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BEFORE THE ARIZONA CORPORATION COMMISSION

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Commissioner

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Arizona Corporation Commission

INDEXED

JAN 19 2000

IN THE MATTER OF U S WEST  
COMMUNICATIONS, INC.'S  
COMPLIANCE WITH § 271 OF THE  
TELECOMMUNICATIONS ACT OF 1996

Docket No. T-00000A-97-0238

INDEXED BY

COMMENTS OF AT&T AND TCG/  
PHOENIX ON CHECKLIST ITEMS 7  
AND 10

AT&T Communications of the Mountain States, Inc. and TCG Phoenix

(collectively "AT&T") hereby file their initial comments on checklist items 7 (911 and E911 Services, Directory Assistance, and Operator Services) and 10 (Databases and Associated Signaling).

**I. CHECKLIST ITEM (vii): 911 AND E911 SERVICES,  
DIRECTORY ASSISTANCE AND OPERATOR SERVICES**

**A. 911/E911 Services**

Section 271(c)(2)(B)(vii) of the Act requires a BOC to provide "nondiscriminatory access to – (I) 911 and E911 services."<sup>1</sup> In the *Ameritech Michigan Order*, the Commission found that "section 271 requires a BOC to provide competitors access to its 911 and E911 services in the same manner that a BOC obtains such access *i.e.*, at parity."<sup>2</sup>

<sup>1</sup> 47 U.S.C. § 271(c)(2)(B)(vii).

<sup>2</sup> *Ameritech Michigan Order*, ¶ 256. See also *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York*, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404 (rel. Dec. 22, 1999), ¶ 349 ("*Bell Atlantic New York Order*").

In the *BellSouth Second Louisiana Order*, the Federal Communications Commission (“FCC”) reconfirmed the 911/E911 checklist obligations it established in the *Ameritech Michigan Order*, stating that:

[S]ection 271 requires a BOC to provide competitors access to its 911 and E911 services in the same manner that a BOC obtains such access, i.e., at parity.<sup>3</sup>

U S WEST has not produced evidence that demonstrates that it is in compliance with checklist item 7 for a number of reasons. First, the U S WEST requires provisioning trunking used for 911/E911 to traverse unnecessary intermediate frames, increasing the risk of failure for competitive local exchange carriers’ (“CLECs”) customers. These same risks are not be encountered in the provisioning of 911 trunking for U S WEST’s customers. This requirement conflicts with the FCC’s *Advanced Services Order*, which requires that CLECs be afforded direct access to the incumbent local exchange carrier’s (“LEC”) network:

An incumbent LEC may not require competitors to use an intermediate interconnection arrangement in lieu of direct connection to the incumbent’s network if technically feasible.<sup>4</sup>

Second, known problems in U S WEST’s provisioning of number portability and CLEC NXX prefixes in Arizona raises the specter of serious 911 problems.

Finally, certain positions U S WEST has taken in negotiations with respect to updating 911/E911 databases are improper and discriminatory. U S WEST has presented no evidence to indicate that the company’s position has changed. Given these problems, U S WEST fails to provide 911/E911 service to CLECs in a nondiscriminatory manner, as required by Section 271.

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<sup>3</sup> *BellSouth Second Louisiana Order*, ¶ 235 (citing *Ameritech Michigan Order*, ¶ 256).  
<sup>4</sup> 47 C.F.R. § 51.323.

1. **Questionable Facility Arrangements and the ICDF or SPOT Frame**

U S WEST has taken the position that CLECs must interconnect and access unbundled network elements through an Interconnection Distribution Frame (“ICDF”) or Single Point of Termination (“SPOT”) frame. The ICDF or SPOT frame is an additional or intermediate frame that introduces additional points of failure into a circuit.

U S WEST’s position has been that 911 transport facilities to the 911 tandem, the Public Service Access Point (“PSAP”) and the Automatic Line Identification (“ALI”) database will all traverse a DS0, DS1 or DS3 ICDF or SPOT frame when the CLEC provides facilities to collocated space in the U S WEST’s wire center or when the CLEC accesses 911 service through unbundled elements. These critical 911 circuits would be subject not only to all of the points of failure of a normal U S WEST circuit, but also to those additional points of failure created by the U S WEST-mandated use of the ICDF or SPOT frame. Increasing the potential for failure on these circuits is unacceptable in general, and in particular, for calls so critical to public safety. As indicated above, this requirement conflicts with the FCC’s *Advanced Services Order*, which prohibits the use of such intermediate frames and instead requires that CLECs be afforded direct access to the incumbent LEC’s network.<sup>5</sup>

The ICDF or SPOT frame proposed by U S WEST is a piece of equipment that is functionally similar to an older vintage Main Distribution Frame (“MDF”). An MDF is composed of steel frame modules with hundred pair termination blocks on both sides, which is used within a central office as the connecting point between customer loops and the central office switch.

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<sup>5</sup> *Id.*

MDFs have a horizontal side and a vertical side; that is, the terminal blocks are arranged horizontally on one side and vertically on the other. A loop enters the central office and is connected to terminal blocks on the horizontal side of the MDF. In general, this is a permanent connection that need never be disturbed unless the loop is replaced. A jumper cable or a cross-connection runs from the horizontal side of the MDF through the middle of the frame, to the vertical side. These jumpers physically pass through the frame from one side to the other. The terminal blocks on the vertical side of the MDF are then connected by a cable to the end office switch in the same building. The cable from the MDF to the switch is generally also a permanent connection that is not intended to be disturbed except when the switch is replaced or switch loads are rebalanced. In this way, the loop is physically and permanently connected to the switch that serves the loop.

In most large central offices, U S WEST has replaced the old MDF technology with a new technology called a COSMIC frame. COSMIC frames have been available for 20 years, are more reliable, require shorter jumper cables, and are easier to manage and provision than MDFs. A COSMIC frame is similar to an MDF, except that all jumpers are on one side of the frame, eliminating the need to pass jumper wires through the 3-foot depth of the MDF. On both the MDF and COSMIC frames, the jumpers typically are not disturbed after initial installation. In most cases, a loop is always associated with a particular port on the switch. If the phone number needs to be changed on a particular line, the change is done electronically in the switch, rather than by physically moving the loop to a new switch port.

The ICDF or SPOT Frame figures prominently in the U S WEST manual on Wholesale Interconnection Operation Collocations Operations (3.5).<sup>6</sup> In this manual, the ICDF or SPOT Frame is contemplated for use between all CLEC collocation equipment

and U S WEST equipment. In fact, the manual explicitly provides that “An ICDF (Single Point Of Termination) facility (a framework for mounting blocks or an equipment bay for mounting panels) is always required for interconnection to the network.”<sup>7</sup> In addition to the fact that use of the ICDF/SPOT frame violates the FCC’s *Advanced Services Order*, the ICDF/SPOT frame introduces performance concerns and additional costs that CLECs will be forced to bear that U S WEST does not.

In testimony filed in other states, U S WEST has sought to interpose the ICDF or SPOT frame as an additional connection between the existing MDF or COSMIC frame and the switch port for access by CLECs to all unbundled elements and for interconnection and for each unbundled element combination. In Arizona, however, U S WEST witness Karen Stewart and the SGAT describe an option where the CLEC can get access to unbundled loops directly at the COSMIC or MDF *or* via the ICDF/SPOT frame.<sup>8</sup> U S WEST seems to be making a new proposal in Arizona which is inconsistent with the U S WEST position in every other state. While AT&T does not necessarily object to accessing some elements at the COSMIC, it has some concerns with this new proposal, given amendments recently made to U S WEST’s SGAT in Nebraska. In all other states, U S WEST has required that CLECs gain access to unbundled elements only through a SPOT frame. In addition, U S WEST’s operations and installation manuals produced during discovery always show an ICDF or SPOT frame associated with unbundled loops.<sup>9</sup> In addition, discovery material shows access to loops and other elements via the ICDF, which has simply been relabeled as an IDF.<sup>10</sup> This is still an intermediate frame by any name. In no state has U S WEST offered to allow CLECs

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<sup>6</sup> Responses to Arizona Discovery Request AEN01-001, Attachment I, Tab 10, p. 74 (Proprietary).

<sup>7</sup> Responses to Arizona Discovery Request AEN01-001 Att. I, Tab 10, p. 74 (Proprietary).

<sup>8</sup> Affidavit of Karen Stewart, pp. 13-14; U S WEST Arizona SGAT, Section 9.1.3.

<sup>9</sup> Response to Arizona Discovery Request AEN 01-001, Attachments C and I (Proprietary).

access to unbundled elements or combinations without some form of collocation. And, in all states, the only means of accessing UNEs and UNE combinations is, after U S WEST has taken them apart, via some type of collocation and intermediate frame.

Today, the majority of U S WEST's plain old telephone service ("POTS") loops connect on COSMIC frames. Exhibits 2 and 3 compare the call path of a typical U S WEST call with the call path for CLEC call that is required to traverse an ICDF/SPOT frame. As Exhibit 2 shows, a call will travel through the U S WEST network as follows: the two wire loop (1) is connected to the COSMIC frame loop block; jumper wires (2) connect the loop block to the port block on the COSMIC frame; cables (3) connect the port block on the COSMIC frame to the switch.

The comparable CLEC connection is shown in Exhibit 3. Referring to that diagram, a CLEC call will travel through the following path: the two wire loop (1) is connected to a loop block on the COSMIC frame; jumpers (2) connect the loop block to a TIE cable block on the COSMIC frame; TIE cables (3) connect the TIE cable block on the COSMIC frame to the ICDF or SPOT frame; jumper wires (4) connect the loop appearance on the ICDF or SPOT frame to the switch port appearance on the ICDF or

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<sup>10</sup> Response to Arizona Discovery Request ELI 01-002, Attachment C (Exhibit 1).

SPOT frame; a TIE cable (5) connects the ICDF or SPOT frame to a TIE cable block on the COSMIC frame; jumper wires (6) connect the TIE cable block on the COSMIC frame to the loop block on the COSMIC frame; cabling (7) connects the port block on the COSMIC frame to the switch port.

This CLEC circuit configuration includes three jumper pair connections instead of the one jumper pair connection for the same U S WEST customer connection.

Additionally, the call must traverse the distance from the COSMIC frame to the ICDF or SPOT frame and back on two new TIE cables. These arrangements introduce unnecessary connections, jumpers, cable length, and consequently, additional opportunities for failure and performance degradation. The result under U S WEST's ICDF or SPOT frame proposal is that CLECs must purchase additional facilities and equipment from U S WEST, all for the opportunity to serve customers with a circuit which, due to the extra connections, is much more likely to fail than a U S WEST circuit.

It is clear that the ICDF or SPOT frame does not provide nondiscriminatory interconnection or access to network elements in a manner that would allow CLECs to provide telecommunications services. This is true for at least the following five reasons:

- **Manual combining of CLEC facilities at an ICDF or SPOT frame will result in UNE-based service that is inferior in quality and inherently less reliable than the service U S WEST offers to its own retail customers over identical elements.**
- **Manual combining of CLEC facilities at an ICDF or SPOT frame will cause significant customer service interruptions at the time of conversion.**

- **Manual combining of CLEC facilities at an ICDF or SPOT frame will substantially restrict the number of customers who can be converted to service provided through UNEs.**
- **Manual combining of CLEC facilities at an ICDF or SPOT frame requires CLECs to incur costs that the ILEC does not incur to provide service over the same network components.**
- **Combining of CLEC facilities at an ICDF or SPOT frame builds in a substantial delay to competition using combinations of UNEs because of the time that will be required to place ICDF or SPOT frames.**

All of these concerns impact the 911 circuits that are carried on DS0 trunks that go to the 911 Tandem (Selective Router) that the public relies upon for safety. For these reasons, U S WEST's proposal is unacceptable, discriminatory, and exposes 911 circuits to improper risk.

In addition, U S WEST expects the CLEC to foot the bill for the ICDF or SPOT frame, the cabling to and from the ICDF or SPOT frame, the additional jumper work on the ICDF or SPOT frame and on the COSMIC, as well as any regeneration equipment needed to bring the signal back into specification.

In contrast to the faulty proposal for CLEC access, U S WEST provides additional security for 911 circuits in its own network. For example, U S WEST places protective covers over 911 circuits on its COSMIC frame and MDF. It uses special color codes for the circuits and trains its technicians to take special precautions when working on or around those circuits. Even assuming that the intermediate frames were permissible and acceptable under any circumstances, which they are not, U S WEST has not proposed any

similar methods in its SGAT for ensuring that 911 circuits for CLECs will be made as secure. While U S WEST claims in its Affidavits that it will protect CLEC circuits in a similar manner, it has offered no legally binding contractual provisions in its SGAT that will provide the CLEC sufficient guarantees that U S WEST will provide nondiscriminatory treatment to CLECs, and it is not clear how protections can be provided at the DS0 SPOT frame where U S WEST has refused to provide a management system for any of these circuits. Processes must be in place and documented which will ensure the integrity and protection of 911 circuits used by CLECs.

In addition to the above concerns, it is also U S WEST policy that CLEC-provided trunks, which carry 911 and other traffic, must traverse a DS1 or DS3 SPOT frame between the CLEC collocation cage and any U S WEST equipment. This adds additional points of failure to the 911 trunks.

For these reasons, U S WEST's requirement that 911 circuits traverse the ICDF or SPOT frame and other unnecessary, additional points of failure are a major concern for any CLEC connection, but particularly for critical public safety related circuits such as 911/E911 circuits. U S WEST's 911 calls do not pass through these additional points of failure. Why should calls from CLEC customers? Until this critical concern is resolved, U S WEST cannot satisfy checklist item 7.

## **2. Problems Associated with Local Number Portability**

U S WEST has inadequate processes for implementing number portability that are causing customer impacting errors that effect the provisioning of 911 service. If a customer moves to a CLEC and opts to keep his/her old telephone number, the number must be ported from the U S WEST switch to the CLEC switch. In some situations, U S WEST is: 1) not properly programming its switches to recognize that the number has

been ported; or 2) is porting numbers and disconnecting the old service before the customer is ready or before the CLEC has established service to its switch (*i.e.*, is not properly coordinating the customer's cutover to the new provider.) This will affect the ability of a 911 PSAP to return a call received from a CLEC customer. If the number has not been ported properly or if a premature disconnect is made, when the PSAP dials the number during an emergency, the PSAP will get a recorded message that the phone has been disconnected or the phone number is not valid. This could cause a dangerous, life threatening situation.

U S WEST has failed in some instances to promptly program its switches to route calls to new CLEC prefixes (NXX codes assigned to CLEC switches and then to CLEC customers.) When this happens, the 911 PSAP may not be able to call back a CLEC phone number in an emergency. There have been several instances of this type of problem occurring to TCG customers in Arizona. U S WEST did not promptly program some of its switches with TCG NXX codes. The result was that U S WEST customers could not call the TCG customers from the affected switches. When that happens, the 911 PSAP may not be able to call back a CLEC phone number in an emergency.

NPA splits in Arizona require CLECs to obtain new NXX codes in the new NPAs. AT&T has had problems with U S WEST failing to promptly provision new AT&T NXXs in Arizona. In July and August of 1999, AT&T recorded a number of customer troubles that were caused by this problem. Exhibit 4 identifies service orders that experienced such problems. U S WEST did not promptly program their switches in these instances to recognize the new CLEC NXX codes with the resulting risk to 911 services. U S WEST must put processes in place to ensure this does not occur. It has presented no evidence that it has done so.

### **3. Lack of Adequate Database Updates**

U S WEST's process for ensuring accuracy of the ALI database appears to be discriminatory. The Automatic Line Identification "ALI" database associates a customer's address with the customer's telephone number. It allows emergency personnel to determine the customer's location, even if the customer is unable to provide that information. U S WEST has maintained in negotiations that customers served by AT&T using number portability or unbundled elements will be removed from the ALI database with a disconnect order before U S WEST transfers the customer to AT&T. This disconnect order would eliminate the customer from the ALI database for an undefined period of time. The ALI database, however, is a critical element in providing prompt emergency service. During the disconnect period, the customer's address will not be available automatically to emergency personnel if the customer needs to use 911 service.

To address this risk, U S WEST should put processes in place that would eliminate this problem. U S WEST claims that, in order to provision an unbundled loop and port, it must first disconnect the customer's service, resulting in a disconnect order removing the customer's address from the ALI database. However, in the early years of competition, many CLEC customers will be provisioned using both the U S WEST loop and the U S WEST switch ordered as UNE combinations. In this situation, there is no reason to send a disconnect order to the ALI database. Moreover, even if the CLEC orders an unbundled loop for connection to a CLEC switch, processes should be in place to maintain the integrity of the ALI database, so as to ensure that critical data required for 911 purposes is not inaccessible for any period of time. Simple process improvements to ensure that the timing of disconnect and reconnect orders and other changes are made in

correct sequence are necessary. This is a significant public safety safeguard, and an important concern for the FCC, which has requested that an RBOC seeking Section 271 relief “must maintain the 911 database entries for competing LECs with the same accuracy and reliability that it maintains the database entries for its own customers.”<sup>11</sup> Due to the importance of preserving the continuity of 911 service to every customer, these processes should be specified and guaranteed in contract language. Recent problems with the cutover of number portability illustrate the need to assure that processes are in place for providing continuous E911 data base accuracy.

A similar problem may exist for resale migration. U S WEST needs to assure CLECs and the Commission that resale migration orders are not being processed via a disconnect and add process. Resale migration should be effected without the need for a disconnect. It is unclear that U S WEST is processing resale migration properly.

In testimony, U S WEST has stated that SCC (the company which manages the database) is developing a process to ensure that ALI records are maintained when numbers are ported.<sup>12</sup> It is not clear when this process will be complete and if the process will assure that records are maintained properly. U S WEST has presented no evidence in this proceeding of any processes that have been developed. Nor has it amended its SGAT to incorporate these processes. U S WEST must do so to gain approval for this checklist item. Until U S WEST does so, a problem still exists, creating the risk of premature removal of CLEC customer information from the ALI database.

In addition, the database process U S WEST is using for new entrants appears to differ from the process U S WEST uses for its own customers. If a U S WEST customer

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<sup>11</sup> *Ameritech Michigan Order*, ¶ 256.

<sup>12</sup> Affidavit of Margaret S. Bumgarner, p. 18.

moves, U S WEST has a process to assure that the customer is always listed and listed correctly in the 911 database. Thus, U S WEST's process is discriminatory. Simple process improvements to ensure that the timing of disconnect and reconnect orders and other changes are made in the correct sequence are necessary. This is a significant public safety concern, and an important requirement of the FCC.<sup>13</sup>

U S WEST's SGAT provisions relating to 911 and E911 must be carefully scrutinized to ensure not only that competition is fair and access is nondiscriminatory, but also to ensure that the public safety is adequately protected. The issues outlined above demonstrate substantial problems with U S WEST's provisioning of 911/E911 service. The most serious of these is the routing of 911 traffic through an ICDF or SPOT frame. With the reliability, performance, and provisioning problems inherent in the ICDF or SPOT frame, its use in connection with 911 circuits is clearly unacceptable and must be rejected. In addition, U S WEST provisioning processes are discriminatory, jeopardizing CLEC customer's access to 911. Until U S WEST assures the Commission that no lines, switch ports, or trunks involved in any phase of 911 delivery or 911 data update will be connected through an ICDF or SPOT frame, and that the other concerns raised above have been addressed, the checklist requirements associated with 911/E911 cannot be met and Section 271 relief must be denied.

## **B. Directory Assistance**

Section 271(c)(2)(B)(vii)(II) and Section 271 (c)(2)(B)(vii)(III) require a BOC to provide nondiscriminatory access to "directory assistance services to allow the other

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<sup>13</sup> *Ameritech Michigan Order*, ¶ 256 (The FCC has required an RBOC seeking Section 271 to demonstrate that it "maintains the 911 database entries for competing LECs with the same accuracy and reliability that it maintains the database entries for its own customers.").

carrier's customers to obtain telephone numbers" and "operator call completion services," respectively.<sup>14</sup> Section 251(b)(3) of the Act imposes on each LEC "the duty to permit all [competing providers of telephone exchange service and telephone toll service] to have nondiscriminatory access to ... operator services, directory assistance, and directory listing, with no unreasonable dialing delays."<sup>15</sup>

Given the similarity of the language in Sections 271(c)(2)(B)(vii)(II) and 271(c)(2)(B)(vii)(III) to that in Section 251(b)(3), the FCC concluded that a BOC must be in compliance with the regulations implementing Section 251(b)(3) to satisfy the requirements of Section 271(c)(2)(B)(vii)(II) and Section 271(c)(2)(B)(vii)(III).

In the *Local Competition Second Report and Order*, the FCC held that the phrase "nondiscriminatory access to directory assistance and directory listings" meant that "the customers of all telecommunications service providers should be able to access each LEC's directory assistance service and obtain a directory listing on a nondiscriminatory basis, notwithstanding: (1) the identity of a requesting customer's local telephone service provider; or (2) the identity of the telephone service provider for a customer whose directory listing is requested." The FCC specifically held that the phrase "nondiscriminatory access to operator services" means that "... a telephone service customer, regardless of the identity of his or her local telephone service provider, must be able to connect to a local operator by dialing '0,' or '0 plus' the desired telephone number."

U S WEST has an obligation under the Act and under a recent FCC ruling regarding U S WEST's national directory assistance service, to provide directory assistance and directory assistance lists in a nondiscriminatory manner.

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<sup>14</sup> 47 U.S.C. §§ 271(c)(2)(B)(vii)(II) & (III).

<sup>15</sup> 47 U.S.C. § 251(b)(3). See also *Bell Atlantic New York Order*, ¶ 351.

Earlier this year, the FCC ruled that the nationwide component of U S WEST's nonlocal directory assistance service violated the Act.<sup>16</sup> While the FCC concluded that the regionwide component of U S WEST's nonlocal directory assistance service falls within the scope of the exception provided in section 271(g)(4),<sup>17</sup> the FCC ruled that U S WEST had to make some changes in its directory assistance offer to comply with 271(g)(4). Specifically, the FCC required U S WEST to "make available to unaffiliated entities all of the in-region directory listing information it uses to provide regionwide directory assistance service at the same rates, terms, and conditions it imputes to itself."<sup>18</sup>

U S WEST is not providing nondiscriminatory access to their Directory Assistance List, which is the list of all in-region telephone numbers it uses to provide directory assistance. Section 10.6.1.1. of the SGAT states that U S WEST will not provide to a CLEC the complete listing for an end user who has a non-published listing. If the U S WEST directory assistance personnel have access to these numbers for emergency situations, the CLECs should have them as well. CLECs are prohibited from publishing this list, so there is should be no concern with publishing a non-published number.

Second, in paragraph 10.6.2.1, U S WEST prohibits CLECs from using the Directory Assistance list to respond to directory assistance calls from customers who are not local exchange end users. Unless U S WEST intends to limit its DA operators from ever providing DA information to end users who are not local subscribers to U S WEST, then this restriction is discriminatory. It is also not enforceable as a CLEC may not be

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<sup>16</sup> *Petition of U S WEST Communications, Inc. for a Declaratory Ruling Regarding The Provision of National Directory Assistance, Petition of U S WEST Communications, Inc. for Forbearance*, CC Docket No. 97-172, Memorandum Opinion and Order, FCC 99-133 (rel. Sept. 27, 1999), ¶ 2.

<sup>17</sup> *Id.*, ¶ 23.

<sup>18</sup> *Id.*, ¶ 37.

able to control, or tell, if an inquiry is coming from a local subscriber, or someone other than a local subscriber.

Third, paragraph 10.6.2.5 is overly broad. This section provides:

Unauthorized use of U S WEST's DA List information, or any disclosure to a third party of the fact that an end user, whose listing is furnished in the DA list, subscribes to U S WEST's, another Local Exchange Carrier's, Reseller's or CMRS's telecommunications services shall be considered a material breach of this SGAT and shall be resolved under the Dispute Resolution provisions of this SGAT.

This paragraph could be interpreted as restricting a CLEC from divulging information that is acquired from sources other than U S WEST's DA List. Paragraph 10.6.2.5 improperly prohibits any disclosure of what may be publicly or commercially available information.

In addition to the Directory List issues, it appears that U S WEST intends to impose improper restriction on the CLEC's ability to access its OS/DA platforms when using UNE combinations. In the collaborative meeting held on January 11, 2000, U S WEST maintained that a CLECs could use custom routing to provide dialing parity for calls to 0, 0+ and 1411 when provisioning using the UNE platform. However, U S WEST defines UNE platform differently from AT&T and the FCC. Apparently, U S WEST defines UNE platform (UNE-P) as the delivery of a UNEs for the CLEC to combine; U S WEST already refers to combined UNEs as UNE combinations, or UNE-C. AT&T and the FCC refer to the UNE platform as UNEs that are already combined. As a result of these definitional difference, it appears that U S WEST will not allow CLECs to access their own OS/DA platforms when using currently combined UNEs. In addition, it appears that U S WEST will not provide dialing parity for CLECs when the

CLEC wants to use its own OS/DA platform when provisioning service using currently combined UNEs. If this is the case, then U S WEST must provide unbundled Operator Service and unbundled Directory Assistance to CLECs in all circumstances where the CLEC is using currently combined UNEs.

Until these provisions of the SGAT are fixed to provide non-discriminatory access to Director Assistance Lists and U S WEST allows CLECs to access their OS/DA platforms using currently combined UNEs, U S WEST cannot satisfy checklist item 8.

## II. CHECKLIST ITEM 10: DATABASES AND ASSOCIATED SIGNALING

Section 271(c)(2)(B)(x) of the competitive checklist requires U S WEST to offer “[n]ondiscriminatory access to databases and associated signaling necessary for call routing and completion.”<sup>19</sup> In the *Local Competition* Order, the Commission identified signaling networks and call-related databases as network elements, and concluded that incumbent LECs must provide the exchange of signaling information between LECs necessary to exchange traffic and access call related database.”<sup>20</sup>

In the *Second BellSouth Louisiana Order*, we required BellSouth to demonstrate that it provided requesting carriers with nondiscriminatory access to: “(1) signaling networks, including signaling links and signaling transfer points; (2) certain call-related databases necessary for call routing and completion, or in the alternative, a means of physical access to the signaling transfer point linked to the unbundled database; and (3) Service Management Systems (SMS); and to design, create, test, and deploy Advanced Intelligent Network (AIN) based services at the SMS through a Service Creation Environment (SCE).”<sup>21</sup>

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<sup>19</sup> 47 U.S.C. § 271(c)(2)(B)(x).

<sup>20</sup> 27 C.F.R. § 51.319; *Local Competition Order*, 11 FCC Rcd at 15723-15751.

<sup>21</sup> *Bell Atlantic New York Order*, ¶ 365.

U S WEST does not comply with these requirements for several reasons. First, it is not clear in the SGAT or from the Affidavit of Ms. Bumgarner if U S WEST is really serious about offering signaling as an unbundled element or even exchanging signaling information necessary for interconnection with CLECs. Second, the quality of interconnection to U S WEST signaling is, in many cases, discriminatory.

**A. Access to Signaling and Unbundled Signaling**

Signaling is an essential component of interconnection. The U S WEST switch must pass signaling information to the CLEC switch for interconnection to work. Any call from a CLEC customer to a U S WEST customer or from a U S WEST customer to a CLEC customer involves signaling. Access to signaling at that level is not unbundled signaling. Unbundled signaling refers to the ability of a CLEC to lease signaling capability from U S WEST instead of building its own signaling network or leasing signaling capability from a third party. Specifically, the CLEC must either install a Signaling Transfer Point (STP), lease this capability from U S WEST, or lease an STP from a third party. The STP is the switching and mediation point for signaling traffic from one switch to another switch.

U S WEST's SGAT intermingles access to signaling for interconnection and signaling as an unbundled element.<sup>22</sup> U S WEST improperly places access to the signaling in the Unbundled Loop section of the SGAT. It is not at all clear why unbundled signaling is part of the U S WEST section on unbundled loops, although it could be implied that by doing so, U S WEST intends to limit access to signaling only when an unbundled loop is ordered. This is inappropriate. Signaling is a stand-alone

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<sup>22</sup> U S WEST SGAT, Section 9.4.

network element. Moreover, CLECs must have access to signaling for purposes of interconnection. U S WEST is required, as are all LECs, to interconnection under Section 251(a) of the Act. Denying CLECs access to signaling for interconnection effectively impairs the ability of all LECs to interconnection and exchange traffic and, therefore, violates the Act.

In her Affidavit, U S WEST Witness Bumgarner also intermingles the access to signaling for interconnection and unbundled signaling, and states that signaling and databases are not considered by U S WEST to be unbundled network elements. Every mention of signaling and databases in Ms. Baumgarner's Affidavit is prefaced with the statement: "The FCC's vacated rules... ." Thus, virtually every offer made by U S WEST relative to signaling hinges on the outcome of the FCC remand proceeding. The FCC has now reaffirmed and expanded its UNE rules in the UNE Remand Order.<sup>23</sup> U S WEST has not updated its SGAT to conform to the FCC's UNE remand order, although the order has been out for several months. Accordingly, CLECs have no assurance as to whether they will receive access to signaling and, if so, what they will ultimately receive for signaling from U S WEST under the SGAT.

In addition, there are quality and reliability concerns regarding the way in which U S WEST is offering access to signaling. U S WEST requires the ICDF or SPOT frame in interconnection arrangements that involve CLEC provided facilities with collocation. As discussed above, the SPOT frame adds points of failure to any circuit, as well as additional cost. With the current U S WEST required architecture, signaling links might actually go through both a DS1 or DS3 ICDF or SPOT frame and a DS0 ICDF or SPOT frame. Most circuits provisioned to U S WEST customers are not required to traverse

these additional frames. All of these additional and unnecessary points of failure constitute discrimination in the way U S WEST provides access to signaling.

## **B. Access to Databases**

AT&T also has concerns whether U S WEST will offer access to call-related databases. The SGAT includes call-related databases in the section on Unbundled Loops, and Ms. Bumgarner's Affidavit, which has not been amended, implies that U S WEST is considering an interpretation of the new FCC orders to unilaterally prevent CLEC access to call-related databases. Since U S WEST has felt free to unilaterally interpret contracts and unilaterally operationalize those interpretations, as they have with reciprocal compensation, Ms. Bumgarner's Affidavit is troubling.

The impact of this is that, in many cases, the CLECs depend on these databases for correct handling of calls. If access to them were withdrawn, some CLECs would be unable to process calls and their business would be severely damaged.

There is a clear relationship between access to operational support systems and access to call-related databases and signaling. The FCC requires that U S WEST provide nondiscriminatory access to the various functions of its operational support systems in order to provide access to such databases and signaling links in a timely and efficient manner. U S WEST has yet to demonstrate that the access it provides to its operational support systems meets the requirements of the Act. As a result, it is virtually impossible for U S WEST to meet its obligations to provide access to call-related databases and signaling networks until the evaluation of U S WEST's OSS takes place. Access to the

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<sup>23</sup> *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order, CC Docket No. 96-98, FCC 99-238, released November 5, 1999 ("UNE Remand Order").

Number Portability database is a good example. This database is one of the required databases for this checklist item. However, access to this database is not in the U S WEST SGAT section on databases associated with signaling. The U S WEST SGAT addresses the Number Portability database in their Number Portability section, which is not at issue in this part of the bifurcated proceedings.

In addition, the SGAT does not provide nondiscriminatory access to databases. First, in Section 9.6.1.2, LIDB storage, U S WEST requires that CLECs license the CLEC data for storage in U S WEST's database. No terms or conditions for this license are provided.

Second, Section 9.6.1.3 acknowledges that U S WEST does not provide parity to its provisioning of the LIDB database, since it addresses the future provision of electronic access to the database. Thus, U S WEST provides electronic access for its own customers, but not for CLEC customers. Similarly, Section 9.6.1.4 also acknowledges a deficiency in parity treatment, since all CLEC line records are to be provisioned through a manual process.

Third, in Section 9.6.2.2.2, U S WEST requires that CLECs e-mail to U S WEST an ASCII file of their line records 2 times a day, regardless of any need to do so. If there are no changes to the CLEC line records, this submission would not be necessary. This simply seems like an opportunity for U S WEST to assess the charges referenced in Section 9.6.2.3.1 (See discussion below).

Fourth, in Section 9.6.2.3.1, U S WEST recites that the CLEC must reimburse U S WEST for all charges that U S WEST incurs relating to the input of CLECs' end user line record information. No definition is given for these charges, and there is ambiguity

within the terms – is it charges that U S WEST incurs or is it costs (charges is the term used).

Fifth, U S WEST is still requiring faxes for queries until an electronic means becomes available. This clearly discriminatory treatment is set forth in Section 9.6.2.5 and 9.6.2.6.

Sixth, LIDB inquiry service is not mandated to be provided at parity, but rather assumes a 7 day order fulfillment process and a cumbersome LOA process. This violates the equal in quality standard.

Based upon these problems, U S WEST cannot meet the requirements for this checklist item.

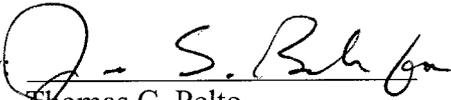
### **III. CONCLUSION**

U S WEST does not presently meet the requirements of checklist items 8, 9 and 12. Until the issues raised by AT&T and other CLECs are resolved, the Commission should not make any findings that U S WEST complies with these checklist items.

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...

RESPECTFULLY SUBMITTED this 19th day of January, 2000.

AT&T COMMUNICATIONS OF THE  
MOUNTAIN STATES, INC. AND TCG  
PHOENIX.

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## CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of Additional Comments of AT&T and TCG Phoenix on Checklist Item 8 were filed this 19<sup>th</sup> day of January, 2000, with:

Arizona Corporation Commission  
Docket Control – Utilities Division  
1200 West Washington Street  
Phoenix, AZ 85007

And that a copy of the foregoing (w/o attachments) was sent via electronic mail to parties of record,

And that a copy of the foregoing was sent via United States Mail, postage prepaid, this 19<sup>th</sup> day of January, 2000 to the following:

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# **EXHIBIT 1**

Arizona  
 Docket No. T-00000B-97-0238  
 ELI 01-002

INTERVENOR: Electric Lightwave, Inc.

REQUEST NO: 002

RE: Interconnection/Collocation

Witness: [to be provided by U S WEST]

Please provide a detailed explanation with diagrams of all equipment that CLEC interconnection trunking must pass through from a collocation cage in a U S WEST office to the U S WEST switch or other U S WEST equipment where it is interconnected. Please provide these diagrams for interconnection trunks involved in the exchange of EAS local traffic, signaling trunks for SS7 messages, trunks for 911/E911, and connection to unbundled loops, unbundled switch ports and unbundled transport.

RESPONSE:

U S WEST is investigating whether it has non-privileged information that responds to this question. U S WEST will supplement this response when this investigation is complete.

Respondents: Bob Mohr, Manager  
 Craig Morris, Manager  
 Ron Tickel, Manager

SUPPLEMENTAL RESPONSE 05/17/99:

U S WEST objects to this Data Request in that it seeks diagrams of "all equipment that CLEC interconnection trunking must pass through . . . ." This Data Request arguably seeks a description of every conceivable configuration that may occur, which request would be overly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

Without waiving this objection, U S WEST will provide typical diagrams of CLEC interconnection trunking within a U S WEST central office.

(a) Interconnection: Questions as to the specifics of every cross-connection point involved in transit of trunks through an office are dependent on 1) the type of CLEC signal level (DS0, DS1, DS3 OCn) specified, 2) mixing options specified, 3) type of trunking, (primary high usage, direct final etc.) and 4) destination points specified by the CLEC.

Typical trunking scenarios could include: from the collocation cage, the CLEC cable is supplied by cable racking to a multiplexer, then to DSXs or DCS machines, then to a trunk distributing frame, to a trunk-side port on the switch.

(b) SS7 Signaling Links: CLECs may interconnect with U S WEST's STPs in several arrangements. All the equipment that a signaling link (circuit) would pass through to interconnect a CLEC switch and a U S WEST STP would depend on A) the type of connection (link) the CLEC requests, B) the CLEC location in the central office and C) the location of U S WEST's STP.

If a CLEC provides its own links from its end office switch to the U S WEST wire center in which the STP is located, the CLEC will obtain collocation in the wire center to terminate its signaling link. U S WEST will deliver the STP port to the CLEC's collocation cage, where the CLEC can complete the connection between the STP port and the CLEC-provided signaling link. In this instance, no ICDF or SPOT frame is required, although U S WEST may utilize an intermediate distribution frame -- just as U S WEST uses such frames for its own signaling links.

CLECs who provide their own signaling links through collocation have the option to use an ICDF. If this option is chosen, U S WEST will terminate the STP port on the ICDF, and the CLEC will complete the connection from the port to the CLEC's collocation cage by placing a jumper on the ICDF.

See Attachment A for basic 'A' and 'B' link arrangements.

(c) 911/E911

See Attachment B for call 911 topology scenario explanations and diagrams.

(d) Unbundled Network Elements

At the CLEC's request, U S WEST will deliver UNEs to a point of termination (POT) provided by the CLEC in the CLEC's collocation cage. In this case, the CLEC's cross connection panel serves as the demarcation point for the unbundled network element. Please see Attachment C for an illustration of this concept.

ICDF is also available for use by CLECs as an option. For example, a CLEC may choose to have its UNEs delivered to an Interconnection Distributing Frame (an ICDF) located outside its collocation cage. U S WEST will deliver UNEs to the ICDF, which serves as the demarcation point for the UNE. Please see Attachment D for an illustration of this concept.

Respondents:        Bob Mohr, Manager  
                       Craig Morris, Manager  
                       Ron Tickel, Manager

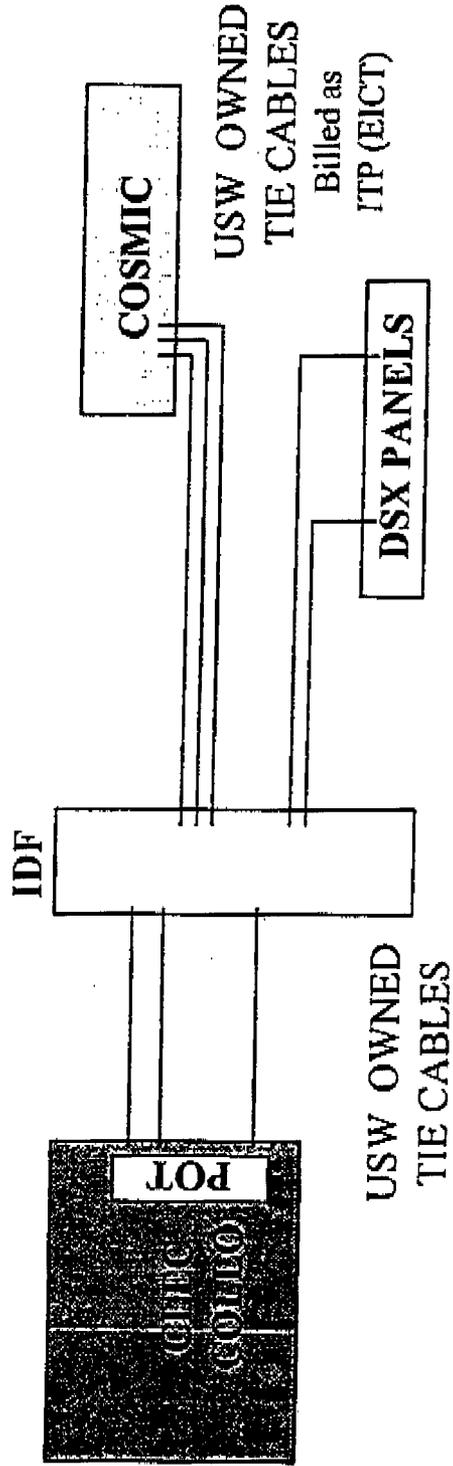
SUPPLEMENTAL RESPONSE 07/15/99:

Attachment E provides 2 diagrams of typical collocation and interconnection

arrangements with the basic rate elements. The recurring and nonrecurring rates can be found in Exhibit A of the Arizona SGAT. Every central office is different from all others in that the distance between equipment and location of the equipment is unique to that central office. This makes it virtually impractical to develop a diagram the will be all inclusive.

Respondent: Ron Tickel, Manager

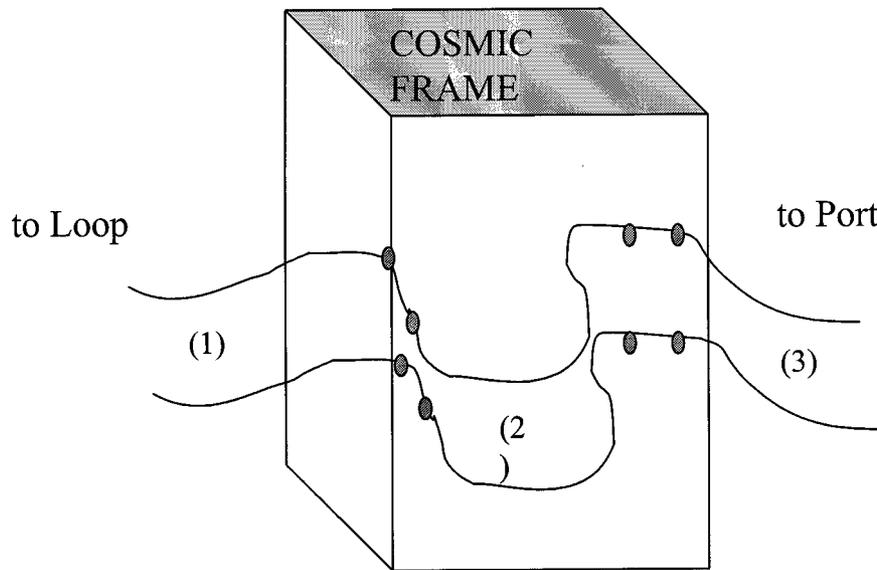
# POT - Interconnection Tie Pair (ITP/EICT)



- Point of Termination frame/blocks in CLEC collocation
- USW provides tie cables between collo and IDF
- USW will use CFA assignment process
- USW charges the UNE plus ITP (EICT)

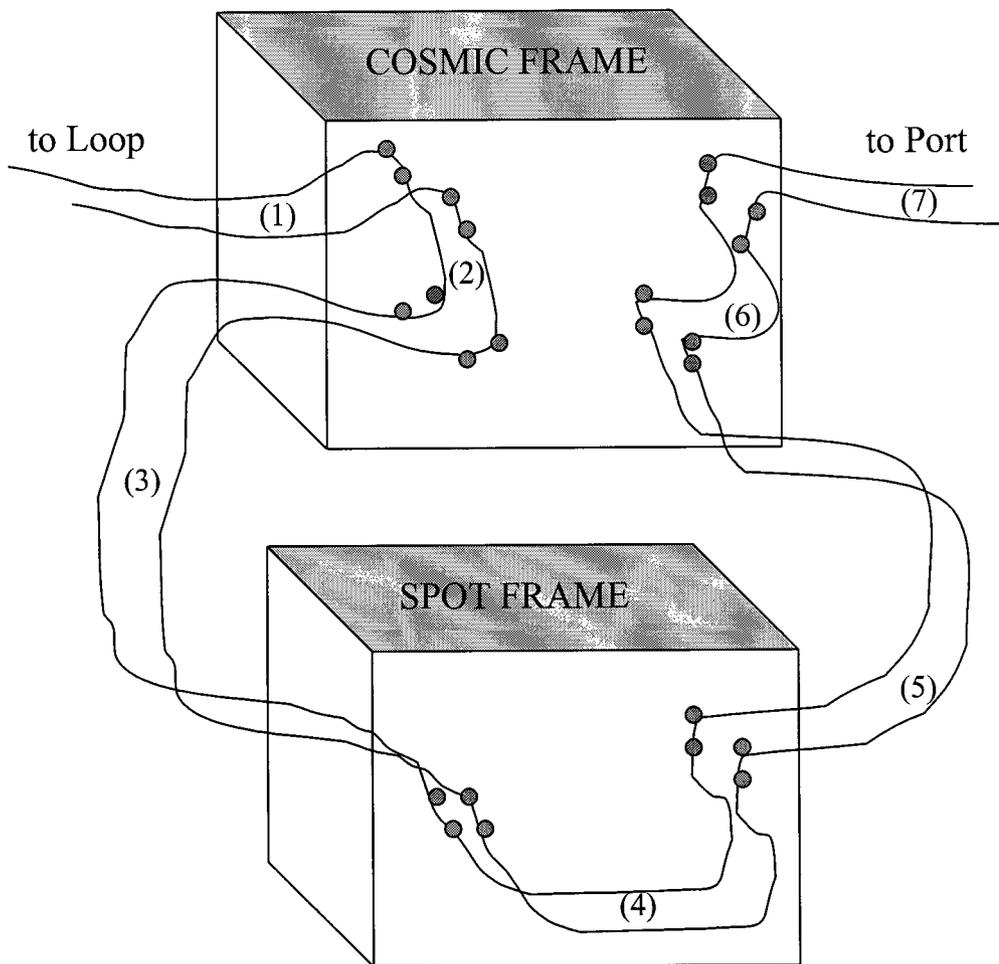
## **EXHIBIT 2**

# Typical U S WEST LOOP-PORT Connection

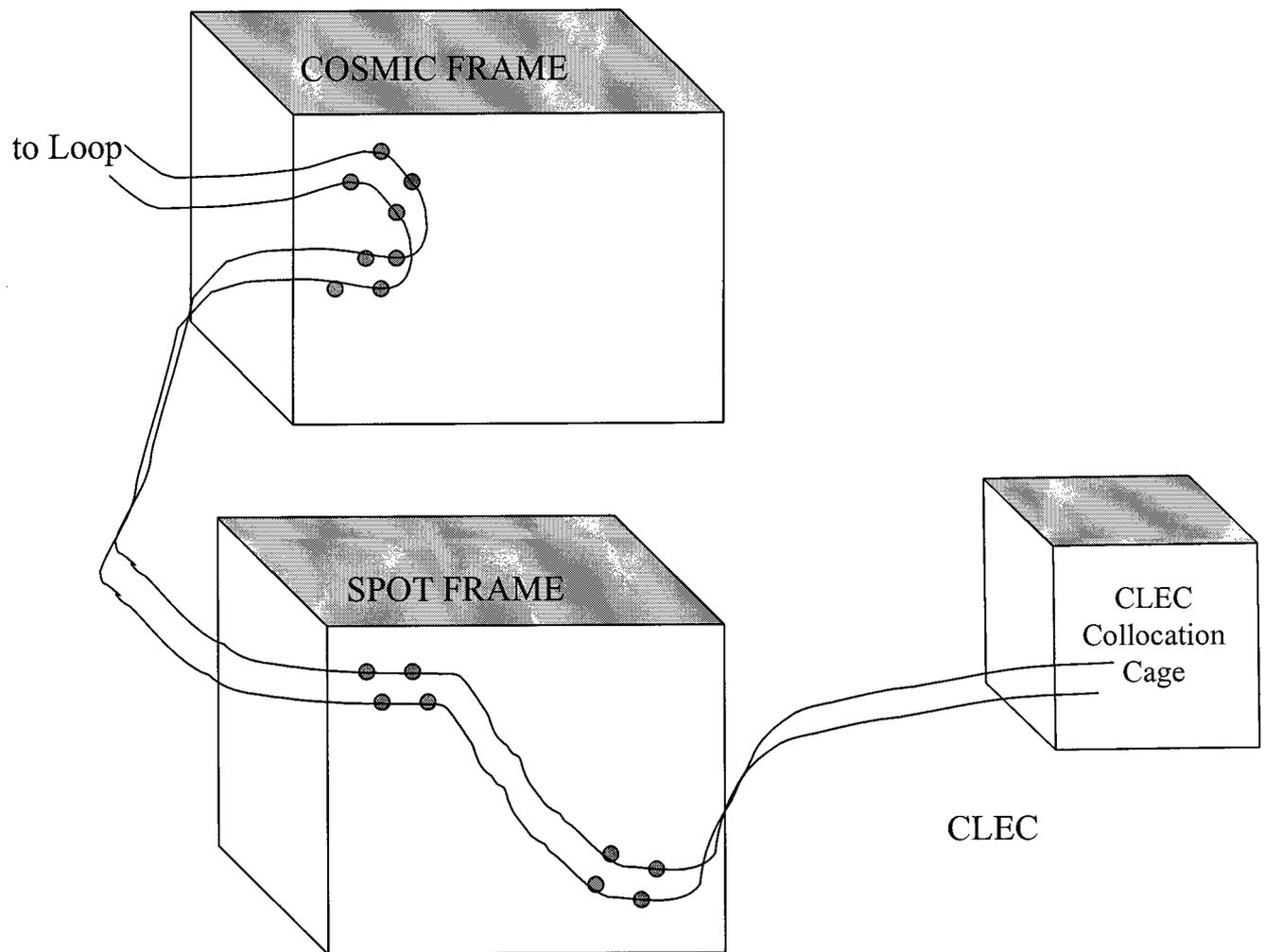


## **EXHIBIT 3**

# CLEC LOOP - PORT Connection with SPOT Frame



# Exhibit 3



## **EXHIBIT 4**

ASR Number	Review Notes	
1 PHOP9900076	1/20@20:21 - LSR sent; 1/22@9:30 - Rejection rec'd, needs 3 separate LSRs; 1/22@17:39 - 3 LSRs sent; 1/22@13:53 - LSR FOC Rec'd, DD=1/29@5pm; 1/28 - ALS not ready to port on 1/29; 2/1@12:08 - supp sent, DD=2/15; 2/2@13:18 - FOC rec'd, DD=2/15; 2/6@13:13 - supps to correct numbers porting and to cancel 1 LNP order; 2/9@10:37 - FOC rec'd, DD=1/29 & canceled other order; 2/26 - call from USW confirming 3/1 port [no such ALS date], delayed verbally to 3/15 to match other order; 3/15 - activated 9TNS, ported and couldn't call #s, bad eod, reverse porting requested, USW retaking #s; 4/8@12:03 - supp sent, DD=4/16; 4/16 - vendor can't port, called USW, rescheduled; 4/19@15:52 - FOC rec'd, DD=4/30@5pm; 5/4 - FOC rec'd, DD=5/24; 5/24@18:41, supp sent, DD=5/27 [prior discussion]; 5/25 - customer down, TT76830 with USW, USW records show change to 5/27 but think a dept pulled #s from their switch, customer continues to receive disconnect msg; now USW says unaware of 5/27 date change; 5/27@10:29 - FOC rec'd, old 602 NPA not built into their fix; 7/28 - 1 TN yet to be restored, [notes indicate fixed some time on 7/28; 5/27@10:29 - FOC rec'd,	
2 PHOP9900379	This order is a companion order to PO99900076, all issues are the same	
3 PHOP9901494	4/1 - Facility FOC=4/12; 4/8 - USW hold, no facilities; 4/14 - Held for mid span doubler job scheduled for 5/20, escalated with USW; 5/13 - Vendor building test trunk group. Customer not ready for LNP now; 6/7 - Customer wants to port in phases; 7/9 - LRN sent, DDS=7/26&27; 7/15 - Committed to 7/26 with some TNS not matching; 7/26 - asked USW for commitment to other TNS, initial set ported, other TNS have # problems; 7/27 - delayed porting to sort out # problem [NPA permissive dialing]; 8/2 - BTN wrong, supped on 8/3 DDS=8/24, 8/17 - LRN rejected, LSR TNS and CSR TNS don't match; 8/19 - Customer doesn't want remaining porting until initial TN problems solved [no details]; 8/27 - supp sent with new DD=9/14; 8/30 - ported 1000 TNS, tested fine except for 1st TN gets disconnect recording; 9/7 - USW DD=9/14 for remaining TNS.	
4 PHOP9901495	7/8 - Plan to port TNS in phases; 7/9 - LSR sent, DD=7/28&7/29; 7/15 - Rejected = TNS and BTN problem; 7/26 - supp sent to fix rejection; 7/26 - activated 520 TNS; 7/27 - LNP FOC, DD= 8/6&8/9; 8/6 - activated 900 TNS; 8/9 - Customer having problems receiving calls from some areas, disconnect msg; USW TT=SC425068; 8/9 - 440 TNS activated.	
PHOY9900492	Customer reported disconnect recording on both of the lines	US WEST did not notify ALS of cut and this is why the customer had some down time
PHOY9900636	1 line RING NO ANSWER and the other 1 line DIS CONNECT MESSAGE	Customer was down because US WEST did not notify ALS of the cut which was done late
PHOY9900351	Can't receive calls, problem on all lines	US WEST did not tie down pairs at the central office
PHOY9900200	no dial tone	USWEST dispatch finally repaired last night
PHOY9900138	US WEST had wiring issues, US WEST was suppose to work this order on July 2 at 11:00am, US WEST did not complete this order until July 6	Provisioning error on USWest Facilities (Out)

PHOY9900256	No Dail Tone on 2 lines, after testing	US WEST facilities were out	US WEST tech did not disclose what exactly was wrong with this order
PHOY9900404	ALS tested all the lines and received disconnect recording on all the lines	US WEST dispatched and cleared all trouble found	US WEST found trouble in the co-lo on 4 of the 6 lines, (facilities out)