference in rates for local switching 1 and 2 should be phased-out as follows:[4] a) effective the date of a Commission decision, the rate for local switching 1 should be 83 percent of the rate for local switching 2; b) effective July 1, 1991, the rate for local switching 1 should be 86 percent of the rate for local switching 2; c) effective July 1, 1992, the rate for local switching 1 should be 90 percent of the rate for local switching 2; and d)

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3 Joint Stipulation, pages 1-3.

4 Local switching is a rate category that provides for local end office common switching functions associated with the various switched access serving arrangements, the termination of local transport at end offices, the termination of access lines at end offices, and the termination of certain calls at designated local exchange carrier interception points. The premium charge applicable to local switching in end offices equipped with equal access capabilities is divided into two categories, local switching 1 and 2. In general, the premium charge for local switching 1 is applicable to usage on Feature Groups A and B access serving arrangements and the premium charge for local switching 2 is applicable to usage on Feature Groups C and D access serving arrangements. A non-premium or "transitional" charge for local switching is applicable to usage on Feature Groups A and B in non-equal access equipped end offices. There are, however, technical exceptions specified in each local exchange carrier's access services tariff.

effective July 1, 1993, rates for local switching 1 and 2 should be equal.[5]

2. In situations where a local exchange carrier's access services tariff contains a combined rate element for local switching, line termination, and line intercept, the difference in rates for local switching 1 and 2 should be phased-out as follows: a) effective the date of a Commission decision, the rate for local switching 1 should be 90 percent of the rate for local switching 2; b) effective July 1, 1991, the rate for local switching 1 should be 93 percent of the rate for local switching 2; c) effective July 1, 1992, the rate for local switching 1 should be 94 percent of the rate for local switching 2; and d) effective July 1, 1993, rates for local switching 1 and 2 should be equal.[6]

3. Effective "immediately"--presumably, the date of a decision--the non-premium discount in non-equal access end offices should cease to be applied to terminating rate elements.

4. Equalization of rates for local switching 1 and 2 and elimination of the discount on terminating access charge rate elements should be handled on a revenue neutral basis, using rate designs developed by the local exchange carriers and approved by the Commission.

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5 At the time, this provision applied to the Independent Telephone Group; Alltel Kentucky, Inc.; Leslie County Telephone Company, Inc.; Lewisport Telephone Company, Inc.; and Salem Telephone Company.

6 At the time, this provision applied to Cincinnati Bell, Contel, GTE South, and South Central Bell. It would now apply to all local exchange carriers.

In addition, the Joint Stipulation includes exhibits showing rate and other tariff revisions that need to be made, consistent with its terms.

The Independent Telephone Group, LDDS, and US Sprint filed comments on the Joint Stipulation. The Independent Telephone Group raises no objections to the Joint Stipulation and recommends that the Commission consider it "as it may eliminate the need for further hearings and other regulatory action in this proceeding."[7] LDDS generally opposes the Joint Stipulation. US Sprint conditionally supports the Joint Stipulation in part and opposes it in part. AT&T and GTE South filed reply comments in support of the Joint Stipulation.

The Commission will not adopt the Joint Stipulation, as it is largely moot. The Commission, however, will implement those aspects of the Joint Stipulation that are still germane.

Equalization of Local Switching 1 and 2 Rates

LDDS argues that "no legitimate public policy goal would be achieved by eliminating the local switching 1/local switching 2 differential in Kentucky,"[8] because it would be unfair to non-dominant interexchange carriers and the rationale for equalization in the federal jurisdiction does not apply in

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7 Comments of the Independent Telephone Group on the Joint Stipulation, filed on April 16, 1991, page 2.

8 Comments of LDDS on the Joint Stipulation, filed on April 29, 1991, page 4. Acronyms have been omitted from this and other citations.

Kentucky.[9] According to LDDS, equalization of local switching 1 and 2 rates would "disadvantage AT&T's competitors, which initially were forced to use inferior access to develop and market services designed to overcome the inferiorities."[10] LDDS explains that local switching 1 rates are applicable to Feature Groups A[11] and B[12] access serving arrangements. These access serving arrangements are generally considered inferior to Feature Groups C[13] and D,[14] where local switching 2 rates are applicable.

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9 The Federal Communications Commission ("FCC") addressed equalization of local switching 1 and 2 rates in Common Carrier Docket No. 87-113, Amendment of Part 69 of the Commission's Rules and Regulations, Access Charges, to Conform it With Part 36, Jurisdictional Separations Procedures.

10 Comments of LDDS on the Joint Stipulaton, page 5, emphasis omitted.

11 Feature Group A provides line side access to a local exchange carrier's end office switches with an associated seven digit local telephone number for use in originating and terminating intrastate calls from and to interexchange carrier points-of-presence. More detailed descriptions are contained in each local exchange carrier's access services tariff.

12 Feature Group B provides trunk side access to a local exchange carrier's end office switches with an associated 950-0XXX or 950-1XXX access code for use in originating and terminating intrastate calls from and to interexchange carrier points-of-presence. More detailed descriptions are contained in each local exchange carrrier's access services tariff.

13 Feature Group C provides trunk side access to a local exchange carrier's end office switches for use in originating and terminating intrastate calls from and to AT&T points-of-presence. More detailed descriptions are contained in each local exchange carriers access services tariff.

14 Feature Group D provides trunk side access to a local exchange carrier's end office switches with an associated 10XXX access code for use in originating and terminating intrastate calls from and to interexchange carriers points-of-presence. More detailed descriptions are contained in each local exchange carrier's access services tariff.

Moreover, Feature Groups A and B were the only access serving arrangements available to carriers other than AT&T prior to the advent of equal access, which is not universally implemented even today. As a result, non-dominant carriers such as LDDS invested considerable financial and human resources in marketing services based on Feature Groups A and B, which often required the use of autodialers, personal identification numbers and authorization codes, and special answer supervision technologies. Thus, even with the advent of equal access, LDDS avows that it cannot simply abandon services based on Feature Groups A and B and reconfigure its operations to accommodate the use of Feature Group D access service. According to LDDS, "once equal access conversion has occurred, the local switching 1/local switching 2 differential is the only offset that competitive carriers such as LDDS have."[15] Also, eliminating "the local switching 1/local switching 2 differential would increase AT&T's competitors' cost of doing business, benefit no one but AT&T, and inconvenience competitive carriers' customers."[16]

In addition to unfairness, LDDS argues that the FCC's decision to equalize local switching 1 and 2 rates was not based on cost but on changes to jurisdictional separations procedures that "necessarily precluded retention of the local switching 1/local switching 2 differential."[17] Specifically, the FCC

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15 Comments of LDDS on the Joint Stipulation, page 7.

16 Id., page 8.

17 Id., emphasis omitted.

reclassified certain central office switching equipment. The FCC also discontinued allocation of the investment based on toll weighting factors. According to LDDS, even in its rulemaking, the FCC continued to recognize the existence of a cost differential.[18]

LDDS concludes its comments on the equalization of local switching 1 and 2 rates by arguing that any elimination of the rate differential "should be done on a gradual basis rather than in a flash-cut fashion"[19] and that "consideration be given to requiring mitigation of the inferiorities of Feature Groups A and B as well through Feature Group B over D protocol."[20]

US Sprint does not oppose the equalization of local switching 1 and 2 rates under the phase-out provisions of the Joint Stipulation.[21] Like LDDS, however, US Sprint points out that the principle beneficiary will be AT&T, as the overall cost of switched access services for AT&T will decrease while the same cost for US Sprint and other interexchange carriers will increase.[22]

AT&T dismisses LDDS's arguments on the equalization of local switching 1 and 2 rates as essentially self-serving. AT&T criticizes LDDS's failure to order equal access in end offices

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18 Id., page 9 and passim.

19 Id., page 14.

20 Id., pages 15-16.

21 Comments of US Sprint on the Joint Stipulation, filed on April 29, 1991, page 1.

22 Id., pages 1-2.

capable of providing equal access. Furthermore, according to AT&T, LDDS "seeks only to maintain an unwarranted cost advantage by utilizing non-premium access for a segment of its market."[23]

GTE South supports the equalization of local switching 1 and 2 rates because elimination of the rate differential is substantially complete in the interstate jurisdiction, terminating Feature Group B access service is technically equivalent to terminating Feature Group D access service, and in equal access end offices local switching 1 is the only discounted rate applicable to switched access services.[24]

In its reply comments, GTE South discusses the development and application of local switching 1 and 2 rates, and contends that LDDS has misrepresented certain facts. For example, contrary to LDDS, GTE South contends that "Feature Group B terminating traffic is technically identical to Feature Group D traffic in equal access offices," and that this equivalency is reflected in the application of rates.[25] Elsewhere, GTE South more fully explains:

> In equal access equipped offices, the only discounted rate element today for Feature Group A and Feature Group B service is the local switching 1 rate element. There are no discounts for carrier common line, switched transport, or information surcharge. Likewise, the switching and trunking for Feature Group B are technically equivalent to, and are equal in terms of quality with, Feature Group D switching and trunking. No basis exists in these regards for treating the

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23 Reply Comments of AT&T, filed on May 15, 1991, page 4.

24 Reply Comments of GTE South, filed on May 15, 1991, page 2.

25 Id.

> Feature Group A/Feature Group B local switching 1 rate element differently than other Feature Group A/Feature Group B switched access rate elements.[26]

Also, contrary to LDDS, GTE South contends that "the rationale for phasing out the local switching 1 rate in the interstate access tariffs is not because of separations changes which result from toll weighting factors."[27] According to GTE South, jurisdictional separations procedures allocate central office switching costs in total rather than by rate element. Rate elements are then "algorithmically" derived and discounts that are applied are arbitrary rather than cost-based. Therefore, according to GTE South, the FCC's decision to equalize local switching 1 and 2 rates was not required by changes in jurisdictional separations procedures. Instead, it was based on reasonableness in rulemaking.

Thirdly, GTE South avows that it is committed to converting its end offices to equal access dialing arrangements, thereby encouraging competition among interexchange carriers. GTE South explains, however, that:

> The conversion to equal access is a costly undertaking, and these added costs directly affect the overall cost of switched access, as reflected in GTE South's traffic sensitive rates. Upon equal access conversion, an interexchange carrier picks Feature Group A or Feature Group B by choice, not because of necessity. It would be irresponsible for a local exchange carrier to incur the cost of providing equal access facilities at the encouragement of the regulatory and interexchange carrier communities and then support a plan which

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26 Id., page 6.

27 Id., pages 2-3.

> allowed certain interexchange carriers to avoid paying for those equal access facilities by choosing services which are charged discounted local switching 1 rates. The Commission should similarly support the elimination of this irrational pricing distinction.[28]

In part, the local switching 1 discount was intended to recognize the inferior nature of Feature Groups A and B access, as compared to Feature Groups C and D access. Technical differences exist in end office connecting arrangements, dialing formats, availability of optional features, and transmission parameters, for example. It was also intended to recognize the lower cost of line side connections as compared to trunk side connections.

In deciding to eliminate the local switching 1 discount, the FCC relied on changes to jurisdictional separations procedures recommended by the Federal/State Joint Board.[29] These changes were based on cost considerations. Specifically, the Joint Board recommended the reclassification of certain central office equipment. It also recommended discontinuation of toll weighting factors applied to central office equipment for jurisdictional separations purposes. The latter recommendation was based on the conclusion that the advent of digital technology equalized the cost of switching local and toll calls, which use line side and trunk side connections, respectively. The FCC adopted the Joint Board recommendations and applied essentially the same logic to

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28 Id., page 5.

29 Common Carrier Docket No. 87-113, Report and Order, 2 FCC Rcd 6447 (1987) and Order on Reconsideration, 4 FCC Rcd 765 (1988), generally.

the local switching 1 and 2 differential. Also, the FCC decided to phase-out rather than flash-cut the differential in order to avoid "rate shock."

The FCC adopted a phase-out schedule with the following local switching 1 transition factors: 1) from April 1, 1989 to June 30, 1990, 87.7 percent of the local switching 2 rate; 2) from July 1, 1990 to June 30, 1991, 92.1 percent of the local switching 2 rate; 3) from July 1, 1991 to June 30, 1992, 96 percent of the local switching 2 rate; and 4) from July 1, 1992 to June 30, 1993, 99.5 percent of the local switching 2 rate.[30]

In Administrative Case No. 323,[31] the Commission approved revised access services tariffs for all local exchange carriers. These tariffs mirrored then current interstate switched and special access rates, and became effective March 3, 1992. In each case, the local switching 1 rate was set at 96 percent of the rate for local switching 2, consistent with the FCC's transition schedule. Moreover, 1992 interstate access services tariff filings will use a transition factor of 99.5 percent and 1993 filings will equalize local switching 1 and 2 rates. Interstate access services tariff filings generally become effective on July 1 of each year.

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30 Id., Order on Reconsideration, paragraph 18.

31 Administrative Case No. 323, An Inquiry Into IntraLATA Toll Competition, An Appropriate Compensation Scheme for Completion of IntraLATA Calls by Interexchange Carriers, and WATS Jurisdictionality. LATA is an acronym for Local Access and Transport Area. WATS is an acronym for Wide Area Telecommunications Service.

Obviously, equalization of local switching 1 and 2 rates has largely been achieved, both at the federal and state level. The current intrastate differential (4 percent) is virtually immaterial, as is the current interstate differential (0.5 percent).

Contrary to LDDS's arguments, the Commission finds no substantial reason to support a rate differential. Interexchange carriers voluntarily choose to use Feature Groups A and B rather than D in equal access end offices. Moreover, most access lines in the Commonwealth are served through end offices that have been converted to equal access. Information filed in this case indicates that the balance will soon be converted to equal access. Continuation of a rate differential would only serve to perpetuate an artificial inducement to choose Feature Groups A and B in equal access end offices. Such a price signal is inappropriate.

Also, the Commission generally accepts jurisdictional separations procedures for rate-making purposes. For example, they have been used to determine jurisdictional rate base in numerous cases. They have also been used to determine intrastate toll and access charges revenue requirements.

The Commission finds that equalization of local switching 1 and 2 rates is reasonable. Therefore, the Commission will allow local exchange carriers to equalize local switching 1 and 2 rates at their discretion, but to be accomplished no later than July 1, 1993, coincident with equalization at the federal level. This effects the intent of the Joint Stipulation without adopting it.

Generally, the revenue effect of equalizing local switching 1 and 2 is immaterial. In most cases, it is less than $10,000. Nonetheless, the Commission finds that equalization should be accomplished on a revenue neutral basis. Therefore, revenue increases resulting from equalization should be offset by reductions to non-traffic sensitive revenue requirements. This approach will neutralize the overall impact on interexchange carriers.

Elimination of the Non-Premium Switched Access Discount

In the past, a 55 percent discount applied to carrier common line charges assessed on switched access minutes of use originating and terminating in non-equal access end offices. A similar discount applied to ULAS[32] charges. The Order initiating this investigation addressed elimination of the discount on both originating and terminating usage. The Joint Stipulation, however, addressed elimination of the discount only on terminating usage, consistent with the then pending Joint Motion[33] in Administrative Case No. 323. The Joint Motion proposed to recover all non-traffic sensitive revenue requirement through charges applicable to terminating usage.

LDDS argues that "elimination of the non-premium discount would unjustifiably and inappropriately result in an access service cost increase to LDDS and any other competitive carrier

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32 Universal Local Access Service.

33 Joint Motion of a Coalition of Local Exchange Companies and Interexchange Carriers.

providing service in areas not served by an equal access end office."[34] According to LDDS, the discount should be retained because elimination of the discount on terminating usage while keeping the discount on originating usage would eliminate most of the total discount, as carrier common line charges are weighted on terminating usage;[35] Feature Groups A and B are inferior to Feature Groups C and D on both originating and terminating usage;[36] and elimination of the discount would be unfair to AT&T's competitors, including LDDS.[37]

Like LDDS, US Sprint is opposed to the elimination of the non-premium access discount.[38] US Sprint's opposition is based on alleged quality of service differences between Feature Groups A and B and Feature Groups C and D.[39] It is also based on the arguments that the discount encourages equal access conversion and promotes competition.[40] Nonetheless, US Sprint proposes a phase-out of the discount on terminating switched access minutes of use.[41] The phase-out would end on July 1, 1993.

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34 Comments of LDDS on the Joint Stipulation, page 16.

35 Id., pages 16-18.

36 Id., pages 18-19.

37 Id., pages 20-22.

38 Comments of US Sprint on the Joint Stipulation, page 2.

39 Id., pages 2-3.

40 Id., page 3.

41 Id., pages 3-4.

AT&T's replies to US Sprint that there are no relevant quality of service differences between Feature Groups A and B and Feature Groups C and D. AT&T cites US Sprint's alleged use of Feature Group B as opposed to Feature Group D terminating switched access service in equal access end offices and asserts that US Sprint's "terminating traffic [Feature Group B] is carried on the same local exchange carrier facilities as terminating premium access [Feature Group D]."[42] According to AT&T, the relevant difference is not quality of service but rather price. Through the use of Feature Group B rather than Feature Group D, US Sprint "receives a price advantage in the form of lower access rates," as a result of the non-premium discount.[43]

Also, AT&T replies that the non-premium discount has not encouraged equal access conversion, as US Sprint argues. Indeed, "the current discounts have made it advantageous for carriers other than AT&T to not request equal access," due to the price advantage the discounts permit.[44] According to AT&T, "by eliminating the 55 percent discount, the Commission will eliminate the current disincentive for interexchange carriers to order equal access."[45]

Similar to AT&T, GTE South argues that LDDS "erroneously suggested that Feature Group A and Feature Group B terminating

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42 Reply Comments of AT&T, page 1.

43 Id., page 2.

44 Id.

45 Id., page 3.

services are inferior to Feature Group C and Feature Group D terminating services."[46] On the contrary, GTE South states that "terminating Feature Group B is technically equivalent to Feature Group C service in non-equal access offices, and is equivalent to Feature Group C and Feature Group D services in equal access offices."[47]

Also, GTE South argues that LDDS erroneously commented that automatic number identification is not available with Feature Group B when, in fact, it is available with Feature Groups B, C, and D in equal access end offices.[48] As well, GTE South argues that LDDS erroneously suggested that, in some situations, Feature Group A is the only access service available to interexchange carriers other than AT&T.[49] In fact, according to GTE South, Feature Groups A and B are always available in non-equal access end offices and Feature Groups A, B, and D are always available in equal access end offices.

Finally, GTE South takes exception with LDDS's claim that elimination of the discount on terminating usage would eliminate most of the total discount. GTE South argues that this concern is irrelevant, stating: "The relevant question is what are the

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46 Reply Comments of GTE South, page 5.

47 Id.

48 Id.

49 Id., pages 6-7.

appropriate rates for terminating non-premium access, not what is the appropriate aggregate non-premium access discount level."[50]

US Sprint filed reply comments, reiterating the points made in its initial comments relative to the criticisms made by AT&T and GTE South.[51]

In Administrative Case No. 323, the Commission adopted a Joint Motion on issues pending in the case, with relatively minor changes. The Joint Motion was sponsored by a coalition of local and interexchange carriers, including AT&T, GTE South, and US Sprint. LDDS was not a signatory. All, however, were parties to the case.

In part, the Joint Motion addressed the recovery of non-traffic sensitive revenue requirement. It specified that non-traffic sensitive revenue requirement be recovered through charges applicable to terminating switched access minutes of use. This mechanism replaced carrier common line charges, which applied to both originating and terminating switched access minutes of use. It also replaced ULAS charges.

The non-equal access discount applied to carrier common line and ULAS charges. The non-traffic sensitive revenue requirement recovery mechanism adopted in the Joint Motion did not include a discount provision and the Commission did not require one. Moreover, since implementation of the Joint Motion, to our

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50 Id., page 7.

51 Reply Comments of US Sprint, filed on May 30, 1991.

knowledge, no local exchange carrier has applied a discount. Also, no interexchange carrier has filed a complaint or petition for reconsideration on the discount issue.

Given these events, this aspect of the Joint Stipulation in this case is moot, as the non-equal access discount has already been discontinued through action in another case.

Time-of-Day Switched Access Rates

AT&T, Cincinnati Bell, Contel, GTE South, the Independent Telephone Group, South Central Bell, and US Sprint filed comments on time-of-day switched access rates. All oppose adoption of such a rate structure.

AT&T argues that three factors should be considered relative to time-of-day switched access rates: 1) whether the cost structure justifies time-of-day discounts; 2) whether the public interest is served by time-of-day discounts; and 3) whether the benefits of time-of-day discounts outweigh the cost of implementation.[52] According to AT&T, examination of these points does not favor adoption of time-of-day switched access rates.

On the point of cost structure, AT&T avows that it supports cost-based rates, stating: "cost-based pricing is the fundamental method of ensuring proper network utilization."[53] Therefore, access cost characteristics should determine the appropriateness of time-of-day rates. Given this premise, time-of-day rates

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52 Reply Comments of AT&T, page 4.

53 Id., page 5.

should not be adopted because "the vast preponderance of the cost associated with the provision of access is not time-of-day or peak usage sensitive."[54] Also, AT&T argues, "even if time-of-day rates were applied to those few elements that are time-of-day or peak usage sensitive, it most probably would not be reflected in a change in the toll rates of interexchange carriers and, therefore, would not produce the desired change in traffic patterns."[55]

Generally, switched access is divided between non-traffic sensitive and traffic sensitive rate elements. In part, non-traffic sensitive rates are designed to recover local loop costs. According to AT&T, "the cost to the local exchange carrier for loop plant is not usage sensitive let alone time-of-day sensitive."[56] As a result, there is no economic support for recovering non-traffic sensitive costs based on time-of-day rates.

Traffic sensitive rates are designed to recover switching and transport costs. AT&T concedes that since end office switches are engineered based on peak demand expectations, time-of-day rates might appear a reasonable way to recover switching costs. AT&T, however, goes on to argue that access constitutes a small portion of the total minutes of use processed through an end office switch and, as a consequence, is insignificant:

> The determination of local switching capacity is based on the total usage of the switch. While the traffic patterns of each central office are unique, as a

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54 Id.

55 Id.

56 Id., page 6.

> general rule, intrastate interLATA access constitutes approximately only 5 percent of that usage. Local usage generally constitutes approximately 80 percent of the minutes of use. Interstate toll is approximately 10 percent and the remaining 10 percent divided between intrastate interLATA toll and intrastate intraLATA toll. In order to have a meaningful impact on network utilization of the local switch, time-of-day pricing would have to be applied to the majority of minutes of use, i.e., local service. Fine tuning on only 5 percent of the minutes on the switch will not improve network utilization.[57]

Furthermore, since the preponderance of minutes of use processed through an end office switch is local in nature, the peak period is mainly determined by local rather than interexchange usage. AT&T states that the peak period for some end offices might be evening hours and concludes that:

> Therefore, cost-based pricing would dictate lower day period access charges and higher evening access charges for those central offices. Interexchange carriers are unlikely to revise the toll discount periods to reflect evening peaks. Consequently, the local exchange company would not experience any reduction in peak period usage.[58]

In addition to end office switching, local transport is classified as traffic sensitive and current access charges recover transport costs through usage sensitive rates. AT&T notes, however, that this rate structure is under review at the federal level and the result may be a revised rate structure that recovers transport costs through both usage and non-usage sensitive rates. In any event, AT&T argues that "it is doubtful that time-of-day

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57 Id., pages 6-7.

58 Id., page 7.

access charge pricing for this rate element will result in any significant change of toll prices that will impact the network utilization of local exchange companies."[59]

AT&T also argues that time-of-day switched access rates are not in the public interest.[60] According to AT&T, time-of-day switched access rates would be difficult to reflect in toll rate schedules and present customers with a logical rate structure for both interstate and intrastate usage, thereby creating customer confusion; might create incentives for business customers to bypass local exchange carriers, as a result of artificially increasing day rates and decreasing night rates; and would likely create disincentives for residential users during the day rate period, perhaps negating any social welfare gains from stimulated evening and night calling.

Lastly, AT&T argues that implementation of time-of-day switched access rates would impose costs associated with both local and interexchange carrier billing systems that outweigh any benefits that might accrue to consumers.[61]

Cincinnati Bell "is unable to determine any benefits in instituting time-of-day pricing for switched access service," but believes "there would be substantial costs involved in implementing such pricing."[62] To support its position, Cincinnati

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59 Id., page 8.

60 Id., pages 8-10.

61 Id., page 10.

62 Comments of Cincinnati Bell, filed on May 15, 1991, page 1.

Bell contends that, since end-users do not purchase switched access services and jurisdictional access minutes of use are less than 1 percent of total minutes of use, time-of-day rates will not encourage efficient network utilization through reducing demand peaks or stimulating usage during off-peak periods.[63] Also, time-of-day switched access rates might impede the ability of interexchange carriers to design toll rate schedules, will be less relevant as flat rated local transport is implemented, will impose additional billing and reporting systems costs, will encourage bypass of the switched network, and are not appropriate to non-traffic sensitive cost recovery.[64]

Contel points out that time-of-day switched access rates are theoretically and conceptually sound:

> Contel agrees that, theoretically and conceptually, time-of-day pricing, which is an extension of peak load pricing, can provide economic benefits if properly applied under appropriate circumstances. Peak load and/or time-of-day pricing provides a structure intended to more closely align cost with price. This, in turn, should result in a greater utilization of existing capacity by shifting volumes from peak to off-peak time periods. If this shifting of volumes occurs, time-of-day pricing can be effective in forestalling the need for future additional capacity to meet customer demand and thus the Company and consumers can all benefit.[65]

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63 Id., pages 1 and 2-3.

64 Id., pages 2-5.

65 Comments of Contel on Time-of-Day Switched Access Services, filed on May 16, 1991, page 1.

This citation notwithstanding, Contel notes several problems with implementing time-of-day switched access rates.[66] Contel argues that to maximize efficiency gains from time-of-day pricing, all switched services should be subject to time-of-day rates. Like others, however, Contel observes that switched access is a small proportion of the universe of minutes of use, thus minimizing efficiency gains from the application of time-of-day rates. Also, like others, Contel observes that it cannot influence peak and off-peak calling by end-users, because it has no control over the rates charged by interexchange carriers. Therefore, no benefits would accrue to Contel's customers and the only result of time-of-day pricing would be a redistribution of its access revenues across rate periods. In addition, Contel observes that each local exchange carrier is likely to have different peak demand periods and time-of-day pricing based on these peak demand periods could lead to toll deaveraging. Moreover, peak demand periods may not correlate to existing toll rate schedules. For example, in Contel's service area, the peak period for interexchange access demand is evening hours, when interexchange carriers offer usage discounts.

GTE South opposes time-of-day switched access rates based on three considerations:

> 1. The Kentucky Commission has not identified any public policy identifying the objectives to be served by the institution of time-of-day switched access prices, or the benefits to be derived from such.

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66 Id., pages 1-4.

2. The history of time-of-day pricing demonstrates that it may not be successful in achieving the objective normally ascribed to it due to the elasticity characteristics of the services which have been time-of-day priced.

3. Time-of-day switched access pricing may work counter-productive to the goals of local exchange carrier efficiency, financial stability, and the promotion/preservation of universal basic exchange service.[67]

In part, GTE South contends that the Commission has stated no goals relative to time-of-day switched access rates against which the parties can frame their comments. Nonetheless, GTE South suggests that time-of-day pricing should advance the economic efficiency and financial viability of the public switched network, consistent with the objective of universal service. GTE South believes these goals are enhanced when pricing mechanisms such as time-of-day rates "serve to (1) stimulate overall switched access minutes of use thereby maximizing network capacity utilization and, (2) realign the distribution of those minutes of use so that network investment and overall capacity requirements are minimized."[68] According to GTE South, when these conditions are met, "the threat of bypass of the switched network is reduced and optimum contribution from access services to the preservation of affordable basic exchange rates is achieved."[69] This is GTE South's "litmus test."

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67 Comments of GTE South on Adoption of Time-of-Day Switched Access Charges, filed on May 15, 1991, page 1.

68 Id., pages 2-3.

69 Id., page 3.

GTE South notes that network efficiencies result when peak demand is shifted to off-peak periods, minimizing the disparity between them.[70] GTE South states that it does not know whether time-of-day switched access rates will produce network efficiencies, but suggests that experience with time-of-day message toll rates may provide insight on the issue. In GTE South's service area, peak demand generally occurs in evening hours, with some notable exceptions. GTE South concludes from available data that demand for message toll service is inelastic relative to time-of-day and between peak and off-peak demand periods. According to GTE South, therefore, any attempt to levelize demand will only serve to reduce overall demand and revenue streams, and increase the average cost per unit of traffic.

As with others, GTE South argues that time-of-day switched access rates will not affect calling patterns, because the stimulus to which end-users respond is the toll rates offered by interexchange carriers.[71] Toll rate schedules are targeted to segments of the end-user market and recover total costs, including switched access costs. At present, absent regulatory intervention, interexchange carriers are under no obligation to revise rate schedules to reflect time-of-day switched access rates. Moreover, regulatory intervention to establish direct

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70 Id., pages 3-8.

71 Id., pages 8-11.

linkage between switched access rates and toll rates would "interject a level of regulation of local exchange carriers and toll providers which previously has not been present."[72]

According to GTE South, assuming implementation of time-of-day switched access rates, interexchange carriers would have only two options: they could absorb any resulting cost changes or increase peak period toll rates, which would curtail usage and revenues.[73] As an alternative to time-of-day switched access rates, GTE South suggests that network efficiencies can best be achieved by establishing policy objectives and pricing structures that promote growth in switched access usage and, thereby, increased utilization of the public switched network. According to GTE South, this can be accomplished by aligning switched access rates with their true long run incremental cost, which is substantially less than current rate levels.

The Independent Telephone Group raised five areas of concern. Among these are that time-of-day switched access rates will require extensive revisions to access services tariffs and carrier access billing systems. The Independent Telephone Group cites an example of these administrative costs and believes it unlikely that "a time-of-day rate [structure] will increase revenue or generate sufficient savings to offset the start-up and

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72 Id., pages 10-11.

73 Id., pages 11-14.

administrative costs associated with it."[74] In addition, the Independent Telephone Group is concerned that time-of-day rates may result in revenue deficiencies, unless access rates are closely aligned with toll rates, in order to properly compensate for price elasticities; time-of-day rates may cause rather than delay network investment, due to misalignment between access rates and toll rates, which could improperly shift usage between peak and off-peak demand periods; time-of-day rates could lead to deaveraging of toll rates, since peak and off-peak demand periods differ between local exchange carriers; and time-of-day rates could lead to rate arbitrage, where interexchange carriers subscribe to interstate access rather than intrastate access to take advantage of price differences.[75]

South Central Bell is opposed to time-of-day switched access rates, because such rates will not result in efficiency gains since they do not affect end-users, unless interexchange carriers are required to flow-through discounts to toll rates.[76] Moreover, even if interexchange carriers were required to reflect discounts, revenue neurtrality would require that such discounts on evening,

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74 Comments of the Independent Telephone Group on Time-of-Day Switched Access Rates, filed on May 15, 1991, page 3. In the example cited, an Independent Telephone Group member claims that revising its carrier access billing system to accommodate a two rate period time-of-day access price structure would require $18,000. In addition, $4,000 would be required for testing of the revised carrier access billing system.

75 Id., pages 4-8.

76 Comments of South Central Bell, filed on May 15, 1991, pages 1-3.

night and weekend access be offset by increases to daytime rates, which would increase bypass incentives. Also, South Central Bell perceives a conflict between time-of-day switched access rates and the Commission's decision in Administrative Case No. 323 to mirror interstate switched and special access rates, which are not time-of-day sensitive.

US Sprint opposes time-of-day switched access rates for two reasons: "(1) the traditional efficiency and equity rationales for time-of-day pricing are inapplicable to switched access service as there is no indication time-of-day access charges alter the calling patterns of end-users; and (2) time-of-day access charges are potentially anti-competitive in the long distance market."[77] On the first point, US Sprint argues that time-of-day pricing is appropriate only when demand is sensitive to a time-of-day rate structure and when there are inadequate facilities to meet peak demand or there is significant excess capacity in off-peak demand periods.[78] US Sprint cites two studies, one conducted by AT&T on wide area telecommunications service and another by US Sprint on its traffic patterns in several states, which show that time-of-day access pricing does not result in any appreciable shift of usage from peak to off-peak demand periods. Also, US Sprint avows that it is not aware of any capacity constraints on the part of local exchange carriers.

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77 Comments of US Sprint on the Adoption of Time-of-Day Switched Access Services Rates, filed on May 15, 1991, page 2.

78 Id., pages 2-4.

On the second point, US Sprint argues that time-of-day switched access rates will give AT&T an unfair price advantage, due to AT&T's customer mix relative to AT&T's competitors.[79] To prove its point, US Sprint cites information on market shares by market segment and provides illustrative calculations to show the effect of time-of-day rates on the access expenses of AT&T and its competitors resulting from the respective market shares and expected calling patterns.

Clearly, time-of-day switched access rates are consistent with economic theory in the abstract. Given the weight of the comments, however, the Commission will not require time-of-day switched access rates.

Leveling usage across demand periods can result in numerous benefits, including lower total investment in plant facilities and lower rates than would otherwise occur. Also, it would be reasonable to expect interexchange carriers to reflect cost differences between rate periods in their rate schedules. This assumes that sufficient market pressure exists to stimulate such a pricing response. Sufficient market pressure may exist in some market niches--for example, the market for specialized business services. At least in the case of message toll services, however, the evidence suggests that intrastate demand alone for switched access services is insufficient to persuade interexchange carriers to change current pricing strategies. Even current rate schedules appear to be irrational relative to demand functions.

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79 Id., pages 5-7.

Historically, usage discounts for message toll services have been widely available during peak demand periods--for example, during evening hours when residential demand generally peaks. On the other hand, such rate schedules have been rationalized based on practical and public policy concerns, such as rate averaging and rate simplicity. In any event, if time-of-day switched access rates will not persuade interexchange carriers to change pricing strategies, the demand behavior of end-users will not be affected and no social gains will be realized.

From the viewpoint of local exchange carriers, the proportion of total usage represented by switched access services appears to be insufficient to affect central office engineering decisions. Given this situation, cost savings would not result from the implementation of time-of-day switched access rates. Consequently, neither interexchange carriers nor end-users would benefit and, indeed, could be harmed through increased access billing systems costs.

If time-of-day switched access charges are to be effective as price signals to interexchange carriers and, in turn, end-users, it appears that implementation will have to be on a wider scale than one or a few state jurisdictions. This is perhaps unfortunate, as the likelihood of federal action seems remote. In fact, the trend at the federal level appears to be toward access charges that are less usage sensitive--for example, flat rate local transport service. This also mitigates the need for time-of-day switched access rates.

Feature Group B Over D Protocol

LDDS opposed the equalization of local switching 1 and 2 rates. At the same time, however, LDDS proposed a "compromise," moving the Commission to require local exchange carriers to implement Feature Group B over D protocol, also known as Feature Group D originating protocol on Feature Group B, where technically feasible:

> LDDS would support the Joint Stipulation with respect to the phase-out of the local switching 1 / local switching 2 differential if it included a provision that local exchange carriers are required to include in their tariffs the implementation of Feature Group D originating protocol on Feature Group B where technically feasible. This compromise would allow carriers subscribing to Feature Group B to have service more comparable to that on Feature Group D, as a quid pro quo for payment of identical switching rates.[80]

To support its proposition, LDDS cites two basic arguments. First, LDDS notes that carriers such as itself continue to subscribe to Feature Groups A and B in equal access end offices, because their customers are accustomed to associated dialing patterns and services offered over these serving arrangements.[81] For example, LDDS argues that service offerings such as travel card service were specifically designed using Feature Group B and cannot be abandoned based solely on the availability of Feature Group D access service. Even if inclined to reconfigure service offerings, LDDS argues that the transition from a network based on

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80 Comments of LDDS on Feature Group D Originating Protocol on Feature Group B, filed on May 30, 1991, page 3.

81 Id., pages 2-4.

Feature Groups A and B to one based on Feature Group D is expensive and complicated.

Second, LDDS discusses the inferior nature of Feature Group B access service with respect to automatic number identification:

> A significant inferiority of Feature Group B is that it does not have automatic number identification capability. That is, Feature Group B usage provides call records which identify only the originating Feature Group B trunk group, or tandem, and do not identify the originating telephone number. Thus, when fraudulent calls are placed over such Feature Group B facilities, carriers are unable to trace the originating caller; only the local exchange carrier tandem from which the call was placed can be determined. This creates the potential for fraudulent abuses of carriers' networks, which can be competitively devastating.[82]

LDDS represents that Feature Group B over D protocol would allow Feature Group D-type automatic number identification delivery, which would allow carriers such as LDDS to more effectively control fraud. It would also place them on an even competitive basis with AT&T, which generally obtains automatic number identification through its use of Feature Groups C and D access service. Moreover, LDDS contends that Feature Group B over D protocol is technically feasible and, in fact, available from some local exchange carriers; including Ameritech and US West operating companies, and Cincinnati Bell.

South Central Bell filed a response to LDDS, opposing any Feature Group B over D protocol requirement, based primarily on the possible exhaustion of carrier identification codes. According to South Central Bell, "the provision of 950 dialing

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82 Id., page 5.

over Feature Group D facilities would not only speed the exhaust of available carrier identification codes but, more importantly, the provision of such a service would frustrate current plans to make additional carrier identification codes available."[83]

By way of background, dialing arrangements associated with Feature Group B are in the form 950-XXXX or 950-1XXX. Dialing arrangements for Feature Group D are in the form 10XXX. Carrier identification codes are required for network routing and billing purposes for trunk side switched access services, and currently consist of three digits. A carrier's identification code (e.g., 222) is used with both Feature Group B (950-0222 or 950-1222) and Feature Group D (10222).

According to South Central Bell, a shortage of carrier identification codes is imminent. Exhaustion may occur late this year. South Central Bell states that "without a means of making additional carrier identification codes available, no new customers will be able to order trunk side switched access service at that time."[84]

The problem is being addressed at the national level.[85] South Central Bell represents that the planned solution provides for a two-phase expansion of carrier identification codes. Phase one is scheduled for late 1992. It will disassociate Feature

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83 Response of South Central Bell, filed on June 18, 1991, page 3.

84 Id.

85 Id., pages 3-4.

Groups B and D by converting Feature Group B to a four digit access code, leaving Feature Group D with a three digit access code. This will expand the availability of carrier identification codes for both Feature Groups B and D. Phase two expansion will convert Feature Group D to a four digit access code, which is scheduled for early 1997.

According to South Central Bell, Feature Group B dialing over Feature Group D facilities could be provided:

> However, the technical capability which would allow this service cannot coexist with phase one of carrier identification code expansion. This is because the technology that allows this capability involves converting a 950-0XXX call into a 10XXX call in the tandem switch. Since Feature Group B will be identified with a four digit carrier identification code in phase one and Feature Group D will be identified with a different three digit carrier identification code, it will not be possible to make this conversion.[86]

As a result, South Central Bell contends that any local exchange carrier offering Feature Group B over D protocol will have to discontinue it or deny service to new customers.[87] Denial of service is not reasonable and withdrawal would impose network reconfiguration costs on all players. Moreover, South Central Bell contends that, if required, Feature Group B over D protocol would only be available for a short time before it would have to be withdrawn to accommodate carrier identification code expansion. South Central Bell is also concerned that tariff filings and

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86 Id., page 4.

87 Id., pages 4-6.

subsequent withdrawals might be required in other jurisdictions to accommodate Feature Group B over D in this jurisdiction.

On the matter of automatic number identification, South Central Bell states, without further elaboration, that "any customer needing 950 dialing with automatic number identification can get that service by ordering Feature Group B direct to an end office," at minimal additional cost.[88]

The Commission will not require Feature Group B over D protocol. It serves no useful purpose to blur distinctions between Feature Groups B and D. Likewise, it serves no useful purpose to encourage the continued use of Feature Group B when Feature Group D may be the better economic choice. In fact, it would be contrary to our efforts to encourage conversion to Feature Group D where it is available.

Essentially, LDDS seeks a ruling that would make automatic number identification on Feature Group B equivalent to automatic number identification on Feature Group D, presumably at Feature Group B prices. At present, automatic number identification is available to users of Feature Group B as an optional service. In order to function, however, access facilities must be terminated at end offices, where automatic number identification switching protocols reside. In other words, automatic number identification will not function at an access tandem level on Feature Group B. Thus, LDDS can obtain automatic number identification on Feature

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88 Id., page 7, emphasis omitted.

Group B without Feature Group B over D protocol, subject to existing network constraints. LDDS can also obtain automatic number identification by converting to Feature D, where automatic number identification is inherent.

Fraud prevention is a concern to all common carriers. No doubt, automatic number identification would assist LDDS in controlling fraud. Personal identification codes issued to customers by carriers such as LDDS serve a similar function. In both cases, presumably, the calling party is identified. LDDS and other carriers must evaluate the advantages and disadvantages of automatic number identification versus personal identification numbers relative to the costs of Feature Groups B and D, and make the choices that best suit their economic interests.

The Commission is generally aware of the possible exhaustion of carrier identification codes and national plans to expand the universe of available codes. The specific details and timing are unclear to the Commission, except as represented by South Central Bell. Given the circumstances, however, it does not appear reasonable to require Feature Group B over D protocol when it might be incompatible with network serving arrangements and cause unnecessary service disruptions due to carrier identification code exhaustion and incompatible tariff structures across regulatory jurisdictions.

ORDERS

The Commission, being otherwise sufficiently advised, HEREBY ORDERS that:

1. LDDS's motion for a public hearing is denied.

2. The Joint Stipulation is denied.

3. Local exchange carriers shall file tariffs that equalize local switching 1 and 2 rates no later than July 1, 1993.

4. Revenue increases resulting from the equalization of local switching 1 and 2 rates shall be offset by reductions to non-traffic sensitive revenue requirements.

5. Elimination of the non-premium switched access services discount is moot due to action in another case.

6. Time-of-day switched access rates shall not be adopted.

7. Feature Group B over D protocol or Feature Group D originating protocol on Feature Group B shall not be required.

Done at Frankfort, Kentucky, this 2nd day of September, 1992.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director