

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
2 **DOCKET NO. 950985-TP**
3 **DIRECT TESTIMONY OF**
4 **JOAN McGRATH**
5 **ON BEHALF OF TIME WARNER AXS OF FLORIDA, L.P.**
6 **AND DIGITAL MEDIA PARTNERS**

ORIGINAL
FILE COPY

7
8 **Q: FOR THE RECORD, PLEASE STATE YOUR NAME AND BUSINESS**
9 **ADDRESS.**

10 **A: My name is Joan McGrath, and my business address is**
11 **Time Warner Communications, 160 Inverness Drive**
12 **West, Englewood, Colorado, 80112.**

13

14 **Q: ON WHOSE BEHALF ARE YOU TESTIFYING TODAY?**

15 **A: I am testifying on behalf of Time Warner AxS of**
16 **Florida, L.P. ("Time Warner AxS") and Digital Media**
17 **Partners ("DMP") (collectively "Time Warner").**

18

19 **Q: ARE YOU EMPLOYED BY THOSE COMPANIES?**

20 **A: No. My title is Manager for Interconnect**
21 **Management for Time Warner Communications ("TWC"),**
22 **which owns Time Warner AxS and is an affiliate of**
23 **DMP.**

1 Q: WHAT ARE YOUR DUTIES AT TWC?

2 A: My primary responsibilities are to lead
3 interconnection negotiation teams, to provide
4 support information and research for and to act as
5 a liaison between Time Warner teams and subteams in
6 interconnection negotiations between TWC affiliates
7 and incumbent local exchange companies.

8

9 Q: PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
10 TELECOMMUNICATIONS EXPERIENCE.

11 A: I received a Bachelor of Science degree in Business
12 Administration with emphasis in Marketing from the
13 University of Denver, Denver, Colorado.
14 Additionally, I have taken technical training
15 courses through AT&T on Electronic Switching System
16 Architecture and ISDN Overview. When my work
17 schedule permits, I also attend Master level
18 telecommunications classes at the University of
19 Denver.

20

21 My telecommunications experience includes
22 employment at U S West, an RBOC,
23 Telecommunications, Inc. (TCI), a major cable
24 company, and Teleport Communications Group (TCG),
25 an alternative local exchange company (ALEC).

1 At U S West, my responsibilities included
2 performing statistical and results analyses for the
3 small business and home personal service. At TCI,
4 my responsibilities included managing market
5 research projects for new alternative access vendor
6 (AAV) markets. At TCG my responsibilities included
7 managing the interexchange company (IXC)
8 interconnection negotiations and the RBOC
9 collocations. My resume is attached as Exhibit JM-
10 1.

11

12 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?** -

13 **A:** Pursuant to Section 364.162, Florida Statutes, Time
14 Warner AxS and DMP have petitioned the Florida
15 Public Service Commission (FPSC or Commission) to
16 establish nondiscriminatory rates, terms, and
17 conditions for local interconnection with Sprint
18 United Telephone Company of Florida (Sprint
19 United). My testimony is filed in support of those
20 petitions.

21

22 To allow Time Warner to efficiently use its network
23 to offer innovative consumer products, the
24 Commission should require the following:

- 1 • a rate structure for mutual interconnection
2 that enables Time Warner to develop an
3 efficient network, which would include bill
4 and keep for local interconnection, and
5 imputation of appropriate interconnection
6 costs; tariffing of interconnection rates;
7 recognition of the impact of collocation
8 costs; and options for Time Warner's
9 interconnection points with Sprint United
10 (discussed by Time Warner witness Don Wood.)
11 • efficient and cooperative network coordination
12 between Sprint United and Time Warner, which
13 would include mutual network management and
14 design (discussed by Time Warner witness Dan
15 Engleman).
16 • equal priority notification on outages;
17 cooperative 911 network arrangements and
18 database access; access of Time Warner to
19 adequate numbering resources; compensation for
20 terminating access charges to ported numbers.
21 • access to and use of existing operator and
22 directory functions, which would include
23 access to operator services; input of
24 directory assistance and directory listings
25 provided at no charge; options for the

1 provision of directory assistance; free white
2 page/yellow page listings for Time Warner
3 customers; an information page in the
4 directory for Time Warner; directories
5 provided and distributed free of charge to
6 Time Warner customers.

7

8 **Q: ARE TIME WARNER AXS AND DMP CURRENTLY CERTIFICATED**
9 **TO PROVIDE LOCAL EXCHANGE SERVICE IN FLORIDA?**

10 **A:** Yes, Time Warner and DMP hold certificate nos. 3167
11 and 3135, respectively. On August 1, 1995, each
12 notified the Commission of its intent to provide
13 alternative local exchange service, and each is
14 authorized to provide local exchange service
15 effective January 1, 1995.

16

17 **Q: WHAT IS THE STATUS OF TIME WARNER'S NEGOTIATIONS ON**
18 **LOCAL INTERCONNECTION WITH SPRINT UNITED?**

19 **A:** Time Warner began interconnection negotiations with
20 Sprint United on July 12, 1995. On the date that
21 this testimony is filed, Time Warner and Sprint
22 United have been unable to reach a mutually
23 acceptable interconnection agreement. As of
24 December 11, 1995, no comprehensive agreement has
25 been reached. Until such an agreement is reached,

1 Time Warner necessarily must consider all
2 interconnection issues to be unresolved.

3

4 **Q: WHY HAS TIME WARNER PETITIONED THE COMMISSION FOR**
5 **ITS ASSISTANCE?**

6 A: Time Warner and Sprint United have not been able to
7 reach a comprehensive agreement. Time Warner has
8 petitioned the Commission to ensure that it will
9 have a timely interconnection arrangement. Time
10 Warner needs to prioritize its capital commitments
11 and is in the position of determining whether
12 business conditions in Sprint United's territory
13 invite competition. A significant part of this
14 determination is the rates, terms and conditions of
15 interconnection with the incumbent LECs, including
16 Sprint United. Time Warner must have an
17 interconnection agreement with Sprint United soon
18 if it is to proceed with its plan to provide
19 service to residential and business consumers
20 within Sprint United's territory.

21

22 **Q: WHAT ARE THE IMPLICATIONS FOR THE ASSIGNMENT OF NXX**
23 **CODES?**

24 A: The North American Numbering Plan (NANP) Guidelines
25 used by Sprint United today do not allow Time

1 Warner to acquire more than one NXX code prior to
2 the exhaustion of the code assigned to Time
3 Warner's first switch. This is true, even if more
4 NXX codes were needed to provide the detailed
5 billing information necessary to distinguish local
6 and toll calls. BellSouth today is the NANP
7 administrator for its region. The consensus in the
8 industry is the NANP administration function should
9 be relegated from the incumbent LECs to a neutral
10 administrator. There will be a significant time
11 lag before this occurs. This Commission should be
12 cognizant of the ability of the LECs to
13 disadvantage competition by using the NANP
14 Guidelines as an excuse to thwart the entry of Time
15 Warner. Time Warner needs multiple NXX codes for
16 purposes of intercompany compensation.

17
18 In those environments where new entrants are
19 required to abide by the existing incumbent LEC
20 exchange boundaries (which dictate whether a call
21 is currently considered local or toll) for purposes
22 of intercompany compensation, there are important
23 implications regarding the number of NXX codes
24 required by, and allocated to, every facilities-
25 based ALEC. To better understand the implications

1 of this issue, I have attached, as Exhibit JM-2, a
2 series of schematics showing how it would be
3 impossible to properly characterize a call as local
4 or toll unless Time Warner is permitted to acquire
5 more than one NXX code. To the extent this
6 Commission requires a usage-based intercompany
7 compensation plan which maintains the current
8 distinction between local versus toll, this
9 Commission should also not tolerate Sprint United
10 delaying or denying the assignment of NXX codes,
11 which Time Warner would legitimately require for
12 proper tracking of usage for intercompany-
13 compensation.

14

15 **Q: WHAT ARE THE APPROPRIATE TECHNICAL AND FINANCIAL**
16 **ARRANGEMENTS WHICH SHOULD GOVERN INTERCONNECTION**
17 **BETWEEN TIME WARNER AND SPRINT UNITED FOR THE**
18 **DELIVERY OF CALLS ORIGINATED AND/OR TERMINATED FROM**
19 **CARRIERS NOT DIRECTLY CONNECTED TO TIME WARNER'S**
20 **NETWORK?**

21 **A:** For intraLATA calls (both local and toll), Time
22 Warner should be allowed to transmit traffic
23 through the Sprint United tandems to other
24 telecommunications provider end offices also
25 subtending the Sprint United tandems (for example,

1 a cellular company, another ALEC, or IXC). On
2 local calls, bill and keep should apply.

3
4 On intraLATA toll calls, if a LATAwide termination
5 structure is not used, the intraLATA Modified
6 Access Based Compensation Plan (MABC) used between
7 LECs in Florida today should apply. Under the MABC
8 plan, the originating LEC bills its end user for
9 the toll call, and pays the terminating LEC
10 switched access charges. Where another LEC serves
11 as an intermediary, the intermediary LEC is paid
12 tandem switching and transport as well. -

13
14 On interLATA toll calls, IXC traffic exchanged
15 between the Sprint United tandem and Time Warner
16 should be handled using industry Meet Point Billing
17 procedures. This acknowledges the participation of
18 each local service provider in the provision of
19 access.

20
21 Time Warner recognizes the requirement for incoming
22 calls to Time Warner customers who keep their
23 Sprint United local telephone numbers would go
24 through the Sprint United tandem and/or the end
25 office containing the old telephone number. When a

1 toll call comes to that ported number from an IXC
2 or another LEC, it goes to the Sprint United end
3 office, is translated to the Time Warner office
4 number, and continues to that Time Warner customer.
5 Normally on terminating toll calls, the local
6 service provider would receive access charge
7 revenues from the toll provider. With a ported
8 number, however, the call loses its identity as a
9 toll call when it gets to Sprint United's central
10 office, even though it continues on to Time
11 Warner's office. If compensation for this is not
12 provided, Sprint United would pay Time Warner
13 according to whatever local interconnect
14 arrangement is in effect, and Time Warner would
15 lose its switched access charge revenues. Not only
16 does it produce revenue losses for Time Warner, it
17 also provides an undeserved windfall to Sprint
18 United.

19

20 The solution to restoring these revenues is for
21 Sprint United to measure this traffic, or develop a
22 surrogate for estimating it, and to remit the
23 correct switched access charges to Time Warner. If
24 this cannot be accomplished, an alternative is to
25 reduce the price for some other element of

1 interconnection to offset Sprint United's revenue
2 windfall.

3
4 Further, Sprint United should allow two collocated
5 ALECs to direct connect within the Sprint United
6 tandem, without going through the tandem switch (a
7 "hotel" connection), charging only for rates
8 applied for collocation, and not for switched
9 access. It is not efficient to exhaust Sprint
10 United's tandem switch prematurely, nor to impose a
11 switching cost on other providers when no switching
12 is needed. This would encourage both efficient
13 network utilization and encourage competition.

14

15 **Q: WHAT ARE THE APPROPRIATE TECHNICAL AND FINANCIAL**
16 **REQUIREMENTS FOR THE EXCHANGE OF INTRALATA 800**
17 **TRAFFIC WHICH ORIGINATES FROM A TIME WARNER**
18 **CUSTOMER AND TERMINATES TO AN 800 NUMBER SERVED BY**
19 **OR THROUGH SPRINT UNITED?**

20 **A:** Competition will only develop if the exchange
21 procedure recognizes the role of both companies in
22 completing the call. The company originating the
23 800 call should send the originating call record to
24 the 800 number owner in order for it to bill the
25 end user. 800 calls originating from Time Warner

1 should be routed to its signal control point (SCP)
2 where a query is launched to the service switching
3 point (SSP). A bill record should be generated by
4 the SSP provider which will be sent to the 800
5 number owner, so it can bill the 800 end user
6 customer. Time Warner should bill Sprint United
7 originating switched access charges and an 800
8 query charge. Depending on the contractual
9 arrangement, companies may also charge for record
10 provisioning.

11

12 **Q: WHAT ARE THE APPROPRIATE TECHNICAL ARRANGEMENTS FOR-**
13 **THE INTERCONNECTION OF TIME WARNER'S NETWORK TO**
14 **SPRINT UNITED'S 911 PROVISIONING NETWORK SUCH THAT**
15 **TIME WARNER'S CUSTOMERS ARE ENSURED THE SAME LEVEL**
16 **OF 911 SERVICE AS THEY WOULD RECEIVE AS A CUSTOMER**
17 **OF SPRINT UNITED?**

18 **A: Public safety concerns dictate that Time Warner's**
19 **customers must have the same level of access to**
20 **reliable 911 service as Sprint United's customers.**
21 **A high level of 911 service can only be achieved**
22 **through a cooperative effort of the local 911**
23 **coordinator, the incumbent 911 tandem provider**
24 **(Sprint United), and Time Warner. Thus, Sprint**
25 **United must configure its 911 tandem to recognize**

1 industry standard 911 signaling for the traffic
2 originating from Time Warner's switches. Sprint
3 United should designate a single point of contact
4 for coordination of installing, testing, and
5 ongoing 911 and E911 operations. All parties
6 should work together toward deploying redundant,
7 reliable, standard facilities. To maintain
8 standardization, Time Warner should be able to
9 utilize the same type of facilities in place from
10 other end offices. Resolving alternate routing and
11 overflow situations should also be a cooperative
12 effort between Time Warner and Sprint United. -

13

14 Also, Sprint United should be required to provide
15 Time Warner with reference data to assist in the
16 configuration of interconnected dedicated 911
17 trunks and to ensure that 911 calls are correctly
18 routed. This should be available to all ALECs,
19 LECs, and Sprint United, on a nondiscriminatory
20 tariff basis. Sprint United should also provide
21 Time Warner a list consisting of each county in
22 Florida that subscribes to 911 and E911, and the
23 E911 conversion date for those counties converting.
24 Further, Sprint United should offer the same level
25 of priority restoration to Time Warner's 911

1 trunks as it does its own; Sprint United should
2 provide information on scheduled outages that would
3 affect 911 service at least 48 hours in advance;
4 and Sprint United should notify Time Warner
5 immediately if an unscheduled outage occurs.

6

7 **Q: WHAT PROCEDURES SHOULD BE IN PLACE FOR THE TIMELY**
8 **EXCHANGE AND UPDATING OF TIME WARNER CUSTOMER**
9 **INFORMATION FOR INCLUSION IN APPROPRIATE E911**
10 **DATABASES?**

11 **A:** To satisfy critical public safety concerns, Sprint
12 United and Time Warner should operate according to
13 the same standards. Sprint United should be
14 required to cooperate with Time Warner to ensure
15 that the Time Warner's customer data is in the
16 proper format for inclusion in the 911 Automatic
17 Location Identification (ALI) database. Customer
18 data, specifically the street addresses, are edited
19 against a database referred to as the master street
20 address guide (MSAG) to ensure the uniform listing
21 of street addresses. The MSAG provides emergency
22 personnel a consistent reference for every address
23 which may call for emergency service. Thus, Sprint
24 United must make the MSAG available to Time Warner
25 for inclusion of Time Warner's customer records in

1 the ALI database(s). Sprint United should also be
2 required to permit Time Warner access to the same
3 mechanized systems Sprint United uses to edit
4 customer data against the MSAG. This should be
5 available as soon as possible.

6

7 **Q: HOW SHOULD REPAIR SERVICE ARRANGEMENTS BE**
8 **DEVELOPED?**

9 **A:** In the new multi-provider environment, each
10 participating company must notify other telephone
11 companies of outages and troubles. Otherwise, it
12 would be impossible to isolate and clear a problem
13 in one part of a multi-provider network. To this
14 end, Sprint United should develop mechanized
15 systems for network monitoring to which other
16 providers have access. Further, notification and
17 repair procedures in the event of outages must be
18 coordinated between Sprint United and Time Warner.
19 To ensure competition, Time Warner's high quality
20 service must not suffer because of a lack of
21 adequate repair procedures.

22

23 **Q: WHAT ARE THE APPROPRIATE TECHNICAL REQUIREMENTS FOR**
24 **OPERATOR TRAFFIC FLOWING BETWEEN TIME WARNER AND**

1 **SPRINT UNITED INCLUDING BUSY LINE VERIFICATION AND**
2 **EMERGENCY INTERRUPT SERVICES?**

3 A: There are three scenarios for Time Warner to
4 provide operator services. Time Warner could self-
5 provide, hire a third party vendor, or hire Sprint
6 United. In either the first or second scenario,
7 Time Warner's only connection to Sprint United
8 would be an inward trunk from Time Warner's local
9 switch to the Sprint United operator services
10 switch. This connection would enable a Time Warner
11 operator to contact a Sprint United operator when a
12 local Time Warner customer requires busy line,
13 verify/interrupt of a Sprint United line.
14 Conversely, if a Sprint United subscriber has a
15 need to verify/interrupt a Time Warner line, an
16 inward trunk arrangement needs to be made available
17 to Time Warner's operator service provider. Time
18 Warner's operator service provider should be able
19 to verify/interrupt Time Warner lines without
20 connecting to Sprint United. If Time Warner
21 selects Sprint United as the provider, operator
22 services trunking will be required between Time
23 Warner's local switch and the Sprint United
24 operator switch to perform all operator service
25 functions. Operator services are one aspect of a

1 full array of local telephone services which new
2 entrants such as Time Warner must be able to offer
3 if they are to compete with LECs such as Sprint
4 United.

5

6 **Q: WHAT ARE THE APPROPRIATE ARRANGEMENTS FOR THE**
7 **PROVISION OF DIRECTORY ASSISTANCE SERVICES AND DATA**
8 **BETWEEN TIME WARNER AND SPRINT UNITED?**

9 **A:** A comprehensive directory assistance database
10 benefits everyone--Sprint United, Time Warner, and
11 end user consumers. For the customers' benefit,
12 Sprint United should be required to carry Time
13 Warner's listings (including updates) in its DA
14 database at no charge to Time Warner. Including
15 Time Warner customer listings in Sprint United's
16 database enhances the value of the database for
17 Sprint United.

18

19 Directory Assistance can be provided by entities
20 other than Sprint United. Thus, Sprint United
21 should be required to offer at least three options
22 for the provision of directory assistance service.
23 First, Sprint United should provide a resale
24 option, where Time Warner would simply utilize
25 Sprint United's directory assistance service for

1 Time Warner's customers. Second, Sprint United
2 should provide a database access option. Under
3 this arrangement, Time Warner would use its own
4 operators, who would be able to "access" the Sprint
5 United database to obtain listing information.
6 Third, Sprint United should provide a database
7 purchase option at an appropriate cost-based price.
8 These options will allow Time Warner to choose the
9 most efficient arrangement for the provision of
10 directory assistance service.

11

12 **Q: UNDER WHAT TERMS AND CONDITIONS SHOULD SPRINT-**
13 **UNITED BE REQUIRED TO LIST TIME WARNER'S CUSTOMERS**
14 **IN ITS UNIVERSAL WHITE AND YELLOW PAGES DIRECTORIES**
15 **AND TO PUBLISH AND DISTRIBUTE THESE DIRECTORIES TO**
16 **TIME WARNER'S CUSTOMERS?**

17 **A:** A unified white pages directory is of great value
18 to consumers, businesses, and local service
19 providers. Time Warner is willing to provide its
20 customer listings to Sprint United. In exchange
21 for providing this valuable asset, Sprint United
22 should provide a single line white page listing for
23 Time Warner's customers at no charge to either Time
24 Warner or the end user. Sprint United will benefit
25 from the additional Time Warner listing by having a

1 comprehensive directory to sell to directory
2 providers.

3

4 For business customers, Sprint United should also
5 provide a single line yellow page listing at no
6 charge as well. Just as Time Warner will do,
7 Sprint United should be required to ensure accuracy
8 and timeliness in these listings. Additional
9 revenues will be realized when Sprint United sells
10 its listings to its yellow pages affiliate. Also,
11 Sprint United will have the opportunity for
12 additional revenues by selling yellow page ads to
13 Time Warner's customers.

14

15 Sprint United should also provide a user
16 guide/informational insert to Time Warner to be
17 published in both the white pages information
18 section and the yellow pages sections, at no charge
19 to Time Warner. The purpose of the informational
20 section of the phone book is to assist customers
21 with their telephone services, in a readily
22 accessible manner. For this information to be
23 complete and for the telephone book to not provide
24 Sprint United an undeserved market advantage,

1 information on Time Warner (and other ALECs) should
2 be included.

3

4 Sprint United should be required to provide and
5 deliver directories to all customers (of both
6 Sprint United and Time Warner) in the same manner
7 and recycle the directories at no charge to Time
8 Warner. Any costs Sprint United incurs for these
9 functions will be recovered through directory
10 advertising Sprint United gains from Time Warner's
11 business customers.

12

13 **Q: WHAT ARE THE APPROPRIATE ARRANGEMENTS FOR THE**
14 **PROVISION OF BILLING AND COLLECTION SERVICES**
15 **BETWEEN TIME WARNER AND SPRINT UNITED, INCLUDING**
16 **BILLING AND CLEARING CREDIT CARD, COLLECT, THIRD**
17 **PARTY CALLS AND AUDIOTEXT CALLS?**

18 **A:** There are numerous intercompany arrangements
19 necessary for the proper billing of services in a
20 multiple provider environment, most of which are
21 already in existence between Sprint United and
22 other telecommunications providers today. All of
23 the arrangements benefit not only Sprint United's
24 customers, but also Time Warner (and other
25 providers') customers. For example, Time Warner

1 must be able to validate credit card or third party
2 calls where the customer is a Sprint United
3 customer. This is accomplished through a line
4 identification database (LIDB), to which Time
5 Warner must have access under reasonable terms and
6 conditions. For efficiency's sake, Sprint United
7 should treat Time Warner the way it treats other
8 LECs today in the clearing of such fund transfers,
9 through standard industry procedures and systems.

10

11 **Q: WHAT ARRANGEMENTS ARE NECESSARY TO ENSURE THE**
12 **PROVISION OF CLASS/LASS SERVICES BETWEEN TIME**
13 **WARNER'S AND SPRINT UNITED'S NETWORKS?**

14 **A:** To ensure fully functional networks between Time
15 Warner and Sprint United, Time Warner's point codes
16 (end office addresses) need to be translated in all
17 Sprint United end offices that support CLASS/LASS
18 features. Likewise, the point code of Sprint
19 United end offices need to be translated in Time
20 Warner's switch. In addition, both STP pairs (Time
21 Warner's and Sprint United's) must be translated to
22 allow an exchange of messages between end offices.
23 Finally, Sprint United should offer unbundled
24 elements of its SCP for use by Time Warner.

1 Q: PLEASE SUMMARIZE YOUR TESTIMONY.

2 A: Time Warner has petitioned the Commission because
3 negotiations have not been fruitful. Time Warner
4 must have certain resolution of all interconnection
5 issues in order to enter the market. Further, Time
6 Warner requires that a complaint process be
7 available to resolve prospective issues that may
8 develop as details are worked out and networks are
9 actually connected.

10

11 For Time Warner to have a reasonable chance to
12 compete so that consumers receive the benefits of
13 local competition, Time Warner requests an
14 interconnection arrangement that permits and
15 encourages the following (in addition to the issues
16 addressed by Time Warner witnesses Engleman and
17 Wood):

- 18 • access for Time Warner to adequate numbering
19 resources
- 20 • compensation to Time Warner for terminating
21 access charges to ported numbers
- 22 • options for access by Time Warner to Sprint
23 United's operator services

- 1 • input of directory assistance and directory
- 2 listings by Sprint United provided at no
- 3 charge to Time Warner
- 4 • options by Time Warner for the provision of
- 5 directory assistance from Sprint United
- 6 • free white page/yellow page listings in Sprint
- 7 United directories for Time Warner customers
- 8 • an information page for Time Warner in the
- 9 Sprint United directory
- 10 • directories provided and distributed free of
- 11 charge to Time Warner customers by Sprint
- 12 United
- 13 • directory affiliates of Sprint United
- 14 marketing their yellow pages to Time Warner's
- 15 customers;
- 16 • equal priority notification on outages by
- 17 Sprint United and Time Warner
- 18 • cooperative 911 network arrangements and
- 19 database access between Sprint United, Time
- 20 Warner, and the 911 coordinator, with equal
- 21 prioritization and notice in the case of
- 22 outages.

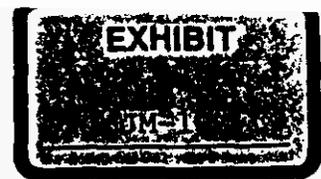
23 In short, the Commission should develop a structure
24 that encourages competition by permitting Time

1 Warner to exercise reasonable control over its cost
2 of doing business.

3

4 Q: DOES THIS COMPLETE YOUR TESTIMONY?

5 A: Yes, it does.

**SUMMARY**

A Professional with 8 years experience and increasing responsibility in creating, managing and facilitating market assessments and business development for telecommunications projects. This hands-on approach to implementing effective research and feasibility studies includes mastery of:

Analysis and Planning
 Meeting demanding time and performance requirements
 Developing innovative, cost saving procedures
 Communicating effectively at all levels
 Building effective teams

SUCCESSSES**Managerial**

- Created and directed team of routing engineers and analysts who developed business plans and networks for 23 cities.
- Redesigned the interconnection process, reducing the collocation interval from 12 months to 90 days or less.
- Developed corporate market assessment process.

Financial

- Decreased costs of carrier interconnection through negotiations by \$100,000.
- Developed qualitative analysis for operational and capital budgets.

Innovative

- Developed non-linear approaches to market analysis which reduced time to implementation.
- Created analysis of revenue, expense and sales raising understanding of resource relationships which increased annual revenues.
- Increased productivity of InterExchange Carrier Interconnection through effective process development.

**BUSINESS
EXPERIENCE**

1993 to
Present

TCG, Denver, Colorado
 Network Planning & Interconnection

Manager

Create and manage the TCG InterExchange Carrier Interconnection process nationally. Liaison among long distance carriers and TCG cities. Evaluate and forecast capacity requirements. Negotiate nationwide carrier contracts.

Network Development

Manager

Developed market assessments and network designs for new cities. Created business plans with capital of \$9-22 Million which met board approval. Liaison among corporate clientele, including cable companies and long distance carriers. Managed technical and non-technical individuals.

**BUSINESS
EXPERIENCE**

- 1990 to 1993** **TCI, Denver, Colorado**
Business Development
Senior Analyst
 Managed planning and execution of TCG market research projects for new access cities and acquisitions. Assessed feasibility of recommendations for existing cities. Critical assessment of VCTV project, research for healthcare and education over broadband networks.
- Business Development**
Corporate System Administrator
 Developed fair market pricing strategies and created operational budgets in excess of \$1 Million. Audited and clarified global carrier accounts. Provided implementation support and training for new city field offices.
- Marketing**
Corporate Customer Service Specialist
 Developed customer service program and pricing data base. Analysed product and pricing of switched and common carrier telecommunications services. Facilitated customer surveys, promotional campaigns, materials and events for business to business services.
- 1987 to 1990** **US WEST Communications, Denver, Colorado**
Small Business and Home Personal Services
Market Analyst
 Performed statistical and results analysis for telemarketing center of revenue, expense, sales, product projections and forecasting.
- Small Business and Home Personal Services**
Telecommunications Specialist
 Sold business lines and trunks, foreign exchange lines, WATS, 800, Centron, remote call forwarding, custom calling services, voice mail and information services. Evaluated case study of Hispanic market, test marketing for voice mail and custom ringing services.

EDUCATION

- University of Denver, Denver, Colorado**
Bachelor of Science in Business Administration, 1977
- 1994 to Present** **Masters of Science in Telecommunications**

**TECHNICAL
TRAINING**

- #5 Electronic Switching System Architecture**
#5 Electronic Switching System ISDN Overview

**Exhibit JM-2
to the Testimony of
Joan McGrath
On behalf of Time Warner Communications of Florida**

Narrative to Exhibit JM-2

Base Schematic "A"

The TWC franchise area (also assumes this area will be the footprint for switched services) is bounded by the solid heavy line. The theoretical NXX code of 473 has been assigned to the TWC switch in this example.

Existing LEC A (usually an RBOC) exchange area is bounded by the dotted lines, and in this example assumes two exchanges are owned by LEC A, with any traffic between the two exchanges considered as toll traffic.

Please note that LEC A owns the tandem which serves its own end offices and those of LEC B, and which would also serve TWC's switch.

Existing LEC B (usually a smaller independent LEC, or ILEC) exchange area is bounded by the dotted/dashed line, and this diagram assumes one exchange is owned by LEC B, with any traffic between it and the 576 switches of LEC A exchanges considered as EAS traffic and with any traffic between it and the 331 switch of LEC A considered as toll traffic.

Base Schematic "B"

This diagram depicts the overlap areas of TWC's footprint on the existing exchange boundaries of LEC A and LEC B.

Diagram 1

TWC customer B places a call to LEC A customer D. Both customers lie within the existing exchange boundary of LEC A. The call can be identified as a local call and local traffic intercompany compensation applies.

Diagram 2

Customer A places a call to Customer B.

- Before ALEC entry, LEC customer A would pay a toll charge to call LEC customer B.
- After ALEC entry, TWC customer A places a call to TWC customer B, both of whom lie within TWC's franchise and are switched entirely within TWC's system. TWC may, or may not choose to charge toll to customer A. No intercompany compensation involved.

Narrative to Exhibit JM-2 (continued)

Diagram 3

TWC Customer B places a call to LEC Customer C. Assumes TWC has only one NXX code = 473.

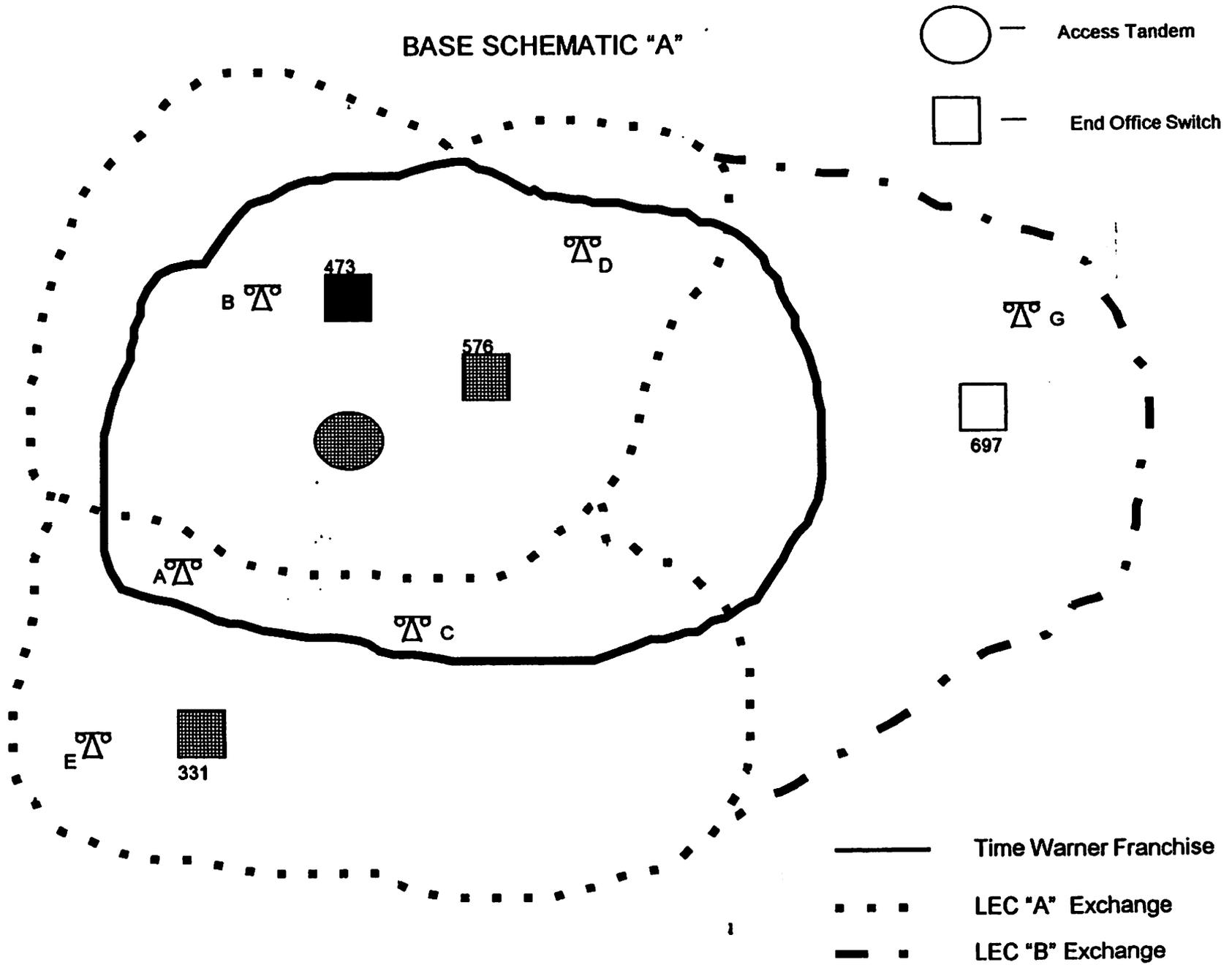
- Before ALEC entry, LEC customer B (NXX=576) would pay a toll charge to call customer C (NXX=331).
- After ALEC entry, TWC customer B (NXX=473) places a call to LEC customer C, and the call is handled by both TWC & LEC A.
- LEC A would charge full intrastate access rates to TWC to complete the call if TWC is acting as a toll carrier for Customer B. If TWC is not acting as a toll carrier, then both TWC and LEC A would charge full intrastate access rates to the toll Carrier.
- Under reciprocity, TWC would charge full intrastate access rates to LEC A for a call from customer C to customer A if LEC A is acting as a toll carrier for Customer C. If LEC A is not acting as a toll carrier, then both TWC and LEC A would charge full intrastate access rates to the toll Carrier.

Diagram 4

TWC Customer A places a call to LEC Customer C. Assumes TWC has two NXX codes: 473 & 235.

- Before ALEC entry, LEC customer A (NXX=331) would pay a local charge to call customer C (NXX=331).
- After ALEC entry, TWC customer A places a call to LEC customer C, both of whom lie within TWC's franchise, and the call is handled by both TWC & LEC A. Under the default paradigm of the LECs, LEC A would want to charge full intrastate access rates to TWC because it could not determine if the call was originating at TWC customer B (which would have been a toll call), or at TWC customer A (which would have been a local call).
- Assigning an NXX code of 235 to TWC customers lying within the shaded area allows the incumbent LEC's recording and billing systems to know that this is a local call, and that local traffic intercompany compensation applies.
- Under reciprocity, TWC would charge local traffic intercompany compensation rates to LEC A for a call from customer C to customer A.

BASE SCHEMATIC "A"



BASE SCHEMATIC "B"

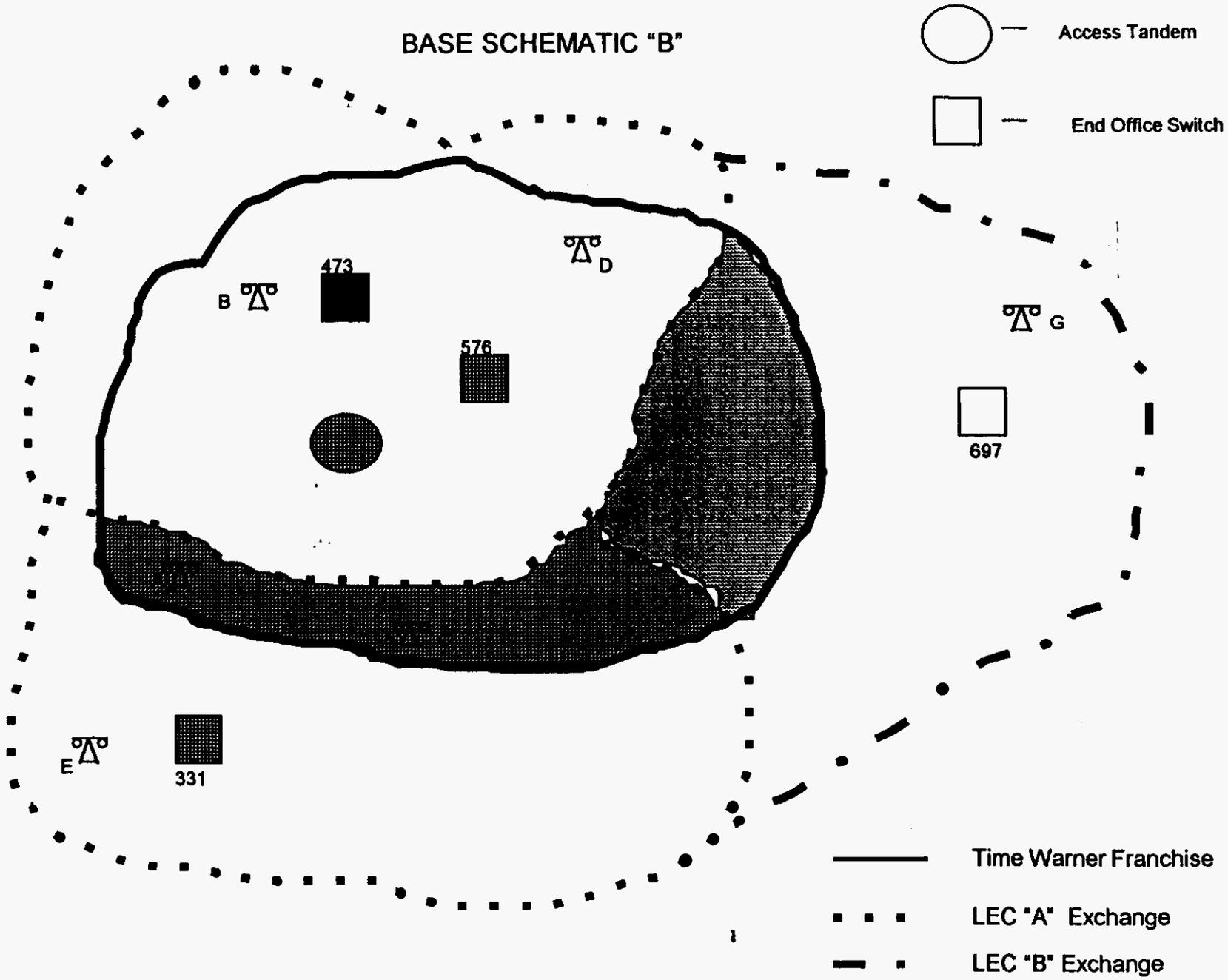


Diagram 1

TWC serves Customer B
LEC A serves Customer D

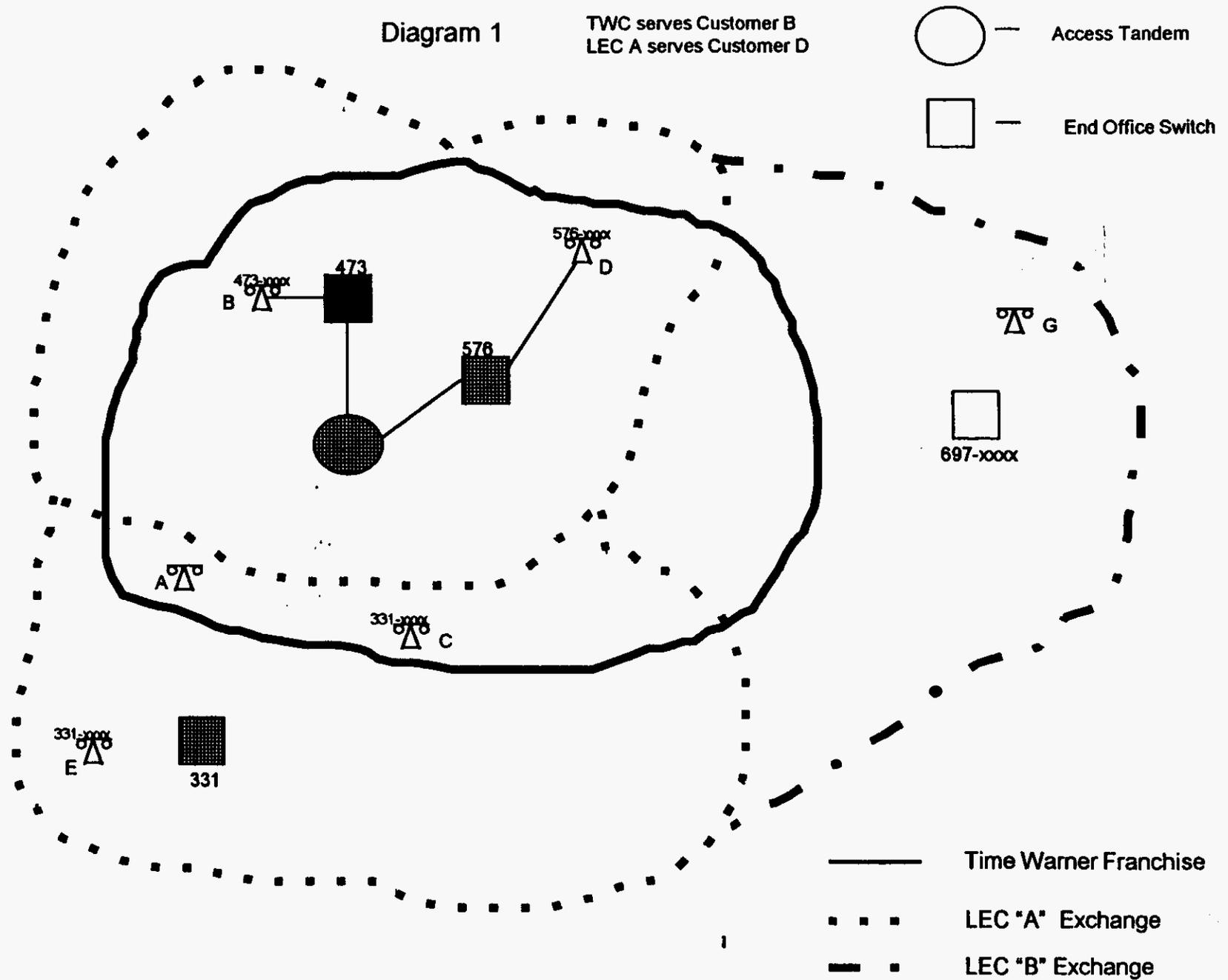


Diagram 2

TWC serves both Customer B and Customer A

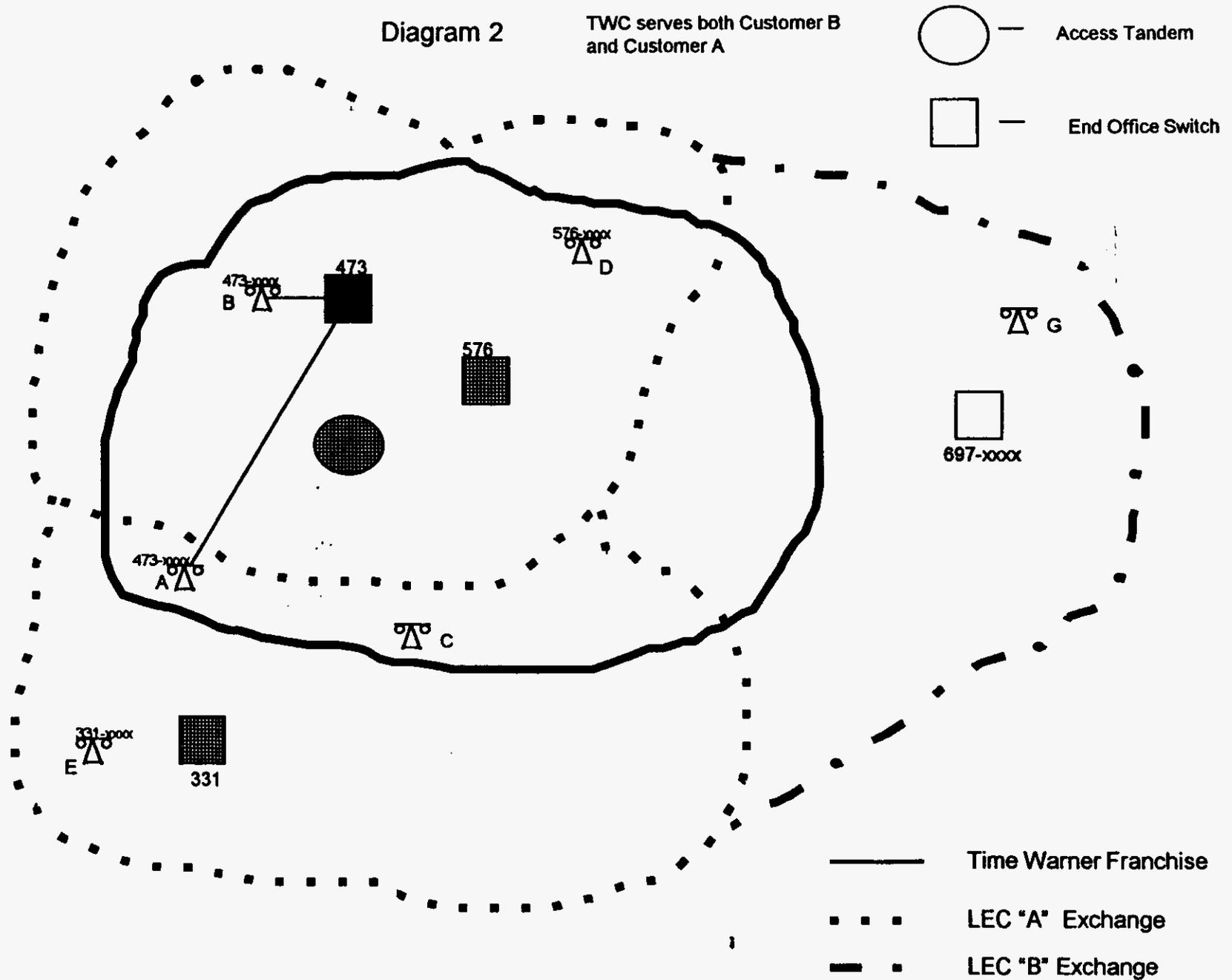


Diagram 3

TWC serves Customer B
LEC A serves Customer C

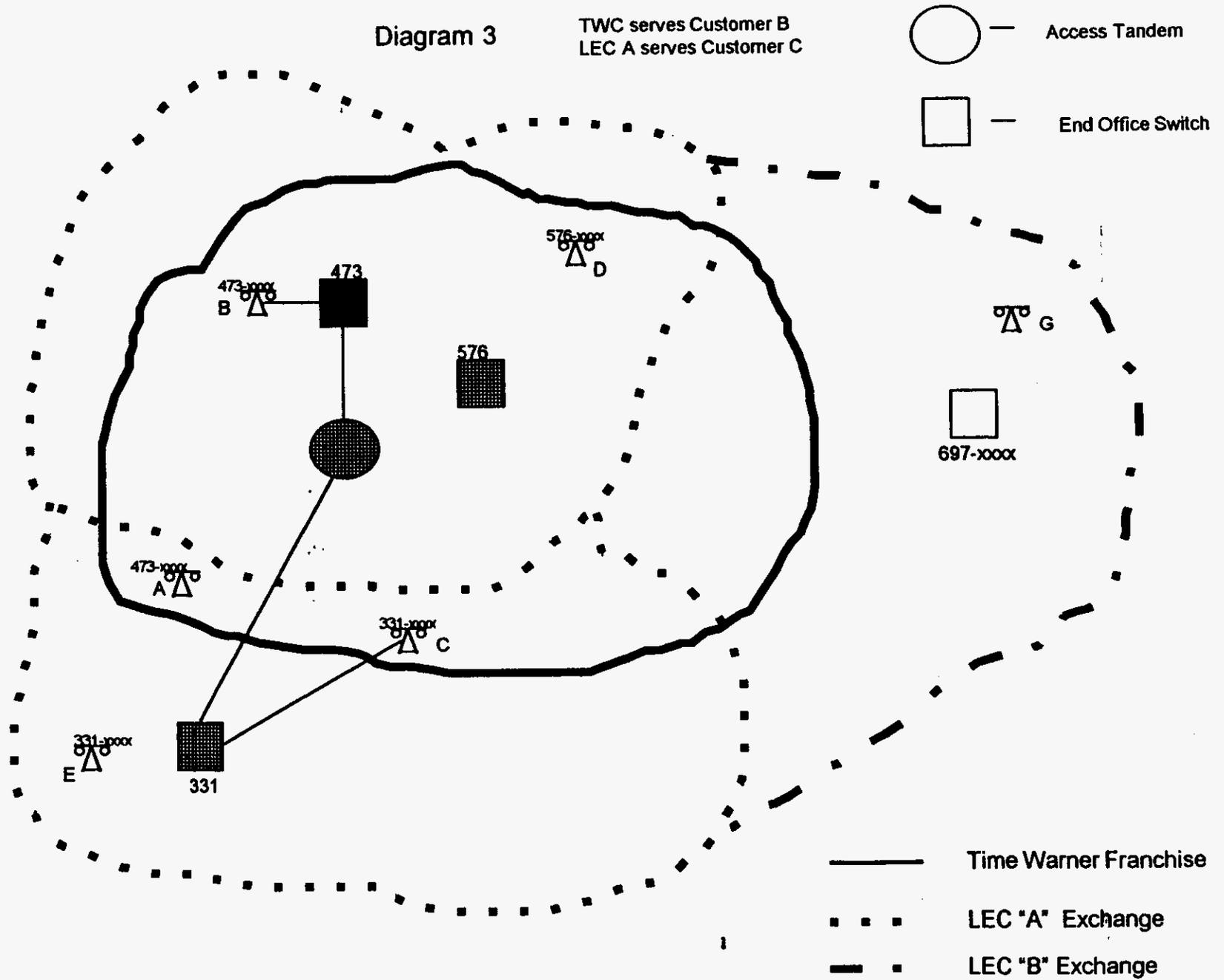


Diagram 4

TWC serves Customer A
LEC A serves Customer C

