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**DIRECT TESTIMONY OF JOHN P. LUBE
ON BEHALF OF AMERITECH ILLINOIS**

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John P. Lube, and my business address is Three Bell Plaza, Dallas, Texas
75202.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by SBC Operations, Inc., a subsidiary of SBC Communications Inc.
("SBC"). My position is General Manager-Network Regulatory for SBC's incumbent
local exchange carriers ("ILECs").

Q. WHAT ARE YOUR RESPONSIBILITIES?

A. My current responsibilities include representing the planning, engineering, and operations
of SBC's Incumbent Local Exchange Carrier ("ILEC") networks, including that of
Ameritech Illinois, before federal and state regulatory bodies. In particular, my current
responsibilities include such representation for Project Pronto.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I have a Bachelor of Science - Electrical Engineering degree from the University of
Houston in Houston, Texas. Also, I have completed company training and external
training related to network planning and engineering, network technology, accounting,

1 and telecommunications policy and regulation. In addition, I am a Registered
2 Professional Engineer in the State of Texas.

3

4 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

5 A. From 1969 through 1997, I held numerous positions with Southwestern Bell Telephone
6 Company (“SWBT”) responsible for network planning, switching and transmission
7 equipment engineering, transmission facility design, trunk and special services circuit
8 design, plant cost allocation, plant valuation, plant depreciation, and the standardization
9 of all outside plant and transmission equipment. In 1997, I held a position with SBC
10 Long Distance and was responsible for all regulatory matters in SWBT territory. I
11 assumed my present title and duties in June 1999.

12

13 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE REGULATORY**
14 **COMMISSIONS?**

15

16 A. Yes, I have previously filed testimony and/or appeared before the state utility
17 commissions in Arkansas, California, Kansas, Illinois, Michigan, Missouri, Oklahoma,
18 and Texas, as well as the Federal Communications Commission (“FCC”).

19

20 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

21 A. The purpose of my testimony is to address the impact of Project Pronto on line sharing
22 in Illinois.

23

1 **II. BRIEF OVERVIEW**

2 **Q. CAN YOU PROVIDE A SUMMARY OF YOUR TESTIMONY?**

3 A. Yes. My testimony demonstrates that Project Pronto does not adversely affect
4 traditional required line sharing. In fact, my testimony shows how Project Pronto
5 provides CLECs with yet another option for achieving the same result as line sharing.

6

7 **III. PROJECT PRONTO**

8 **Q. WHAT IS PROJECT PRONTO**

9 A. Project Pronto is a multi-billion dollar investment by SBC in its 13-state ILEC territory
10 to provide a broadband capable network in the loop plant. This new network
11 architecture will allow Ameritech Illinois' network to support new broadband services
12 that, in turn, will allow CLECs to offer DSL services to more consumers and businesses
13 than can be reached directly from central office ("CO") Digital Subscriber Line Access
14 Multiplexers ("DSLAMs") over all-copper loops today.

15

16 **Q. PLEASE DESCRIBE THE PROJECT PRONTO ARCHITECTURE.**

17

18 A. The Project Pronto architecture consists of several inter-related components. These
19 are, beginning at the end user's premises, (a) the copper distribution pair between the
20 end user's premise and the Serving Area Interface (SAI); (b) the copper feeder pair
21 between the SAI and the remote terminal ("RT"); (c) a Next Generation Digital Loop
22 Carrier ("NGDLC") RT; (d) fiber between the RT site and the CO; and (e) the optical

1 concentration device ("OCD") in the CO. The components listed above are used for
2 the provision of DSL service over the Project Pronto architecture. An NGDLC central
3 office terminal ("COT") is also used for the provision of "Plain Old Telephone Service"
4 ("POTS") over this architecture.

5
6 The various components comprising this architecture all work in conjunction with one
7 another to provide an end to end broadband service capable of supporting DSL.

8

9 **Q. CAN THIS ARCHITECTURE BE PROVIDED TO CLECS ON A PIECE-**
10 **PART BASIS?**

11

12 A. No. From a technical perspective, this architecture cannot be broken up into stand-
13 alone pieces. For example, to provide DSL service to a single end user, this
14 architecture uses one copper pair from the premises to the NGDLC RT; one port on a
15 multi-port line card in the NGDLC RT; and a permanent virtual circuit established within
16 the NGDLC RT, the OC-3c signal riding over the fiber between the NGDLC RT and
17 the OCD, and the OCD. Thus, Ameritech Illinois is offering a "service" rather than
18 individual components for serving individual DSL end users.

19

20 **Q. WHAT IS THE PURPOSE OF THE OCD?**

21 A. The OCD is a CO device that routes data-signals. The inbound ports on the OCD
22 receive the OC-3c optical signals from each of the numerous RT sites served out of that
23 CO. Each of these OC-3c optical signals contains the data signals from numerous end

1 users, each of which is served by the CLEC of its choice. The OCD routes each end
2 user's data signal to the appropriate outbound port on the OCD for delivery to that end
3 user's CLEC's data network.
4

5 **IV. PROJECT PRONTO AND LINE SHARING**

6 **Q. DOES PROJECT PRONTO ADVERSELY AFFECT LINE SHARING?**

7

8 A. No, Project Pronto does not adversely affect Line Sharing.

9

10 **Q. WHY DOESN'T PROJECT PRONTO ADVERSELY AFFECT LINE**
11 **SHARING?**

12

13 A. First, because Project Pronto is an overlay network, it does not alter Ameritech Illinois'
14 existing network or the traditional methods of line sharing in that existing network.

15 Second, one of the broadband service arrangements that will be offered via the Project
16 Pronto architecture provides the same result as line sharing. In other words, the CLECs
17 essentially will gain, with Project Pronto, an additional means of providing DSL to an
18 end user who currently obtains POTS from Ameritech Illinois. Clearly, this additional
19 option for CLECs does not adversely affect the CLECs' ability to line share.

20

21 **Q. IS THIS "LINE-SHARED" BROADBAND SERVICE ARRANGEMENT**
22 **JUST ANOTHER FORM OF THE TRADITIONAL, REQUIRED LINE**
23 **SHARING?**

24

1 A. No. Although the “line-shared” broadband service arrangement achieves the same
2 result as line sharing over the copper subloop serving the end user, the rest of this end-
3 to-end broadband service arrangement is not line-shared.

4 **Q. CAN YOU EXPLAIN IN MORE DETAIL HOW THE “LINE-SHARED”**
5 **BROADBAND SERVICE ARRANGEMENT WORK?**

6
7 A. Yes. The NGDLC deployed with the Project Pronto architecture supports both voice
8 and data. The incoming voice and data signals from the end user will be carried over
9 the copper portion of the broadband service arrangement, through the NGDLC RT, to
10 a port on the NGDLC’s ADSL Digital Line Unit (“ADLU”) card. The ADLU card
11 splits the voice and data signals. The data signal will be processed and multiplexed by
12 the ADLU card, and the common DSL hardware and software in the NGDLC; and
13 then will be transmitted from the RT over the data OC-3c fiber to the OCD in the CO
14 to be delivered to the appropriate CLEC. The voice signal (i.e., the POTS) provided
15 by Ameritech Illinois will be routed from the ADLU card to the NGDLC’s common
16 equipment for multiplexing and routing back to Ameritech Illinois’ CO switch via a
17 separate voice OC-3 fiber. The net results are that an end user is able to receive both
18 POTS and DSL service over the same copper distribution pair, and that a CLEC may
19 provide this DSL service where Ameritech Illinois provides the POTS. Therefore, the
20 “line-shared” broadband service arrangement achieves the same result as traditional,
21 required line sharing.

22 **Q. WHAT FACILITY CHANGES WOULD BE REQUIRED FOR A CLEC TO**
23 **PROVIDE DSL SERVICE TO A CURRENT AMERITECH ILLINOIS POTS**

1 **CUSTOMER IF THE CLEC CHOOSES TO UTILIZE THE PROJECT**
2 **PRONTO BROADBAND SERVICE?**

3
4 A. First, the current distribution pair between the SAI and the end-user's premises would
5 not need to be changed. Second, at the SAI, the current distribution pair would be
6 disconnected from the current feeder facility (between the SAI and the CO) and re-
7 connected to a pair connecting the SAI to the Project Pronto NGDLC RT. Then, as
8 explained above, the existing POTS would be transported to Ameritech Illinois' switch
9 in the CO, and the new DSL service would be transported to the CLEC's collocation
10 space in the CO.

11 **Q. HOW IS THE PROJECT PRONTO LINE-SHARED ARRANGEMENT**
12 **DIFFERENT FROM TRADITIONAL, REQUIRED LINE SHARING**
13 **ARRANGEMENTS?**

14
15 A. Traditional, required line sharing arrangements utilize copper loops (or subloops),
16 splitters, and stand-alone Digital Subscriber Line Access Multiplexers ("DSLAMS").
17 These arrangements are described in more detail in the testimony of Betty Schlackman.
18 As explained above, the "line-shared" broadband service arrangement to be provided
19 via Project Pronto differs from traditional, required line sharing in that the broadband
20 service is an integrated system of components that work in conjunction with each other
21 to provide an end-to-end service. Thus, Ameritech Illinois is offering an end-to-end
22 broadband service over the Project Pronto network to achieve the same result as line
23 sharing with the CLEC.

24
25 **V. OPTIONS AVAILABLE TO CLECS FOR LINE SHARING**

1 **Q. WITH PROJECT PRONTO, WHAT OPTIONS WILL EXIST FOR A CLEC**
2 **TO LINE SHARE?**

3
4 A. First, because Project Pronto is an overlay network, all options for providing DSL
5 service available to the CLEC prior to the deployment of Project Pronto still will be
6 available to the CLEC. Consequently, any line-shared arrangements associated with
7 those previous options likewise still will be available. For example, the CLEC could still
8 line share over an available all-copper loop using a splitter in conjunction with its stand-
9 alone CO DSLAM.

10

11 Second, where physical space and other factors¹ allow, the CLEC could locate its
12 DSLAM and splitter in or near Ameritech Illinois' RT site, and purchase an unbundled
13 subloop to the end user's premises and dark fiber to its data network². The CLEC
14 could then combine these network elements to provide its DSL service. The remainder
15 of this type of line sharing arrangement would consist of a connection between the voice
16 side of the CLEC's splitter and an Ameritech Illinois loop back to the Ameritech Illinois
17 switch for the POTS.

18

¹ Other factors affecting collocation in an Ameritech Illinois' RT site include the heat dissipation capacity, commercial AC power capacity, and back-up battery capacity at the RT site. Other factors affecting a CLEC's ability to locate its equipment near an Ameritech Illinois' RT site is the availability of easement for the CLEC's cabinet, and any relevant zoning restrictions on the placement of that cabinet.

² The CLEC could alternatively use its own fiber or fiber obtained from a third party to reach its data network.

1 Third, as described above, the CLEC could also purchase Ameritech Illinois' "line-
2 shared" broadband service arrangement where the Project Pronto architecture has been
3 deployed.

4

5 **Q. WILL AMERITECH ILLINOIS ALWAYS BE ABLE TO ACCOMMODATE**
6 **THE COLLOCATION OF A CLEC SPLITTER AND DSLAM EQUIPMENT**
7 **AT A PROJECT PRONTO RT SITE IN ORDER TO LINE SHARE VIA**
8 **SUB-LOOP UNBUNDLING?**

9

10 A. Ameritech Illinois will make every reasonable effort to accommodate a CLEC's
11 collocated splitter and DSLAM at a Project Pronto RT site. Collocating this additional
12 equipment requires that physical space and other limitations (described above) are not
13 exceeded. Whether this collocation is possible in a specific RT site will depend on the
14 RT site, the equipment used by the CLEC, and whether available capacities have
15 already been exhausted by other CLECs already collocating at that RT site.

16

17 **Q. WHAT STEPS IS AMERITECH ILLINOIS TAKING TO PROVIDE THIS**
18 **COLLOCATION SPACE FOR CLECS?**

19

20 A. In existing controlled environment vaults ("CEVs") and huts, there may be some
21 available space, but again, this will depend on the specific CEV or hut, as well as the
22 type of equipment used by the CLEC. Where space is available, however, Ameritech
23 Illinois will allow collocation of CLEC equipment in increments as small as a single shelf
24 of equipment.

25

1 New CEVs and huts placed for Project Pronto will be made one size larger to take into
2 consideration the collocation of CLEC equipment. SBC's proposed Voluntary
3 Commitments, filed with the FCC on July 13, 2000, confirm this intent, stating that
4 approximately 20% of the space in all future Project Pronto CEVs and huts can be used
5 to install CLEC equipment in those structures.

6
7 In existing cabinets, there generally is very little space. However, this too will vary
8 cabinet-by-cabinet. Even where such space might exist in these cabinets, this space
9 was originally intended for POTS growth in that particular serving area. To the degree
10 that space is used for CLEC collocation, POTS growth in the future could be
11 compromised. Also, DSL equipment has a much higher power requirement and heat
12 dissipation than POTS equipment. Because these cabinets were designed for POTS,
13 power and heat could be limiting factors. However, where space, power, and heat
14 allow, Ameritech Illinois will allow collocation of CLEC equipment in increments as
15 small as a single shelf of equipment.

16
17 For both the new cabinets placed for Project Pronto and the existing cabinets used for
18 Project Pronto, SBC's proposed Voluntary Commitments offer a process for a CLEC
19 to obtain collocation space. Under this process, and upon a CLEC request, Ameritech
20 Illinois will either deploy a new Project Pronto cabinet with approximately 15% of the
21 space available for CLEC equipment or place in adjacent cabinet structure for CLEC

1 use. For existing cabinets, Ameritech Illinois will, under this process and upon a CLEC
2 request, place an adjacent cabinet structure for CLEC use.

3

4 **Q. WILL AMERITECH ILLINOIS GRANT THE CLECS ACCESS TO ITS**
5 **COLLOCATED DSLAM EQUIPMENT?**

6

7 A. Ameritech Illinois does not and will not own stand-alone DSLAM equipment. This
8 equipment belongs to Ameritech Advanced Data Solutions (“AADS”), in compliance
9 with the FCC merger conditions.

10

11 **Q. WILL AMERITECH ILLINOIS' PROJECT PRONTO NGDLC**
12 **EQUIPMENT CONTAIN DSLAM FUNCTIONALITY?**

13

14 A. Yes, the NGDLC RT hardware and software, including the ADLU card, together
15 perform the function of a DSLAM.

16

17 **Q. WILL AMERITECH ILLINOIS MAKE THIS DSLAM FUNCTIONALITY**
18 **AVAILABLE TO CLECS?**

19

20 A. Yes, via the Project Pronto broadband service offering.

21

22 **Q. WHY IS IT APPROPRIATE FOR SBC TO OWN THE NGDLC**
23 **EQUIPMENT IN THE PROJECT PRONTO RT SITES?**

24

25 A. Ameritech Illinois ownership of the NGDLC equipment in the RT site is the best
26 solution for all CLECs and end users because it provides the most cost efficient and
27 rapid option for the provision of DSL services to the mass market. This arrangement

1 maximizes the shared use (and therefore, overall utilization) of a limited number of line
2 ports and card slots in the NGDLC RT equipment. This arrangement also prevents the
3 CLECs from having to develop administrative processes and support systems to track
4 their own line card usage for service provisioning, repair, and reporting to property
5 taxing jurisdictions. In addition, the Project Pronto NGDLC platform will be used to
6 provide POTS in the geographic area it serves.

7

8 **Q. IS THE FCC CURRENTLY REVIEWING SBC'S PROPOSED OWNERSHIP**
9 **ARRANGEMENT FOR EQUIPMENT ASSOCIATED WITH ITS PROJECT**
10 **PRONTO DEPLOYMENT?**

11
12 A. Yes, the FCC has reviewed the SBC ILECs' ownership of the NGDLC ADLU card
13 and the OCD, and has authorized such ownership pursuant to its 2nd Memorandum
14 Opinion and Order in CC docket no. 98-141, issued September 8, 2000.

15

16 **VI. SUMMARY**

17 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

18 A. As explained above, Project Pronto is an overlay broadband network. While Project
19 Pronto interfaces with the existing loop network, it does not alter the existing loop
20 network. Moreover, it does not alter a CLEC's ability to line share over the existing
21 loop network.

22

1 Instead, Project Pronto will afford CLECs an additional way to achieve the same results
2 as traditional, required line sharing. One of the broadband service arrangements
3 available to CLECs via the Project Pronto architecture provides a line-shared copper
4 subloop plus a data path back to the CLEC's collocation arrangement in the CO. In
5 this service arrangement, the POTS is returned to the Ameritech Illinois switch over a
6 separate path through this network architecture. Clearly, Project Pronto does not
7 impede, but instead supports the CLECs' ability to line share.

8

9 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 **A. Yes.**