

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on July 14, 1999

COMMISSIONERS PRESENT:

Maureen O. Helmer, Chairman
Thomas J. Dunleavy
James D. Bennett
Leonard A. Weiss
Neal N. Galvin

- CASE 95-C-0657 - Joint Complaint of AT&T Communications of New York, Inc., MCI Telecommunications Corporation, WorldCom, Inc. d/b/a LDDS WorldCom and the Empire Association of Long Distance Telephone Companies, Inc. Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service by New York Telephone Company and Sections of New York Telephone's Tariff No. 900.
- CASE 94-C-0095 - Proceeding to Examine Issues Related to the Continuing Provision of Universal Service and to Develop a Regulatory Framework for the Transition to Competition in the Local Exchange Market.
- CASE 91-C-1174 - Proceeding Regarding Comparably Efficient Interconnection Arrangements for Residential and Business Links.

ORDER DIRECTING RATE REDUCTIONS

(Issued and Effective October 21, 1999)

BY THE COMMISSION:

In two separate instances in the Unbundled Network Elements (UNE) Proceeding, we authorized New York Telephone Company (Bell Atlantic-New York or BA-NY) to price a network element at a level higher than the price that would be associated with the use of potentially available new technology, but to reduce the price at the end of one year unless it could show that such a reduction would be unreasonable.

In both instances, BA-NY was directed to pursue development of the new technology. In the first instance, in

Phase 2 of the Unbundled Network Elements proceeding, we authorized BA-NY to set the non-recurring charge for central office wiring connections on the premise that the connections would be made manually (commonly referred to as "hot-cuts"), but directed that the rate be reduced, after one year, to the level associated with making the connections in an "electronic" or "automated" manner unless BA-NY could show that rate reduction to be unreasonable.^{1/} Specifically, BA-NY had to make "a persuasive showing ... that it would not be feasible and sensible to develop and deploy equipment enabling electronic link provisioning in an all fiber network"^{2/}

In the second instance, based on a limited rehearing of Phase 1, we authorized the pricing of unbundled loops for basic rate integrated services digital network (ISDN-BRI) on the basis of *universal* digital loop carrier (UDLC) technology instead of *integrated* digital loop carrier (IDLC) technology, but directed that the rate be reduced, after one year, to the level that would be associated with integrated digital loop carrier technology unless BA-NY could show that to be unreasonable.^{3/} Specifically, BA-NY had to "convincingly show that the deployment of the equipment needed to do so is technologically impossible or economically unjustified"^{4/}

BA-NY has submitted reports pertaining to each charge, which were issued for comment. In both instances, BA-NY asserts the contemplated rate reduction would be unreasonable, but it does not suggest the new technology is not feasible.

^{1/} Case 95-C-0657, et al., Opinion No. 97-19 (issued December 22, 1997), mimeo p. 75.

^{2/} Id. at 59.

^{3/} Case 95-C-0657, et al., Order Granting in Part Petition for Rehearing (issued January 28, 1998), p. 6.

^{4/} Id.

We have reviewed both reports and the comments of other parties. In both instances, the use of a newly available technological construct, designated GR-303, will allow the lower-priced configuration contemplated by our order. Since this new technology is in fact available and performs the functions envisioned, we will reduce the rates for central office wiring and ISDN-BRI loops from their present level. In addition, in the now-pending Second Network Elements Proceeding, where a comprehensive review of all element rates will be considered, we will direct that GR-303 technology should be assumed wherever pertinent in the design of that network; however, BA-NY will be permitted, in every instance, to show the contrary.

CENTRAL OFFICE WIRING CHARGES

Background

In the Phase 2 Order, we decided, inter alia, the non-recurring charges for various elements and the miscellaneous charges that BA-NY proposed to recover from carriers purchasing wholesale services or network elements. Among the specific non-recurring charges presented for the Commission's determination were BA-NY's Central Office Wiring Charges. These non-recurring charges are intended to reflect the costs incurred by the company to connect its subscriber link to the competitor's collocated facilities (commonly referred to as a "cross-connection"). Since the earliest days of telephone, cross-connections have been made manually using copper jumper wires. At issue in Phase 2 was whether non-recurring central office wiring charges should be based on the costs of providing electronic cross-connections, i.e., connecting a link to the competitor's collocated facilities by a keystroke, rather than manually placing jumper wires on the main distribution frame.

In the Phase 2 Recommended Decision, the Administrative Law Judge decided that it was reasonable to assume central office

cross-connections could be made electronically given the forward-looking network construct.^{1/} However, after review of the filings on exception, we found that the equipment needed to perform electronic cross-connections would not be deployed soon enough to be considered currently available technology and therefore should not be used as part of the TELRIC^{2/} model. As a result, we found that, since all cross-connections had to be performed on a manual, line-by-line basis, the central office work times proposed in the Recommended Decision would be adjusted upward to reflect the additional time necessary to perform the physical cross-connections. The Order, however, directed the company "to pursue with its vendors, through steps including issuance of a formal request for proposals, the development of the needed electronic equipment."^{3/} The company was ordered to submit a report on those efforts by November 22, 1998 and by December 22, 1998, BA-NY was to "submit tariff amendments reducing its central office wiring charge to the level contemplated by the Recommended Decision or show cause why it would be unreasonable to require it to do so."^{4/}

On November 23, 1998, BA-NY submitted its response claiming that it would be unreasonable to reduce the non-recurring central office wiring charge. By notice dated January 5, 1999, we invited interested parties to submit comments by January 19, 1999.^{5/} AT&T Communications of New York and MCI

^{1/} R.D., p. 69.

^{2/} The FCC determined that the pricing provisions of the Act contained in Section 252(d)(1) should be implemented by setting prices of each element on the basis of the "total element long-run incremental cost," or TELRIC, along with a reasonable allocation of forward looking costs.

^{3/} Case 95-C-0657, supra, Opinion 97-19, mimeo p. 59.

^{4/} Id. at p. 75.

^{5/} At the request of the parties, the date for filing comments

WorldCom submitted responses.

Position of Parties

In its report, BA-NY indicates that it is technically feasible to provide electronic cross-connections. However, BA-NY states that even in a future looking network, manual cross-connections are necessary for providing unbundled loops in an efficient manner.^{1/} BA-NY further posits that electronic cross-connections entail costs that BA-NY did not take into account in its original cost studies.^{2/} Therefore, BA-NY recommends that the rate for central office cross connections remain at the current level.

BA-NY states "that CLECs would want and need analog interfaces to unbundled links even in a network fully embodying the forward-looking architecture."^{3/} To utilize integrated digital loop carrier technology, according to BA-NY, a CLEC would have to interconnect at a DS1 level^{4/} with each central office terminal (COT) serving an unbundled loop. Since there could be as many as twenty central office terminals in a single central office, BA-NY indicates it may be more cost effective to purchase individual analog loops, depending on how many unbundled loops are being served from a central office terminal.^{5/} In addition, BA-NY indicates that provision of non-switched services would require separate interconnections between the CLEC and central

was extended until January 26.

^{1/} BA-NY at 13.

^{2/} BA-NY at 14.

^{3/} BA-NY at 7.

^{4/} A DS1 is a digital signal equivalent to 24 voice grade signals.

^{5/} BA-NY at 7-8.

office terminal, making the analog method even more cost effective.^{1/} BA-NY also states that the ordering and interconnection process becomes more complex when digital interfaces are used.^{2/} However, in its report, BA-NY stated that "a conceivable alternative to individual connections between CLEC point of termination (POT) bays and each COT in a central office would be to establish a centralized electronic cross connect device, e.g. DCS, connected to the digital ports on the BA-NY local switch, to all digital loop carrier systems in the office, and to all CLEC POT bays."^{3/} BA-NY also investigated the use of an automated system, such as a Arobot@, to perform electronic cross-connections in a universal digital loop carrier network. It stated that Arobots@ have been currently developed to perform cross-connection on small scale applications, however, such a device would not be physically or economically practical in a central office, main distribution frame application.^{4/}

In its response to BA-NY's report, AT&T states we should immediately reduce the Phase 2 central office wiring charge since BA-NY's report "demonstrates that the technology required for provisioning of unbundled loops is in fact currently available."^{5/} AT&T argues that BA-NY's report does not demonstrate "that the technology required for electronic loop provisioning is a new development, which did not exist when the Commission issued its Phase 2 determination ..."^{6/} In addition,

^{1/} BA-NY at 8.

^{2/} BA-NY at 12.

^{3/} BA-NY at 13.

^{4/} BA-NY at 9.

^{5/} AT&T at 2.

^{6/} AT&T at 2-3.

AT&T rejects as "irrelevant and absurd" BA-NY's claim that actual electronic provisioning would result in additional costs for CLECs. ^{1/}

MCI WorldCom comments that the rates should be reduced since BA-NY "actually demonstrates that electronic cross connects are technically feasible [emphasis omitted]." ^{2/} MCI WorldCom argues that the CLEC ought to make the determination, not BA-NY, whether electronic cross connects are cost effective for CLECs. ^{3/}

MCI WorldCom rejects BA-NY's claim that CLECs must collocate in order to access unbundled loops on the basis that "collocation is expensive, time-consuming and often unavailable. In addition, collocation, as a means of getting access to unbundled loops, is discriminatory and not technically necessary." ^{4/} MCI WorldCom also rejects BA-NY's premise that a customer would need to be moved off of an integrated digital loop carrier system in order to access individual loops. MCI believes that the resulting decline in service quality and inability to offer higher bandwidth services would result in a competitive disadvantage for MCI. ^{5/} MCI WorldCom states that "[t]here is no technical impediment to receiving service from a CLEC and at the same time maintaining end-to-end digital service via DLC equipment." ^{6/}

^{1/} AT&T at 3.

^{2/} MCI at 2.

^{3/} MCI at 5-6.

^{4/} MCI at 8.

^{5/} MCI at 8-9.

^{6/} MCI at 9.

PROVISIONING OF ISDN-BRI

Background

As part of its cost study in Phase I, BA-NY priced ISDN-BRI loops using universal digital loop carrier technology and, in our Phase 1 Opinion, we accepted the construct. MFS Intelenet of New York, Inc. (MFS) sought rehearing, arguing that the costs to provide ISDN-BRI could be reduced if provisioned over simple copper loops. We declined to posit copper loops, believing that would raise costs for element purchasers generally, but decided to address MFS' concerns by pricing ISDN-BRI loops on the basis of integrated digital loop carrier technology, a step that would reduce their costs and that we believed was feasible given available technology. BA-NY, in turn, sought rehearing on the grounds that the integrated digital loop carrier technology necessary to provide ISDN-BRI -- primarily the GR-303 protocol -- was still in the developmental and testing stage and not yet deployable. The protocol is an important part of the network design because it allows the equipment in a digital loop carrier system to "talk" with each other.

We agreed that it was too soon to set rates for ISDN-BRI loops on the basis of integrated digital loop carrier technology, but, as in the case of electronic cross-connections, ordered BA-NY to pursue the development of the equipment needed to do so and submit a report by December 29, 1998. We also ordered BA-NY to file tariff pages by January 29, 1999 reducing the rate for ISDN-BRI to a level based on integrated digital loop carrier technology or show why it would be unreasonable to require it to do so.^{1/}

On December 29, 1998, BA-NY filed its report on the feasibility of providing ISDN-BRI loops using an integrated digital loop carrier network design. Comments on BA-NY's report

^{1/} Order Granting in Part Petition for Rehearing (issued January 29, 1998), p. 6.

were received from AT&T and MCI WorldCom on March 15, 1999 and March 25, 1999, respectively.

Position of Parties

Similar to the cross-connection discussion, BA-NY indicates that it is technically feasible to provide ISDN-BRI over an integrated loop digital carrier network. However, BA-NY raises several issues resulting from the technology used that BA-NY indicates should be addressed by the industry prior to implementation in a competitive environment. As a result, BA-NY proposes that the means of provisioning ISDN-BRI and its associated rates remain unchanged.

BA-NY states ISDN-BRI should be provisioned through universal, rather than integrated digital loop carrier network configuration interfaces. While GR-303 "can deliver ISDN-BRI over integrated interfaces," ^{1/} BA-NY argues that it is not suitable for use in a multicarrier environment because of unresolved issues relating to security, service quality, and standards for operation, administration and maintenance. ^{2/} Therefore, BA-NY states that there is no basis at this time for reducing the ISDN-BRI rate that assumes integrated as opposed to universal digital loop carrier technology.

According to BA-NY, GR-303 is a "valuable network resource" ^{3/} because it permits concentration of more than 24 voice grade loops unto a DS1 bandwidth signal by recognizing the "statistical fact that most loops are not being used at any one given time." ^{4/} GR-303, according to BA-NY, "can also eliminate

^{1/} BA-NY at 2.

^{2/} Id.

^{3/} BA-NY at 6.

^{4/} Id.

the need for inefficient 'universal' connections in the provisioning of ISDN-BRI service on a network utilizing digital loop carrier (DLC) technology." ^{1/} BA-NY states that it plans to deploy GR-303 "only in areas identified for the installation of new DLC systems" and it does not expect to upgrade current interfaces with GR-303 technology. ^{2/}

AT&T argues that "the Commission should order BA-NY to reduce its ISDN loop rates based on the current availability of GR-303 based IDLC technology, which is acknowledged in BA-NY's December 29, 1998 submission." ^{3/} AT&T states that BA-NY has not sustained its burden of proof to supports its claim that GR-303 is not currently available technology. It regards as specious BA-NY's present reliance on Phase 1 testimony and its suggestion that "nothing of technological relevance" has occurred since that date. In addition, AT&T states that BA-NY has not shown that vendors concur with the issues BA-NY raised as problem areas. ^{4/}

MCI WorldCom states that BA-NY has "failed to convincingly demonstrate to the Commission that it is not technically feasible (or economically unjustified) for premium loops to be provisioned through integrated interfaces rather than universal interfaces." ^{5/} MCI argues that "none of the problems raised by BA-NY refute the technical feasibility of using GR-303 to provision premium loops in a multicarrier environment." ^{6/} It also acknowledges that certain modifications will be required to accommodate a multicarrier environment. However, MCI WorldCom

^{1/} BA-NY at 6-7.

^{2/} Id.

^{3/} AT&T at 1.

^{4/} AT&T at 4.

^{5/} MCI at 2.

^{6/} MCI at 4-5.

argues that the issues BA-NY raised with GR-303 are not "insurmountable" ^{1/} and, therefore, we should order BA-NY "to immediately reduce its ISDN loop rates to a level calculated on the basis of IDLC connections." ^{2/}

DISCUSSION

When the rates at issue here were set, GR-303 technology was in its development and trial stage, and its availability for deployment was too remote for it to be reasonably taken into account, even in a forward-looking TELRIC study. Since then, several major manufacturers have begun marketing the equipment and technology and it is now readily available for deployment. It therefore appears that subscriber loops can be most efficiently provided via integrated digital loop carrier technology using the GR-303 protocol, and that the employment of that technology will allow for electronic cross-connections and for the provisioning of ISDN-BRI. Moreover, in combination with a fiber-based integrated digital loop carrier network, this would all but eliminate the need for a copper main distribution frame at the central office -- a potential significant savings in investment and expense.

These changes are precisely the ones we regarded, in the earlier orders, as warranting reductions in these rates. In contrast to the situation then, a TELRIC analysis today would take account of GR-303 technology and the associated availability of electronic cross-connections and of ISDN-BRI. Deployment of each is technologically practicable. We conclude, therefore, that BA-NY does not "convincingly show that the deployment of the equipment needed to do so is technologically impossible or

^{1/} Id.

^{2/} MCI at 7.

economically unjustified" ^{1/} in order to maintain the present prices of ISDN loops, nor does BA-NY make "a persuasive showing ... that it would not be feasible and sensible to develop and deploy equipment enabling electronic link provisioning in an all fiber network" ^{2/} in order to preclude the reduction of the central office wiring time to five minutes. Accordingly, the rates for these two items should be reduced in the manner contemplated in our earlier orders.

The effects of GR-303 technology, of course, go far beyond the items at issue here, extending to fundamental matters of network design and associated costs. Those implications should be fully explored in the Second Network Elements proceeding, and the network design contemplated there should incorporate GR-303 technology.

CONCLUSION

We will direct that Bell Atlantic reduce the rates for central office wiring and ISDN-BRI loops from their present level to those identified in our prior rulings. In addition, we will direct that GR-303 technology be considered in the design of the network construct in the Second Network Elements Proceeding.

^{1/} Case 95-C-0657, supra, Order Granting in Part Petition for Rehearing, p. 6.

^{2/} Case 95-C-0657, supra, Opinion 97-19, mimeo p. 59.

The Commission orders:

1. Within 20 days of the date of this Order, New York Telephone Company, d/b/a Bell Atlantic-New York (Bell Atlantic), shall file tariff amendments consistent with this Order. Upon filing those tariff amendments, Bell Atlantic shall serve copies on all active parties to these proceedings. Any party wishing to comment on the tariff amendments may do so by submitting 10 copies of its comments to the Acting Secretary within 15 days of the date the amendments are filed. The tariff amendments shall not take effect on a permanent basis until approved by the Commission but may be put into effect on a temporary basis on one day's notice, subject to refund if found not to be in compliance with this Order. For good cause shown, newspaper publication of the tariff amendments is waived.

2. These proceedings are continued.

By the Commission,

(SIGNED)

DEBRA RENNER
Acting Secretary