

Date Mailed July 9, 2003
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BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into SBC Wisconsin's Unbundled Network  
Elements

6720-TI-161

**UNE COMPLIANCE ORDER**

This is a determination regarding the compliance filing cost studies required by the Commission's March 22, 2002, *Final Decision* in this proceeding.

**Introduction**

On March 22, 2002, the Commission issued its *Final Decision* in this proceeding in which it adopted cost study methods that are compliant with Total Element Long Run Incremental Costs (TELRIC) pricing standards for unbundled network elements (UNEs). This followed a hearing that was held from February 26 to March 8, 2001 (February 2001 hearing). The *Final Decision* directed SBC Wisconsin (SBC), formerly known as Wisconsin Bell d/b/a Ameritech Wisconsin, to rerun and file its cost studies, the resulting UNE rates, and draft tariffs by May 21, 2002, in accordance with the *Final Decision*. The Commission also determined that final rates determined through application of the methodology established in that order would be effective May 21, 2002.

SBC's compliance cost studies and proposed tariffs included 50 confidential cost studies that filled six binders. On June 21, 2002, the Commission issued its *Order Regarding Compliance Filing* setting the due dates for comments and giving instructions for comments. On

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August 1, 2002, a group of Competitive Local Exchange Carriers (CLECs) consisting of AT&T Communications of Wisconsin, L.P., WorldCom, Inc., McLeodUSA Telecommunications Services, Inc., and TDS Metrocom, Inc. filed joint comments on SBC's cost studies (CLECs' August 2002 comments), and filed their own proposed revised cost studies and tariffs. Following the CLECs' comments, staff submitted a data request (staff's August 2002 data request) to SBC covering areas that were not reviewed by the CLECs. On September 10, 2002, SBC filed its response to the CLECs' comments and a separate response to staff's data request (SBC's September 2002 response).

A Decision Matrix listing the issues raised in the CLECs' August 2002 comments and staff's August 2002 data request and identifying decision options for the Commission was prepared and sent to parties for information and further comment. Comments were received on November 27, 2002.

A consolidated document was prepared that combined the CLECs' August 2002 comments on SBC's May 21, 2002, compliance filing, staff's August 2002 data request on the same compliance filing and SBC's September 2002 responses to CLECs' and staff's issues, including references to the cost study appendices (Consolidated Document). On December 10, 2002, staff transmitted the Decision Matrix and the Consolidated Document and appendices to the Commission for its consideration. A draft order was prepared and sent to parties on March 17, 2003, to assist the Commission in making its determinations in this proceeding. Comments were received on April 25, 2003. In addition, a letter identifying technical corrections needed for the Draft Order was issued on April 18, 2003. On June 16, 2003, staff provided the Commission with a memo identifying the issues still in dispute.

At the June 26, 2003, open meeting, the Commission considered the record, and now issues this decision with respect to SBC's Compliance Filing.

A list of participating parties is attached hereto as Appendix A.

### **Findings of Fact**

1. It is reasonable for the Commission to rely on SBC's May 21, 2002, cost studies as complying with the *Final Decision*, except for the issues identified and discussed in this order.

2. It is reasonable for the Commission to accept SBC's September 10, 2002, revised cost studies for Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect; Switch Port Conversion; UNE-P Migration without Dial Tone-Install; and UNE-P Migration without Dial Tone-Disconnect as reasonable implementations of the *Final Decision*, modified only for further determinations regarding travel costs.

3. It is reasonable for the Commission to accept the CLECs' August 1, 2002, cost studies for Switch Port Service Order-Install, Switch Port Service Order-Disconnect, Subsequent and Record Only Loop Service Order, Record Only Switch Port Service Order and Subsequent Switch Port Conversions rate elements as reasonable implementations of the *Final Decision*, modified only for further determinations regarding joint and common costs.

4. It is reasonable to apply the Administrative charge, the Design and Central Office (CO) Connection charge, and the Customer Connection charge to Digital Service 1 (DS1) and DS3 unbundled loops, and to apply a Line Connection charge based on 100 percent manual cross-connects to voice grade unbundled loops. In addition a Line Connection charge with 2 percent manual cross-connects shall apply to unbundled network element-platform (UNE-P).

This is a reasonable means of implementing the *Final Decision*. Further adjustments are also necessary to remove travel costs.

5. It is reasonable for the Commission to apply its Category 2 process to the final implementation of the Administrative charge, the Design and CO Connection charge, and the Customer Connection charge applicable to DS1 and DS3 products. The Category 2 process refers these determinations to the negotiation/arbitration interconnection agreement process.

6. It is reasonable to develop migration charges for UNE-P only, but not for other UNEs, at this time.

7. It is reasonable to allow SBC to charge a Manual Service Ordering charge under the limited circumstances described in this order and to apply its Category 2 process to the final implementation of this charge. The Category 2 process refers these determinations to the negotiation/arbitration interconnection agreement process.

8. It is reasonable to require SBC to remove the Billing Development charge from its tariffs and reinsert the explanation from the Commission's docket 6720-TI-120 decision<sup>1</sup> regarding the Usage Establishment charge. This determination also applies to the Trunk Order Development charge.

9. It is reasonable to require SBC to remove travel costs from any cost study that did not include those costs when presented in the February 2001 hearing.

10. It is reasonable to apply SBC's confidential discount percentage to the November 2000 contract prices for Digital Loop Carrier (DLC) electronics while the Commission conducts

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<sup>1</sup> Matters Related to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell, Inc., d/b/a Ameritech Wisconsin), docket 6720-TI-120, issued May 30, 1997, pp. 68-69.

further process to determine the actual discount earned as of March 22, 2002. The Commission will apply its Category 3 process, delegation to the Division Administrator to this determination.

11. It is reasonable for the Commission to stay its determinations regarding the price of the High Frequency Portion of the Loop and Subloop (HFPL and HFPSL), and the unbundling of Project Pronto.

12. It is reasonable to use the CLECs' method of weighting growth and replacement lines.

13. It is reasonable to accept that the signaling costs included in the unbundled local switching shared transport charge are different than the signaling costs in the signaling system seven (SS7) charges.

14. It is reasonable to require SBC to remove the adjustment to TELRIC plant related expenses made in its May 21, 2002, compliance filing of its joint and common model.

15. It is reasonable to allow the addition of operational support system (OSS) testing costs to the joint and common mark-up in the Network Support category. The Commission will apply its Category 3 process, delegation to the Division Administrator, to determine the amount of OSS testing costs to be included. In the interim, the Commission will use SBC's proposed \$12.488 million.

16. It is reasonable to require SBC to apply the Commission's investment growth adjustment to the full plant investment instead of to the incremental price increases in the joint and common cost model.

17. It is reasonable to require SBC to compound the maintenance productivity factor over three years and to reduce the maintenance factor using data from the amount of fully depreciated plant.

18. It is reasonable to delegate the determination of average actual historical costs of IDLC conversions to the Division Administrator using the Category 3 process with no interim rate.

19. It is reasonable to apply the Category 2 process, the use of individual interconnection agreements, to the determination of Loop Qualification costs.

20. Appendix B shows the resulting rates from the cost study methods the Commission determined to be TELRIC compliant in the *Final Decision*.

### **Conclusions of Law**

1. The Commission has jurisdiction to issue this order under Wis. Stat. §§ 196.02(1), and (7), 196.03, 196.04, 196.06, 196.196, 196.20, 196.204(3), 196.219, 196.28, 196.37(2), 196.40 and other provisions of Wis. Stat. Ch. 196 and 227, as may be pertinent hereto and 47 U.S.C. §§ 251, 252, 253(b), 261(b)(c) and other provisions of 47 U.S.C. § 251 *et. seq.* as may be pertinent hereto.

2. The Commission has authority to require SBC to file tariffs as provided in this order under Wis. Stat. §§ 196.19, 196.196, and 196.219(2m).

3. The Commission makes the following determinations, in conclusions 4-8 which as discussed below, are stayed.

4. Unbundling the features, functions and capabilities of the Next Generation Digital Loop Carrier (NGDLC) architecture that supports both voice and xDSL services is required by the public interest and consistent with the factors in Wis. Stat. § 196.03(6).

5. CLECs are impaired within the meaning of 47 U.S.C. § 251(d) and 47 C.F.R. § 51.317 without all the features, functions and capabilities of the NGDLC architecture that supports both voice and xDSL services.

6. CLECs are impaired unless SBC offers a modified end-to-end Broadband UNE when new line cards become available.

7. CLECs are impaired unless SBC makes available to all telecommunications carriers all the technically feasible services, features, and functions of the NGDLC architecture that supports both voice and xDSL services when provided by manufacturers. This requirement applies to both existing and future features, functions, and capabilities.

8. CLECs are impaired unless SBC provides the line splitting functionality of the NGDLC architecture to any requesting telecommunications provider.

9. The cost study methods adopted by the Commission comply with 47 C.F.R. 51.303 defining forward-looking TELRIC costs and 47 C.F.R. § 51.505 which requires the addition of a reasonable allocation of forward-looking common costs. Cost study methods that conflict with those adopted by the Commission are herein presumed not to comply with the required federal standards.

## Opinion

The determinations in this order are grouped into the following sections: Nonrecurring Charges; Unbundled Loops; Project Pronto/Broadband UNE; Unbundled Local Switching; and Other Issues. The discussion in this order references, and covers, the issues that were raised in CLECs' August 2002 comments and staff's August 2002 data request. Unless otherwise indicated, this order refers to the CLEC's August 2002 comments, staff's August 2002 data request and SBC's September 2002 response. The *Final Decision* in many cases adopted certain adjustments conceptually, but did not specify the necessary adjustments to specific cost studies. This order specifies how cost studies should be modified to comply with the Commission's *Final Decision*. The Commission finds herein that, unless the CLECs or staff have raised an issue, SBC's May 21, 2002, compliance filing is in compliance with its *Final Decision*.

In evaluating the outstanding issues, the Commission determined that further process will be necessary for certain issues to determine the rates that result from the Commission's selected methodologies. The Commission developed three categories of processes that will be followed in making these determinations.

Category 1: This category is applicable to rate elements where the Commission has determined how the cost study methods are required to be modified, but there is not sufficient information in SBC's September 2002, filing to determine the resulting rates. However, the required adjustments are identified very precisely in this order. For this category, it is reasonable for the Commission to rely on staff to issue data requests to SBC to obtain the revised cost studies necessary to implement the Commission's decisions. It is reasonable for the Commission to rely on staff to advise it as to whether SBC has properly implemented its adjustments.

Category 2: This category is applicable to rate elements that are not likely to be used by a broad spectrum of providers. In light of the limited number of providers utilizing these rate elements, it is reasonable to have the final determinations regarding the application of the Commission's methodologies to take place in the context of negotiation and/or arbitration of interconnection agreements per 47 U.S.C. §§ 251 and 252.

Category 3: This category is applicable to rate elements that are likely to be purchased by the majority of providers in the state and where SBC presented new data relating to these elements in the compliance phase. Because of the broad impact of these rate elements, and the recent submission of data affecting these prices, the CLECs should be offered an opportunity to respond to SBC. In the interest of having a prompt and efficient process for the CLECs to be heard and the Commission's policy determinations regarding TELRIC to be implemented, the Commission will delegate further process and implementation decisions on these issues to the Division Administrator. The Division Administrator will work with the Administrative Law Judge to facilitate the process, including any discovery matters. The Commission emphasizes that this process requires that at this time, inputs to the cost models be established for use in the interim and true-up time periods, until this process is completed by the Division Administrator.

In the discussion below, the Commission specifically identifies which category of process applies to each of the respective issues.

The Commission further made determinations with respect to the HFPL and Project Pronto, which it herein stays. In staying the implementation of these determinations, the Commission is acknowledging that the FCC's Triennial Review Order is expected to significantly change unbundling requirements for Broadband services and HFPL. Because the

issuance of the FCC's order may be imminent, the Commission stays these provisions. The Commission reserves jurisdiction to revisit these determinations either in this docket, or in a separate proceeding.

### **Non-Recurring Charges**

Non-recurring charges reflect one-time costs for activities required to initiate or provide telecommunications services and UNEs. Such activities are generally accomplished through SBC's OSS. This section of the decision addresses 17 of the CLECs' non-recurring charges issues in two groups. The first group covers the assumptions for the proportions of Dedicated Inside Plant and Dedicated Outside Plant (DIP/DOP) in various cost models. The next group covers the assumptions regarding the amount of fall-out to manual processing in electronic ordering systems in various cost models. In deciding these issues as groups, the Commission accepts SBC's revised September 2002, cost studies to resolve the DIP/DOP issues, and the Commission accepts the CLECs' August 2002, cost studies to resolve the fall-out issues.

#### *Dedicated Inside Plant and Dedicated Outside Plant (DIP/DOP)*

The CLECs asserted that SBC did not comply with the Commission's determination to apply an assumption of 95 percent DIP/DOP, where DIP/DOP are applicable. As explained in the *Final Decision*, DIP/DOP facilities allow for rapid activation and deactivation of services with no physical disruption of service as physical connections remain in place and only a

command from the OSS is necessary to activate and deactivate service.<sup>2</sup> The specific rate elements in dispute include Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect; Switch Port Conversion; UNE-P Migration without Dial Tone-Install; and UNE-P Migration without Dial Tone-Disconnect.

The CLECs asserted that the 95 percent DIP/DOP should apply to all the Network Element Control Center (NECC) costs for the Line Connection-Install charge, and additionally, to all the costs associated with the Circuit Provisioning Center (CPC Design), Field Operations Group (FOG), Field Dispatch Group (FDG) and the NECC for Switch Port Connection-Install, Switch Port Connection-Disconnect and Switch Port Conversion charges. Similar adjustments were also proposed for UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect. The CLECs asserted that all of these groups are involved with field work and thus should have the 95 percent DIP/DOP apply.

SBC agreed that the CPC Design, FOG, and FDG groups should have the 95 percent DIP/DOP applied. However, SBC disputed the treatment of the NECC activities. SBC filed revised costs studies on September 10, 2002, to reflect its revised proposal. For certain of the rate elements, SBC asserted that the 95 percent DIP/DOP should not apply to the activities of “Screen Work Order (WORD) Document,” “Screen Facilities Information” and “Complete WORD Document.” SBC asserted that these activities would occur regardless of whether a line has DIP/DOP, asserting that screening and a work order are always necessary. For UNE-P Migration without Dial Tone-Install and Disconnect, SBC asserted that the only additional activities that should have 95 percent DIP and DOP applied are “Monitor inside technician” and “Monitor and release transactions.”

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<sup>2</sup> *Final Decision* at p. 178.

The Commission determines that SBC's September 10, 2002, revised cost studies for Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect Switch Port Conversion, UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect reasonably implement its *Final Decision*. SBC made significant adjustments related to DIP/ DOP in these cost studies in response to the CLECs' issues. SBC identified a limited number of activities, where it did not believe the 95 percent DIP/ DOP should apply. The Commission agrees these activities can reasonably be expected to occur regardless of whether DIP/DOP exists. The CLECs, in their comments on the Draft Order, further asserted that SBC's cost study actually applied the 95 percent DIP/DOP and then in a formula error, reversed that application. Regardless of the sequence of calculations, the Commission accepts SBC's treatment of NECC costs.

As a related issue, the CLECs asserted that SBC double counted the clerk costs in the NECC. SBC asserted that the NECC clerk time is not double counted when SBC's corrections for DIP/ DOP are made. The CLECs' revisions to the cost studies created the double counting. Because the Commission accepts SBC's DIP/ DOP corrections, it also accepts SBC's treatment of the NECC clerk time.

SBC also corrected a formula error identified by the CLECs, and SBC treated the FDC for UNE-P Migration without Dial Tone charges slightly differently than how the CLECs proposed. The treatment of FDC costs had very little impact on the final rate. In light of the difficulty associated with mixing and matching cost studies, the Commission accepts SBC's treatment of FDC costs for UNE-P Migration without Dial Tone charges. In summary, the Commission determines that SBC's September 10, 2002, revised cost studies for Line

Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect Switch Port Conversion, UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect are reasonable implementations of its *Final Decision* in this proceeding.

*Fall-Out*

The CLECs asserted that SBC did not comply with the Commission's 2 percent fall-out rate for orders both in combination and not in combination. As explained in the *Final Decision*, fall-out is the percentage of service orders that require manual intervention in an otherwise electronic processing system. When an order does not fall-out, but instead is able to flow-through, then no manual intervention is necessary. Manual intervention is costly.<sup>3</sup> The specific rate elements in dispute include Switch Port Service Order-Install, Switch Port Service Order-Disconnect, Subsequent and Record only Loop Service Order, Record Only Switch Port Service Order and Subsequent Switch Port Conversions. Additionally, as the Commission required only one service order to be applicable to UNE-P, the CLECs wanted clarification as to which service order should apply, the loop or the port service order. SBC entirely disagreed with the CLECs' proposed adjustments to the cost studies for these charges.

The CLECs contended that it is quite clear that the Commission intended SBC to use the 2 percent fall-out rate for both loops (which SBC has done) and switch ports (which SBC has not done). According to the CLECs, this is demonstrated in the language of the *Final Decision* that the 2 percent fall-out percentage applies both in combination (including a switch port) and not in combination (stand alone DS0 elements). SBC asserted that the *Final Decision* only required

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<sup>3</sup> *Final Decision* at p. 169.

changes to the Loop Service Order fall-out and did not require changes to the Switch Port Service Order fall-out. The Commission agrees with the CLECs and determines that SBC's interpretation would make meaningless the Commission directions relating to the application of the 2 percent fall-out rate to loops both in combination and not in combination.

The CLECs pointed out that SBC only applied the 2 percent fall-out rate to Initial Orders but not Subsequent and Record Only orders. The CLECs asserted that the Commission's reference to the "initial receipt" of an order was not intended to preclude the application of this fall-out rate to Subsequent and Record Only orders. The CLECs say this is demonstrated in the Commission's discussion of the "Stages of Processing."

The CLECs proposed to use a 2 percent end-to-end fall-out rate. [SBC] proposes different fall-out rates at various stages of the ordering and provisioning processes. For example, [SBC] uses different fall-out rates for the initial receipt of an order and for the provisioning of an order. The Commission finds that [SBC's] method of using different fall-out rates for different stage of ordering and provisioning processes is reasonable in determining forward-looking NRCs.<sup>4</sup>

The CLECs argued that Commission's use of the word "initial" was limited in its application to the service order process as opposed to end-to-end provisioning of an unbundled element. SBC asserted that because the *Final Decision* does not address activity that occurs after the initial receipt of an order, the Subsequent Order and Record Work Order costs were not required to be adjusted.

The Commission agrees with the CLECs that its use of the word "initial" was not intended to preclude the application of this fall-out rate to Subsequent and Record Only orders. The *Final Decision* used the word "initial" in connection with the stages of processing as

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<sup>4</sup> *Final Decision* at p. 170.

described by the CLECs. The Subsequent and Record Only form of charges were designed to reflect that less work is needed for this type of order than for an “Initial” order. As a result the Subsequent and Record Only charges were designed to be lower charges than the “Initial” order charge. SBC’s interpretation would result in Subsequent and Record Only order charges that are higher than Initial order charges. Because such a result is contrary to the purpose of these different charges, the Commission rejects SBC’s interpretation as unreasonable. The Commission accepts the CLECs’ cost studies for service orders and their interpretation of the word “initial.”

The CLECs also pointed out that SBC, in applying a single service order charge for UNE-P, chose the higher Switch Port Service Order instead of the lower Loop Service Order charge. As a result of the Commission’s accepting the CLECs’ proposed adjustment regarding fall-out rates, the difference between these two charges now should be minimal. Accordingly, the basis for this dispute has been eliminated. However, the Commission will clarify that it intends the Loop Service Order, not the Switch Port Service Order, to apply. SBC in its comments on the Draft Order requested that the Commission clarify that because this issue has become moot, SBC should not be required to rerun its UNE-P cost study. The Commission agrees that SBC is not required to rerun its UNE-P cost study.

In summary, the Commission agrees with all the CLECs’ adjustments to the following rate elements: Switch Port Service Order-Install, Switch Port Service Order-Disconnect, Subsequent and Record Only Loop Service Order, Record Only Switch Port Service Order and Subsequent Switch Port Conversions. The Commission determines that the CLECs’ August 1, 2002, cost studies for these rate elements are a reasonable implementation of its *Final*

*Decision* in this proceeding. The only further adjustment that is necessary is to implement the decisions on joint and common costs as discussed below.

*Administrative charge, Central Office (CO) Connection charge, and Customer Connection charge for unbundled loops, or Loop Provisioning and Line Connection*

The CLECs' comments and SBC's reply connected two issues that were presented as unrelated decisions in the Commission's *Final Decision*. One of those decisions was to require 100 percent manual cross-connects for stand-alone unbundled loops. The other decision was to not allow SBC to charge the Administrative charge, Central Office Connection charge, and Customer Connection charge for unbundled loops. In this order the Commission now addresses these two decisions as related issues.

In SBC's initial May 21, 2002, compliance filing, SBC included new cost studies for Loop Provisioning charges for DS0, DS1, and DS3 to implement the Commission's decision to use 100 percent manual cross-connects for stand alone unbundled loops. The CLECs objected to SBC's filing new cost studies in the compliance filing. The CLECs asserted that SBC interpreted the requirement to eliminate three cost elements as a justification for introducing entirely new cost studies for Loop Provisioning, thereby linking these formerly unrelated issues.

In staff's August 2002 data request, staff explained that it expected to see two versions of Line Connection charge cost studies; one that reflected the 2 percent manual CO cross-connects and another that reflected 100 percent manual CO cross-connects, as the staff understood that the Commission broke this charge into two charges with one applicable to stand alone unbundled loops and another applicable to loops in combination. The 100 percent manual CO cross-connects cost study would then be applicable to the Line Connection charges for stand alone

unbundled loops. The 2 percent manual CO cross-connects cost study would be applicable to loops in combination. As SBC had already filed a revised Line Connection cost study incorporating the 2 percent manual CO cross-connects, staff asked SBC to provide a revised line connection cost study with 100 percent manual CO cross-connects.

In SBC's September 2002 response to staff's August 2002 data request, and the CLECs' August 2002 comments, SBC did not file a revised Line Connection cost study, but instead filed revised Administrative charge, CO Connection charge and Customer Connection charge cost studies for each of DS0, DS1, and DS3 unbundled loops and withdrew its initial DS0, DS1 and DS3 Loop Provisioning cost studies.

In further relation to the Administrative charge, CO Connection charge, and Customer Connection charge, SBC, in its May 21, 2002, compliance filing, additionally eliminated those non-recurring charges (NRCs) for interoffice transport and added transport provisioning cost studies. In its September 2002 response, SBC withdrew the transport provisioning cost studies and filed revised Administrative charge, CO Connection charge, and Customer Connection charge for interoffice transport. These kinds of NRCs have previously existed for interoffice transport.

SBC made the following argument in its September 2002 response:

In the first paragraph on page 184 of the *Final Decision*, the Commission states:

“[SBC] proposed three new NRCs called an administrative charge, a design and CO connection charge, and a customer connection charge, in addition to its former initial service order charge and line connection charge. The CLECs argued that all the NRCs should be covered by a single charge and it is not clear if the CLECs realize new charges were being proposed. The Commission determined that [SBC] should not be allowed to add

additional NRCs until it makes a clear showing that the changes are indeed appropriate and how these charges would be applied.”

In the following paragraph the Commission rejects the three purportedly “additional” charges in the case of “DSO services.” The Commission misunderstood the nature and purpose of the three NRCs; these were *not* in addition to any service order or line connection charge. Instead, they were the *only* NRCs that would apply in the case of a digital loop. By pointing out this misunderstanding, [SBC] believes that it has made the requisite “clear showing that the charges are indeed appropriate.” Moreover, because the Commission rejected the three NRCs only for DSO services (see the second paragraph on page 184 of the *Final Decision*), and expressly approved the classification of DS1s and DS3s as “complex” (see pages 172-173 of the *Final Decision*), [SBC] believes it is reasonable in any event to read the *Final Decision* as approving the three NRCs in question in the case of DS1 and DS3 loops. Accordingly, [SBC] believes it is appropriate and fully consistent with the *Final Decision* to re-file its original studies and price proposals (subject only to revisions required by other determinations in the *Final Decision*). [SBC] is therefore withdrawing the new provisioning charge for digital loops and re-filing such original studies and price proposals. SBC September 2002 Reply Comments, Consolidated Document at pp. 27-28

SBC therefore explained that the proposed charges were to apply instead of the Service Order charge and Line Connection charge. Accordingly, the Commission in this review further clarifies the *Final Decision* to now identify that the Administrative, Design and CO Connection, and Customer Connection charges were not in addition to SBC’s former initial service order charge and line connection charge.

The Commission determines that it is reasonable to apply the Administrative charge, a Design and CO Connection charge, and a Customer Connection charge to DS1 and DS3 unbundled loops instead of the Service Order charge and the Line Connection charge. The Commission determines that it is reasonable to apply the Line Connection charge to DS0 (voice grade) unbundled loops. In addition, a Line Connection charge with 2 percent manual cross-connects should apply to UNE-P and 100 percent manual cross-connects to stand alone

unbundled loops. This is a reasonable means of implementing the Commission's decision to classify DS0 as a simple product and DS1 and DS3 as complex products. It also applies less manual processing for UNE-P loops than for stand alone unbundled loops as staff indicated it expected to see to comply with the *Final Decision* as described above. In the *Final Decision*, the Commission explained that it believed that the Administrative charge, a Design and CO Connection charge, and a Customer Connection charge were *per se* unreasonable in relation to the retail rates for voice grade service. Applying these charges to only DS1 and DS3 alleviates the concern that the charges were *per se* unreasonable.

The CLECs have not had an opportunity to comment on the revised cost studies for the proposed Administrative, Design and CO Connection and the Customer Connection charges submitted by SBC in its September 2002 response. The Commission determines that it will apply its Category 2 process to these charges, which is implementation through individual interconnection agreements. Accordingly, the level of these charges will not be determined in this order.

#### *Migrations versus New Installations*

Staff inquired why SBC did not create a Migration charge everywhere that SBC has an Install charge and a Disconnect charge. Staff explained that the language in the *Final Decision* appeared to be applicable to all rate elements and the *Final Decision* provided that migrations should not include design costs.

SBC responded that a "migration" is only applicable to an end-to-end service and that a stand-alone UNE requires physical work, most frequently in the central office, and thus cannot

be migrated. The Commission does not agree with SBC's assertion. A migration of a stand-alone unbundled UNE is possible. Service is in place, so facilities do not need to be designed to serve an existing customer.

Implementation of a migration charge in this manner, however, would affect almost all of the NRC rate elements. Identification of the work groups and rate elements potentially affected could lead to significant delays in determining final rates.

If this issue was of major concern to CLECs, they would logically have raised it in their own comments. The CLECs, however, did not raise this as an issue. Accordingly, in light of the difficulty in implementing this charge, the Commission determines that it is reasonable to accept the existence of only a UNE-P migration charge and to not develop migration charges for other UNEs at this time.

#### *UNE-P Manual Service Ordering*

An issue was raised whether SBC should be allowed to impose a UNE-P Manual Service Order charge. The Commission determines herein that SBC may charge a UNE-P Manual Service Order charge, but only in limited circumstances.

Staff, when initially reviewing SBC's May 21, 2002, compliance filing, believed the UNE-P Manual Service Ordering cost study was a new cost study because SBC's June 2000, cost studies did not include a UNE-P Manual Service Ordering cost study. However, SBC explained in its September 2002 submission that during the February 2001 hearing, SBC had submitted a UNE-P Manual Service Ordering cost study. This was in response to the flow-through rates the CLECs' proposed for service ordering. By including the UNE-P Manual

Service Order charge in its compliance filing, SBC assumed that the Commission allowed the UNE-P Manual Service Order charge in its *Final Decision* when it accepted the CLECs' 2 percent fall-out rate.

The Commission determines herein that it is reasonable to allow a UNE-P Manual Service Order charge under the following limited circumstances. When SBC has developed and offered an electronic process, but a CLEC has chosen to use a manual process instead of the electronic process, then it is reasonable to charge a higher UNE-P Manual Service Order charge. The Commission's assumption of a 2 percent fall-out to manual processing requires the use of an efficient electronic processing system to achieve this low cost in keeping with the forward-looking TELRIC pricing standard discussed in the *Final Decision*. SBC cannot be expected to achieve these low costs if CLECs chose not to use the electronic processing systems SBC provides. However, when SBC's electronic systems are simply not fully available for any reason, then it would not be reasonable for the CLECs to pay a higher charge. It is not reasonable for CLECs to incur higher charges because SBC's systems are not available or functioning properly.

In addition, as discussed in the *Final Decision*, the CLECs do not have a choice of another provider from which they can purchase unbundled loops that were put in service under decades of monopoly regulation.<sup>5</sup> SBC allows unbundled access because the Telecommunications Act of 1996 requires this. Accordingly, the CLECs are dependent on the quality of SBC's documentation and assistance to implement and operate electronic processing systems with SBC. If the documentation provided is incomplete or inaccurate, this process can

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<sup>5</sup> *Final Decision* at p. 167.

become difficult and time consuming. In normal business to business relationships, it is in interest of both the selling and buying companies to accomplish this process as efficiently as possible.

To ensure that SBC be reasonably compensated for its work while not allowing it to unfairly increase competitors' costs by creating inefficient ordering systems, the Commission determines that it is reasonable to place an additional limitation on when SBC may charge a UNE-P Manual Service Ordering charge. Once a CLEC has made sufficient implementation steps to be able to send a test electronic order, it should no longer be charged Manual Service Ordering charges. Choosing such a point in time to end the UNE-P Manual Service Order charges will help provide equal incentives for both parties to efficiently implement electronic systems.

As the UNE-P Manual Service Order charge cost study was presented during the February 2001 hearing in this proceeding, the CLECs have had an opportunity at hearing to challenge the study. The Commission determines that it will apply its Category 2 process to these charges, which is implementation through individual interconnection agreements. Accordingly, the level of the charge will not be determined in this order.

*Billing Development Charge*

An issue was raised in the August 2002 data request as to whether SBC should be allowed to charge a Billing Development charge. In light of its prior decisions, as explained below, the Commission determines that SBC is not allowed to implement this charge.

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The August 2002 data request stated that SBC deleted the following language from its current tariffs when it filed its May 21, 2002, compliance tariffs:

Pursuant to the direction of the Public Service Commission of Wisconsin in its Finding of Fact, Conclusion of Law and Second Order in docket 6720-TI-120, [SBC] will not recover the ULS Usage establishment costs as a separate charge and has reserved the right to revise the unbundled local switching rate to recover costs associated with usage development and implementation.

Following this deletion in its May 21, 2002, compliance tariffs, SBC inserted a new non-recurring charge in its compliance tariffs which it called a “Billing Development” charge. An issue arose whether the Billing Development charge covered the same costs as the former prohibited Unbundled Local Switching (ULS) Usage Establishment charge. SBC replied that, except for immaterial differences, the Billing Development charge did recover essentially the same costs as the former ULS Usage Establishment charge. However, SBC further explained in its September 2002 response that it had submitted the cost study for a new Billing Development charge at the February 2001 hearing which was not questioned.

The Commission determines herein that SBC shall not be allowed to charge its Billing Development charge. This is consistent with this Commission’s determination in docket 6720-TI-120, the evaluation of SBC’s Statement of Generally Available Terms and Conditions (SGAT).<sup>6</sup> During the February 2001 hearing, SBC submitted a cost study for a charge that was already prohibited. SBC did not request or even identify that it was proposing a charge that had previously been prohibited. This same analysis applies to the Trunk Order Development charge.

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<sup>6</sup> Matters Relating to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell, Inc., d/b/a Ameritech Wisconsin) docket 6720-TI-120, issued May 30, 1997, pp. 68-69.

In addition, in its September 2002 response, SBC requested that, if the Commission should disallow the Billing Development charge, SBC should be allowed to revise its ULS recurring charge to include these billing development costs. The treatment of any possible modification of ULS charges is also covered in the above paragraph that SBC removed from its tariff. Simply reinserting that language will resolve the issue of further modification to the ULS charges. The Commission determines that it is reasonable to require that SBC remove the Billing Development charge from its tariffs and add back the deleted the language that explained the Commission's decision in docket 6720-TI-120 regarding the ULS Usage Establishment charge.

*Travel to Unmanned Central Offices added to NRCs*

The CLECs raised an issue regarding the addition of travel costs to cost studies. The Commission herein determines that it will not allow SBC to add travel costs to any cost study that did not originally include travel costs.

The Commission in the *Final Decision* determined that it would accept SBC's proposed travel costs for travel to unmanned central offices based on SBC's proposed percentage of unmanned central offices.<sup>7</sup> The CLECs' August 2002, comments noted that SBC added travel costs to the charges for connection and disconnection of line splitters where previously SBC had not proposed travel costs. In addition, an issue was raised in the August 2002 data request that SBC had added travel costs to the NRCs for Line Connection charge, the DS0, and DS1 Digital Loop, DS3 Digital Loop, Subloop, Dark Fiber, Unbundled Local Transport and UNE-P Migration, which previously did not include travel costs. SBC's September 2002, response

explained that it added the cost for travel to unmanned central offices to any cost study which included the FOG.

The Commission determines that it is not reasonable for SBC to add travel costs to any cost study submitted in the February 2001 hearing that did not originally include travel costs. Where travel costs were not proposed, there is no record covering whether travel is likely to be necessary, or the frequency with which such travel might occur for those particular types of activities. No opportunity for cross examination was provided to the CLECs. The Commission, therefore, determines that it had accepted SBC's proposed travel costs as filed in the February 2001, hearing and requires any additional travel costs to be removed.

### **Unbundled Loops**

#### *DLC Electronics Discount*

The CLECs asserted in their August 2002 comments that SBC did not make the Commission's required adjustment to reflect the discounts SBC has achieved on its contract for electronics. The Commission determines herein that SBC should apply the confidential discount percentage from Mr. Palmer's affidavit in the interim time period until confirmation of SBC's actual discount earned as of March 22, 2002, can be made.

The CLECs in their August 2002 comments explained that SBC and the CLECs were in agreement that SBC did update its materials prices in its May 21, 2002, compliance filing to reflect the November 2000, contract for electronics. However, the CLECs disagreed with SBC's May 21, 2002, compliance filing as to whether further discounts should be applied to the November 2000 contract prices. The CLECs, in the February 2001 hearing, proposed a

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<sup>7</sup> *Final Decision* at p. 181.

16.02 percent discount which encompassed a standard term discount and a volume discount. The Commission in its *Final Decision* accepted that a standard term discount would apply, but determined that the volume discount should be based on the actual level of discount SBC achieves.<sup>8</sup>

The CLECs identified in their August 2002 comments that they had discovery disputes during the compliance discovery process with SBC regarding obtaining the data for the actual level of discounts achieved. The CLECs provided documentation of the questions they asked during the compliance discovery process and the material they received in response to their questions. SBC in its replies provided in the compliance discovery process limited the time period during which the actual discounts had occurred. SBC, in its September 2002 response, asserted that it did not receive any discounts off the base prices of the November 2000 price list during the year 2000.

The Commission in its *Final Decision*, however, did not limit the time period for the receipt of discounts. The Commission in its *Final Decision* required SBC to use the actual level of discounts it had achieved. The language in the *Final Decision* concerning the achieved level of discounts would be meaningless if the time period for the discounts was limited to only one month after the initial date of the contract. The Commission intended that any discounts achieved by the time of the *Final Decision* should be included.

The CLECs proposed in their August 2002 comments that the Commission should extrapolate and use a 20 percent discount. The CLECs believed that if the actual level of discounts achieved was less than their 16.02 percent proposed in the February 2001 hearing, then SBC would have provided this data in the compliance discovery process. Accordingly, the

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<sup>8</sup> *Final Decision* at p. 145.

CLECs concluded that the discount must be greater than 16.02 percent and proposed a 20 percent discount.

The Commission determines herein that it is unreasonable to assume no discounts simply because none were realized in the first month of the contract. In its comments on the Draft Order, SBC provided a confidential affidavit of Mr. Palmer providing data regarding its actual discount earned as of March 22, 2002. The Commission, accordingly, determines that it is reasonable to require SBC to use the percent discount in Mr. Palmer's affidavit while the Commission evaluates the accuracy of that data. The Commission will use its Category 3 process, delegation to the Division Administrator to evaluate the accuracy of that data. This adjustment will be subject to the true-up process of this order.

### **Project Pronto-Broadband UNE**

#### *Allocation of costs to the HFPL*

In this Compliance Order, the Commission affirms the determinations made in the *Final Decision* regarding the pricing of the High Frequency Portion of the Loop (HFPL). The Commission, however, acknowledges that the upcoming FCC Triennial Review Order may no longer require the unbundling of the HFPL, and accordingly stays the HFPL-related determinations.

The CLECs asserted, in their August 2002 comments, that SBC attempts to assess the full subloop rate (\$7.23 per month) when carriers use only the high frequency portion of loop (HFPL) for the subloop (or HFPSL). SBC, in its September 2002 response, asserted that the Commission's decision regarding the high frequency spectrum only applies to the full loop and

not the subloop. The Commission determines herein that both the loop and the subloop should be provided at no cost, per the *Final Decision* as explained below.

The CLECs asserted the Commission's decision required the HFPL, including the subloop, to be provided at no cost. The CLECs' cited the following discussion in the Commission's *Final Decision*.

After weighing the evidence about the impact of giving away the HFPL will have on competition from other facilities-based broadband providers and their incentives to invest in Wisconsin, the windfall in profits from the 50 percent rate, and the incentive for data CLECs to compete with [SBC] in Wisconsin, the Commission finds that it is reasonable for [SBC] to provide the HFPL UNE at no cost.<sup>9</sup>

SBC responded with the following argument:

The product covered by the Commission's *Final Decision* at p. 120 is the HFPL UNE. This is a completely different product from the Project Pronto HFPSL. The HFPL UNE is the high frequency portion of a stand alone home run copper loop. It is itself a UNE (or at least pre-USTA was a UNE), and can be accessed at the central office. The HFPSL, on the other hand, is a service that is but an integral part of what the Commission has labeled a UNE, i.e. the Project Pronto "Broadband UNE," but it is not itself a UNE. Accordingly, it would be inappropriate to read the Commission's order at p. 120 as applying to the Project Pronto HFPSL, particularly when it is "provided" as an integral and inseparable part of the Project Pronto "Broadband UNE."<sup>10</sup>

The Commission finds herein that its concerns about the windfall in profits from SBC's proposed 50 percent rate, and its effect on the incentive for data CLECs to compete with SBC in Wisconsin as explained in the *Final Decision* apply equally to both the subloop and the loop. Further, the Commission's *Final Decision* on the HFPL does not distinguish between the provision of HFPL on a loop versus a subloop. Clearly the language in the *Final Decision*

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<sup>9</sup> *Final Decision* at p. 120

<sup>10</sup> SBC's September, 2002, response

intends that both should be provided at no cost. Accordingly, the Commission determines herein that the HFPL including both the loop and the subloop HFPSL should be provided at no cost in the manner proposed by the CLECs in their August 2002 comments.

The Commission further determines, however, that the above determinations relating to the HFPL and HFPSL are stayed. The FCC has indicated that its Order may no longer require the unbundling of the HFPL as a UNE, subject to a transitional phase-out period. Given the imminent change in federal law, the Commission finds that its determinations relating to the HFPL and HFPSL should not be made effective. The Commission reserves jurisdiction to revisit these determinations in this docket, or in a separate proceeding, if it finds this necessary. Chairperson Bridge dissented from this stay.

#### *Division of DLC Costs*

The CLECs asserted in their August 2002 comments, that SBC's May 21, 2002, compliance tariff would require a data carrier to pay for the entirety of SBC's remote terminal cost even though the SBC's voice service would rely upon the same equipment. In SBC's September 2002 response, it asserted that in its May 21, 2002, compliance filing it had attributed common remote terminal costs, with a portion of these investments allocated to both the voice grade services and the Broadband UNE. SBC in its September 2002 response provided the Commission with references as to where in its cost study the allocations were made. As the Commission has decided to stay its requirements related to the unbundling of Project Pronto, there is no need to determine this refinement of pricing at this time.

*Range of Project Pronto Transmission Options*

In this Compliance Order, the Commission describes its authority under Wisconsin law to require unbundling of Project Pronto, supplementing the Final Decision's analysis under federal law. As in the above section on the HFPL, however, the Commission acknowledges that the upcoming FCC's Triennial Review Order may change federal law relating to Broadband Services. The indications from the FCC are that it will no longer require unbundling of Broadband Services as a UNE. The Commission accordingly stays its determinations requiring the unbundling of Project Pronto.

Project Pronto is the name SBC uses to describe its major capital investment in the infrastructure, deploying the new NGDLC. DLC technology allows a telecommunications carrier to provide broadband services over copper loops by utilizing the HFPL. Traditional forms of DLC access the HFPL through a line splitter and concentrate those signals using a Digital Subscriber Line Access Multiplier (DSLAM). The NGDLC technology provides DSLAM functionality through locating one piece of electronics in a Remote Terminal as a component of the loop structure and a corresponding piece of electronics in a Central Office which houses switching equipment. In the *Final Decision*, the Commission required SBC to provide a Broadband End-to-End UNE, but did not require access to the line cards in Remote Terminals.

The CLECs asserted that SBC's proposed Broadband UNE tariffs unreasonably limited the transmission options that are made available. The CLECs proposed that the Commission should require SBC to offer any transmission option which the Project Pronto network is capable of providing. The CLECs, in their August 2002 comments, proposed tariffs which provide

additional transmission options. SBC responded that its proposed Broadband End-to-End UNE tariff provides all the transmission options required by the FCC's *Project Pronto Waiver Order*. SBC asserted that it complied with the *Final Decision* by converting its Broadband Service Offering into an End-to-End UNE.

The Commission determines herein the *Final Decision* required SBC to offer, as an end-to-end UNE, all transmission options consistent with the FCC's *Project Pronto Waiver Order* and that this determination was authorized by Wisconsin law. This decision also further analyzes the transmission options that are consistent with the *Project Pronto Waiver Order* and further specifies the Commission's requirements for transmission options.

The Commission is authorized per Wis. Stat. § 196.219(3)(f) to require additional unbundling of intrastate telecommunications services based on a determination that additional unbundling is required in the public interest and is consistent with the factors under Wis. Stat. § 196.03(6). The following are the factors in Wis. Stat. § 196.03(6).

- (a) Promotion and preservation of competition consistent with ch. 133 and § 196.219.
- (b) Promotion of consumer choice.
- (c) Impact on the quality of life for the public, including privacy considerations.
- (d) Promotion of universal service.
- (e) Promotion of economic development, including telecommunications infrastructure deployment.
- (f) Promotion of efficiency and productivity
- (g) Promotion of telecommunications services in geographical areas with diverse income and racial populations.

The Wisconsin statutory standard for unbundling is similar to the federal statutory standard. The federal statutory standard, found in 47 U.S.C. § 251(d)(2), provides that "the failure to provide access to such network element would impair the ability of the

telecommunications carrier seeking access to provide the services that it seeks to offer.” While many of the witnesses at the hearing in this proceeding discussed the federal impair standard, staff witness Mr. Duane Wilson also identified the state factors to be considered in an unbundling analysis. He explained that parties addressed the promotion of competition, the promotion of efficiency and productivity, and to a lesser extent infrastructure deployment and consumer choice in their testimony. He further explained that there had been little discussion about the impact upon the promotion of universal service, quality of life issues, or service to rural areas and inner cities.<sup>11</sup> The Commission’s discussion in the *Final Decision* covered the state standards. This order further explains the Commission’s analysis of unbundling under those standards. Accordingly, the Commission’s discussion in this decision is organized around those state standards to further explain its analysis.

First, under the federal standard found in 47 C.F.R. § 51.317(b)(1), when analyzing impairment, the Commission must evaluate whether “lack of access to that element materially diminishes a requesting carrier’s ability to provide the services it seeks to offer.” In making this determination, consideration must be given to whether alternatives in the market are available as a practical, economic, and operational matter and may also rely upon factors such as cost, timeliness, quality, ubiquity, and impact on operations.

This same analysis is also applicable under the Wisconsin standard when evaluating whether additional unbundling is consistent with the promotion and preservation of competition and the promotion of customer choice. Unless there are practical ways for competitors to enter a market and reasonably expect to achieve cost efficiencies similar to the ILEC, the extent of competition will be limited. Competitors may only target high-usage customers, but would not

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<sup>11</sup> Transcript p. 4414.

compete ubiquitously if the ILEC obtains a competitive advantage derived from decades of monopoly regulation. Accordingly, the Commission evaluated whether alternatives are available in the marketplace as a practical, economic and operational matter as follows:

If [SBC] were still providing all of its voice services over the pre-existing network, there may have been merit to this argument [that access to the preexisting network is sufficient]. However, the additional means provided by Project Pronto architecture of providing competitive advanced services is also used to provide traditional voice services, giving [SBC] a degree of efficiency that CLECs cannot hope to achieve on the preexisting network.<sup>12</sup>

In the *Final Decision* the Commission analyzed the alternatives SBC said were available to competitors. In doing this analysis, the Commission considered the technological advance provided by Project Pronto as well.

Finally, [SBC] argued that even assuming the CLECs' assumptions come true regarding withdrawal of Broadband Service, copper retirement, and cross-talk problems, the Commission still could not lawfully require [SBC] to unbundle the Project Pronto DSL architecture now, because the Commission's determination must be "[b]ased on the actual state of competition."<sup>13</sup> The Commission's concerns reflect the state of technological change in [SBC's] provision of service to its own voice customers. There are no other providers that could be similarly situated as [SBC] and be able to offer comparable services at comparable prices.<sup>14</sup>

The technological advance reflected in [SBC's] Project Pronto architecture is that it has implemented electronics that provide DSLAM functionality through the use of Next Generation DLC (NGDLC). Using NGDLC technology, one piece of electronics is put in the [Remote Terminal] and another corresponding piece is put into the [Central Office]. In combination these provide DSLAM functionality.

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<sup>12</sup> *Final Decision* at p. 104.

<sup>13</sup> *UNE Remand Order* at par. 23.

<sup>14</sup> *Final Decision* at p. 106.

An added feature of the NGDLC is that for incoming copper facilities, it separates the data carrying the HFPL from the low frequency voice portion of the loop and directs both the data and voice transmissions over separate fibers back to the [Central Office]. So [SBC's] NGDLC serves both voice and data traffic, making it an efficient device to use remotely in the loop structure.<sup>15</sup>

In the federal evaluation, the FCC rules provide that additional factors that may be considered include whether the unbundling of network elements will promote the introduction of competition; facilities-based competition, investment, and innovation; reduced regulation; certainty that the element will be made available; and whether unbundling of the element is administratively practical. This same analysis is also applicable to evaluating whether additional unbundling is consistent with the promotion of economic development, including telecommunications infrastructure deployment and the promotion of efficiency and productivity.

The *Final Decision* included the following further analysis.

The Commission considers these additional factors. In light of a concern for rapid introduction of competition, and promotion of investment, the Commission chose not to require subloop unbundling of the Broadband end-to-end UNE. However, the Commission considers that it will not promote facilities-based competition, investment and innovation unless it requires unbundling of the Broadband end-to-end UNE. If practical, economical and operational alternatives to compete are not available, companies will not invest. The efficiencies [SBC] obtains through the Project Pronto architecture including the leveraging the scale of operations through its existing voice customers would inhibit other competitors from making alternative investments. The Commission, in choosing to unbundle the Broadband end-to-end UNE has chosen the path of least necessary regulation to promote competition. Finally, choosing to unbundle the Broadband end-to-end UNE is operationally practical and doing so will promote certainty in the industry of alternative means of providing DSL service.<sup>16</sup>

There was little discussion on the record regarding the other state factors including the promotion of universal service, quality of life issues, or service to rural areas and inner cities.

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<sup>15</sup> *Final Decision* at p. 93.

<sup>16</sup> *Final Decision* at pp. 109-110.

However, no evidence was presented that these factors would be adversely affected to a degree that would be separately identifiable from the general tension of competition with quality of life and universal service issues. Access to the NGDLC functionality would also increase the level of broadband competition in rural areas by the inherent abilities of the technology.

Accordingly, the Commission concluded that the additional unbundling of Project Pronto was required in the public interest and consistent with the factors in Wis. Stat. § 196.03(6). *Final Decision* at p. 113-114. Additionally, the Commission determined that the CLECs were impaired without this offering, with the meaning in 47 U.S.C. § 251(d)(2) and 47 C.F.R. § 51.317.<sup>17</sup>

The further issue to address is the meaning of the Commission's requirement that SBC offer, as an end-to-end UNE, all transmission options consistent with the FCC's *Project Pronto Waiver Order*. SBC argued that tariffing its Broadband Service Offering provides all the transmission options required by the FCC's *Project Pronto Waiver Order*. The Commission in its *Final Decision* did not limit its requirement to only tariffing the Broadband Service Offering. The Commission concluded:

[SBC's] Broadband Service offering does not remedy the impairment to CLECs seeking to offer DSL services different from those offered by AADS unless the various versions are made into end-to-end UNE options. Making Project Pronto a UNE will assure the continued offering and TELRIC pricing of access to the Project Pronto loop network. It will also allow Commission oversight of [SBC's] efforts to meet its obligation under the Project Pronto Order to pursue line card options for CLECs. Further, unbundling of Project Pronto [into piece parts] may be necessary if [SBC] does not meet its obligations under the Project Pronto Order to pursue line card options for CLECs.<sup>18</sup>

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<sup>17</sup> *Final Decision* at p. 116.

<sup>18</sup> *Final Decision* at p. 117.

This analysis required the unbundling of Project Pronto in the form of various versions made into end-to-end UNEs to allow a variety of advanced service offerings. SBC relied upon the following language to support its position, “Instead, the Commission is unbundling Project Pronto as it is packaged and sold as a single product.”<sup>19</sup> This sentence, however, has limited application because it is included in the discussion of whether piece parts of Project Pronto should be unbundled and whether the packet switching criteria must be met.

In addition, similar language in the *Final Decision*, “the Commission requires the Broadband Service to be unbundled,”<sup>20</sup> is presented in the context of making the Broadband UNE a mandatory offering as opposed to voluntary offering, not in the analysis of unbundling. When viewed in its entirety, the Commission determined that it required not just the Broadband Service Offering, but Project Pronto to be unbundled on an end-to-end basis.

Of particular importance to the Commission is that SBC meet its obligations under the FCC’s *Project Pronto Waiver Order* to pursue line card options for the CLECs. The FCC’s Project Pronto Waiver Order includes the following analysis:

SBC’s proposal, as modified in this proceeding, will help ensure that consumers will have a wide array of choice. Specifically, SBC commits to making available all features, functions and capabilities of the equipment installed in remote terminals at just, reasonable, and nondiscriminatory rates, terms, and conditions. For example, under this commitment, SBC’s incumbent LECs will provide additional classes or qualities of service, other bit rate offerings, different combinations of permanent virtual connections, remote testing, and other features, functions, and capabilities made available by the manufacturer. SBC’s commitment applies both to existing and to future features, functions, and capabilities. Should the manufacturer develop new features or plug-in cards with different capabilities SBC’s commitment provides a process for competitive LECs to seek such capabilities. Competitive LECs may request existing and future features, functions and capabilities either through SBC’s public forums or by contacting SBC directly. We view this commitment as critical to ensuring the

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<sup>19</sup> *Final Decision* at p. 116.

<sup>20</sup> *Final Decision* at p. 115.

SBC incumbent LECs do not discriminate against competitors wishing to innovate and to use the full functions and capabilities of the equipment. Through this commitment, SBC's competitors will receive assurances that SBC's incumbent LECs will not restrict the use of the equipment to the method of operation chosen by SBC, thus restricting competition and innovation in the advanced services marketplace.<sup>21</sup>

Based on this analysis the FCC imposed the following requirements:

4. Features and Functions

(a) Existing Features and Functions. Upon request and except as described below, SBC/Ameritech incumbent LECs will make available to all telecommunications carriers (including SBC/Ameritech's separate Advanced Services affiliate(s)) all technically feasible Advanced services features and functions of equipment (e.g. ADLU card) installed in remote terminals where the SBC/Ameritech incumbent LEC deploys a NGDLC architecture that supports both POTs and xDSL services....

(b) Future Features and Functions. As to xDSL features and functions that vendors may develop in the future for use on SBC/Ameritech incumbent LEC equipment deployed in remote terminals, the SBC incumbent LECs will evaluate and discuss with interested telecommunications carriers in collaborative sessions described in Paragraph 8 below such features or functions, including response to specific requests from telecommunications carriers, to determine whether there is a practical and technically feasible means to deploy such features and functions where the SBC/Ameritech incumbent LEC deploys a NGDLC architecture that supports both POTs and x DSL services....

When making purchasing decision with respect to future xDSL features and functions, SBC/Ameritech shall evaluate both retail and wholesale customer needs....

8. Industry Collaborative Sessions.

No later than September 1, 2000, SBC/Ameritech incumbent LECs shall begin hosting collaborative sessions with all interested telecommunications carriers, including its separate Advanced Services affiliate(s), vendors, and other

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<sup>21</sup> In the Matter of Ameritech Corp., Transferor and SBC Communications, Inc., Transferee; For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules, CC Docket No. 98-141; 15 FCC Rcd 17521; 2000 FCC Lexis 4764; September 8, 2000, Released; Adopted September 7, 2000 (*Project Pronto Waiver Order*) para. 42 (In the *Project Pronto Waiver Order*, the FCC waived a restriction on the ILEC's ability to own advanced services equipment. In the FCC's *SBC/Ameritech Merger Order*, the FCC had required a separate affiliate and not the ILEC to own all advanced services equipment.)

members of the telecommunications industry to address operational and technical issues regarding access to NGDLC remote terminals and new types of xDSL features and functions that may be provided via NGDLC. Any transcripts and summaries of action items that may result from such sessions will be made publicly available.

During such collaborative sessions the following types of issues will be addressed regarding features and functions that are requested to be deployed by the SBC/Ameritech incumbent LECs: technical and operational feasibility; commercial arrangements pertinent to the deployment of such features and functions and how those costs (e.g. cost of procuring, developing, provisioning, deploying and maintaining such features and functions) will be recovered; whether technical, operations support system and operational trials will be needed and how they will be conducted; and whether such features and functions will reduce the capacity of remote terminals to meet forecasted demand for advanced services and POTs. The SBC/Ameritech incumbent LECs will approach such discussions from the presumption that it seeks to optimize the use of their network by affiliated and unaffiliated carriers and to support the development of new xDSL features and functions.<sup>22</sup>

Clearly, in the *Final Decision* the Commission determined that various versions of the transmission types made possible through the Project Pronto network should be made into end-to-end UNEs to allow a variety of advanced service offerings. This issue is also well explained in an order of the Illinois Commerce Commission.<sup>23</sup>

Such a NGDLC UNE platform will achieve the same goals as a line card collocation requirement. This platform, combined with the requirement that [SBC] offer a modified platform when new line cards become available, ensures there will be sufficient demand for new line cards, and will also give CLECs an incentive to express to the licensed manufacturers of such line cards their preferences for line card features. Such manufacturers, recognizing that CLECs are the actual customers, will have a real incentive to incorporate innovative features and functionalities into new line cards. This is essentially the same scenario as with line card collocation, yet additional costs stemming from multiple owners of line cards at the RT would be avoided, as would administrative problems associated with inventorying of cards.

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<sup>22</sup> Ibid.

<sup>23</sup> Illinois Bell Telephone Company-Proposed Implementation of High Frequency Portion of Loop (HFPL)/Line Sharing Service, Order on Rehearing, docket 00-0393, September 26, 2001, p. 32.

Additionally, in the *Final Decision*, the Commission considered SBC's "impact on network operations" analysis and found some merit in SBC's arguments. The Commission identified that this was a factor in determining that it would only require end-to-end unbundling, and not require unbundling of piece parts including collocation of CLEC line cards.<sup>24</sup> The Commission agreed with SBC that, with respect to line card collocation, there did appear to be technical feasibility concerns that could have a significant impact on SBC's operations. These included premature physical and bandwidth exhaustion of the NGDLC systems; inefficient utilization of the NGDLC system; operational problems; additional or earlier capital investments and delays and increased costs from a provisioning and maintenance perspective.

The Commission herein, however, determines that as in the FCC's *Project Pronto Waiver Order*, the features, functions, and capabilities that are made available by manufacturers are presumed to be technically feasible unless persuaded otherwise.<sup>25</sup> The Commission herein clarifies that it applies a presumption of technical feasibility when evaluating requests for features, functions, or capabilities offered by manufacturers, but will consider capacity constraints and significantly increased costs.

In light of SBC's narrow interpretation of the *Final Decision*, the Commission further clarifies herein that the Commission's unbundling requirements are (1) SBC shall pursue line card options for the CLECs, as described in FCC's *Project Pronto Waiver Order*; (2) SBC shall offer a modified end-to-end Broadband UNE when new line cards become available; (3) SBC shall make available to all telecommunications providers including SBC's Advanced Services affiliate(s) all technically feasible advanced services features and functions of equipment

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<sup>24</sup> *Final Decision* at p. 106.

<sup>25</sup> *Project Pronto Waiver Order* par. 44.

(e.g., ADLU card) installed in remote terminals that deploy a NGDLC architecture that supports both voice and xDSL services; this requirement applies to both existing and future features, functions, and capabilities; and (4) features functions and capabilities are presumed to be technically feasible when they are offered by manufacturers unless SBC provides persuasive evidence otherwise that capacity restraints or significantly increased costs will occur.

The CLECs asserted that their proposed tariff modifications provide transmission options which they deem possible. The CLECs asserted that these transmission options should be viewed as a minimum list to which additional options should be made available by request from competitors. The Commission does not have a factual record by which to evaluate these proposed transmission options. However, the Commission requires SBC to view these options as requests from CLECs. As clarified in this order, this means SBC is required to either provide these options or persuade the Commission of technical infeasibility giving consideration to capacity constraints and significantly increased costs.

As noted above, the Commission acknowledges that the upcoming FCC Triennial Review Order may change federal law relating to Broadband Services so as to no longer require unbundling. The Commission hereby stays its determinations relating to Project Pronto. At this time, SBC is not required to revise its tariffs as provided above. The Commission reserves jurisdiction to revisit its Project Pronto determinations, either in this docket or in a separate proceeding, if necessary. Commissioner Bie dissented from the determination to require unbundling of Project Pronto. Chairperson Bridge dissented from the stay requirement.

*Line Splitting*

The terms line splitting and line sharing are defined as follows: SBC's provision of the HFPL to competitors while SBC is the provider of the voice frequency service to customers is referred to as "line sharing."<sup>26</sup> Alternatively, SBC refers to the arrangement where both the HFPL and the voice frequency portion of loop are utilized by either a single CLEC or two CLECs as "line splitting." Line splitters are passive devices which divide the high frequency from the voice frequency signals.

The CLECs asserted that SBC's proposed tariffs do not require SBC to provide line splitters such that CLECs can engage in line splitting using SBC-owned line splitters.<sup>27</sup> The CLECs asserted SBC's proposed tariffs included line splitting prohibitions that are inconsistent with the *Final Decision*.

The Commission, in its *Final Decision*, did not decide whether SBC was required to provide line splitters for line splitting, but instead referred that determination to be made in the arbitration docket 05-MA-120, *Petition for Arbitration to Establish an Interconnection Agreement Between Two AT&T Subsidiaries, AT&T Communications of Wisconsin, Inc. and TCG Milwaukee, and Wisconsin Bell, Inc. (d/b/a Ameritech Wisconsin)*, an arbitration proceeding between AT&T Communications of Wisconsin (AT&T) and SBC (AT&T/SBC arbitration).

The ultimate outcome of the AT&T/SBC arbitration process, however, was an interconnection agreement that required AT&T, not SBC Wisconsin, to provide splitters for itself in all line splitting situations. Thus, while the earlier issued AT&T/SBC Award and *Order*

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<sup>26</sup> *Line Sharing Order* at p. 4.

<sup>27</sup> Consolidated Document p. 63.

*Rejecting an Interconnection Agreement* reflected Commission views that incumbent LECs can be required to provide splitters to CLECs, neither decision created any binding requirement that SBC provide splitters to any CLEC, and neither determines the splitter issue here.

Arbitration awards and orders rejecting interconnection agreements tell the parties in those cases what kinds of interconnection agreement terms and conditions the Commission would or would not approve; but they do not in any way require the parties to ultimately adopt such terms and conditions if they can voluntarily agree to other terms and conditions (as happened with regard to who should provide splitters), nor do they in any way bind the incumbent LEC via-a-vis other CLECs.

The 1996 Act makes clear that the only way in which third-party CLECs can "benefit" from another CLEC's negotiation and arbitration of an interconnection agreement is by opting into the terms and conditions of the final, approved interconnection agreement under 47 U.S.C. § 252(i) and 47 C.F.R. § 51.809. In other words, CLECs have no right to "opt into" arbitration awards or decisions rejecting interconnection agreements.

The outcome of the AT&T/SBC arbitration/negotiation process left this docket without a binding decision imposing a splitter requirement. The Commission can not now implement such a requirement, and accordingly it accepts SBC's proposed tariffs, which do not provide line splitters for CLECs' use in line splitting,

*Line Splitting in Project Pronto*

The CLECs further argued that because the Commission required SBC to provide a Broadband end-to-end UNE, and in light of the technology, the Commission effectively required SBC to line split. The Commission agrees with the CLECs' analysis. SBC's proposed tariff, which turns its Broadband Service Offering into a UNE, does not include a line splitting option. SBC's Broadband UNE offers only three options, (1) a "data only" option; (2) data with SBC providing the voice service (line sharing) and (3) a combined voice and data option where a single CLEC purchases both voice and data. It does not include an option to purchase data while another CLEC purchases the unbundled voice frequency from SBC which would be a line splitting option. SBC asserted that it does provide line splitting, in that using option three, CLECs can sell the voice or data frequency to a third CLEC and set up its own "line splitting arrangement."

Option three, however, does not provide all forms of line splitting because it does not allow a CLEC to purchase the data frequency when another CLEC has purchased the voice frequency from SBC. The Commission agrees with the following CLEC analysis.

Because the Asynchronous Digital Line Unit (ADLU) used by Project Pronto in the DSL-capable remote terminal, inherently provides the splitting function, routing the independent voice and data signals over two completely separate fiber optic transmission paths back to the central office, no additional equipment is required by SBC to facilitate line splitting using the Broadband UNE. "Splitting" the DSL-based voice and data signals is an inherent part of the Broadband UNE. As such, to allow carriers to "line split" using the Broadband UNE, [SBC] need only be required to remove its prohibitions limiting carriers from terminating individual voice and data cross-connect elements to two different collocation

cages (one for the voice provider and the other for the data provider). No additional equipment or effort on [SBC's] part is required to accomplish line splitting in this scenario.<sup>28</sup>

The Commission determines that by unbundling Project Pronto, it requires all forms of line splitting. As described above, the Commission required more of SBC than just making its Broadband Service Offering into a UNE. The Commission requires SBC to make available to all telecommunications providers all the technically feasible advanced services features and functions of the equipment installed in remote terminals that deploy a NGDLC architecture that supports the provision of both voice and xDSL services. The Commission presumes that features, functions and capabilities are technically feasible when they are offered by manufacturers unless SBC provides persuasive evidence otherwise that capacity restraints or significantly increased costs will occur. The Commission determines that there are no other providers that could be similarly situated as SBC and able to offer comparable services at comparable prices. This is a result of the efficiencies SBC obtains through the Project Pronto architecture including the leveraging the scale of operations through its existing voice customers. CLECs are impaired in their ability to provide the services they seek to offer. The Commission applies a presumption that an option is technically feasible if a manufacturer makes such an option available. As the NGDLC architecture provides the line splitting functionality, it is available from manufacturers. Accordingly, SBC is required to provide that functionality to the CLECs.

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<sup>28</sup> Consolidated Document at p. 65.

However, like the Commission's determination regarding unbundling Project Pronto transmission options in general, the Commission stays this requirement.

### **Unbundled Local Switching**

#### *Weighting of Growth and Replacement Lines*

The CLECs asserted that SBC failed to comply with the *Final Decision's* requirement to determine the price of switching equipment based on 70 percent lower cost replacement lines and 30 percent higher cost growth lines.<sup>29</sup> SBC used a different method of weighting lines in its May 21, 2002, compliance filing that it asserted did comply with the Commission's weighting requirement. The Commission herein adopts the CLECs' method of implementing the weighting growth and replacement lines.

SBC asserted in its September 2002 response that the relationship of Total Replacement lines to Total Growth lines was in fact 70 percent replacement and 30 percent growth each year. The CLECs in their August 2002 comments identified that when looking at the allocation used for each manufacturer, that lines purchased from Lucent are weighted more heavily with growth lines, leaving lines purchased from Nortel and Siemens more heavily weighted with the lower cost replacement lines. The prices vary per manufacturer. The CLECs explained that while the cost differences balance out with little difference in costs for unbundled local switching, they do not balance out for trunk port investments which are a component of unbundled local transport. The CLECs explained that SBC's weighting gave seven percent higher transport investment than a simple application of 70 percent and 30 percent by vendor. SBC, in its September 2002

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<sup>29</sup> *Final Decision* at p. 70. When an entire switch is removed and replaced, manufacturers offer a lower price per line. Once a switch is installed and there are incremental expansions of capacity, manufacturers charge a higher cost per line.

response, did not explain why there should be a different percentage by manufacturer, but only that the end result complied with the Commission's requirement. SBC did not explain why its method would be preferable to the CLECs' method. The CLECs' method is simple and rational. Accordingly, the Commission determines herein that the CLECs' method of weighting growth and replacement lines is a more reasonable interpretation of the Commission's *Final Decision* requirement and should be used.

*Double Recovery of SS7 costs*

The CLECs asserted that SBC would double recover SS7 costs. SBC responded that the two charges in question covered different portions of the signaling system and did not double count costs. The Commission accepts SBC's response that SS7 costs are not double counted.

The CLECs asserted that SBC's unbundled local switching-shared transport (ULS-ST) charge includes the same costs as its ULS-ST SS7 charge, and accordingly that costs are double recovered. As a solution the CLECs recommended that the Commission should eliminate the ULS-ST SS7 charge.

This issue does not, however, appear to be related to compliance with the Commission's *Final Decision*. Instead, it appears to be a new cost study method issue that was not raised at the time the Commission made its *Final Decision*. In addition, SBC appears to have a reasonable response. SBC explained that provisioning ULS-ST requires additional signaling functionality that is not included in the SS7 rate. SBC described different links between different transfer and control points. Based on the information presented, the Commission determines that it is not necessary to reevaluate its *Final Decision* in light of this potential issue.

**Other Issues**

*Joint and Common Mark-up*

*Ameritech's adjustment to the TELRIC plant-related expenses.*

In its May 21, 2002, compliance filing, SBC made an unauthorized adjustment to the joint and common model. This adjustment purportedly flowed-through adjustments the Commission made in its *Final Decision* to SBC's TELRIC models to another model, the joint and common model. The Commission concludes that there is no record to support SBC's proposed adjustment, and that the accounting-based joint and common model on a stand-alone basis, without SBC's proposed adjustment, provides a reasonable means of determining joint and common costs. The Commission therefore requires SBC to remove its adjustment. The calculation should be performed in the same manner as SBC provided in response to staff's data request.

SBC's joint and common cost model, as presented in the February 2001 hearing, determined the mark-up that was to be applied to the results of the TELRIC models in order for SBC to recover costs such as corporate overhead. SBC's joint and common cost model contains a numerator which includes forecasted joint and common costs which were developed from historical accounting records. The model contains a denominator which includes forecasted TELRIC plant-related costs, which were also developed from historical accounting records. This method computes a ratio between one type of cost and another which is applied as

the mark-up.<sup>30</sup> This mark-up ratio is applied to the UNE costs developed in the TELRIC models to compute UNE rates.

The denominator, while based on accounting records, includes the same kind of costs that are forecast by the TELRIC models. However, the TELRIC models develop the cost of plant by forecasting the number of feet of cable and wire that will be needed to reach customers multiplied by the material prices included in SBC’s contracts. The TELRIC models forecast the cost to build a network today, whereas the accounting records include the costs of the network as it was historically constructed.

Staff identified, in its August 2002 data request, that SBC made a \$485 million adjustment to decrease the denominator, the TELRIC plant-related costs, which led to an increased mark-up for joint and common costs, such that the mark-up on all UNEs would increase from about 20 to 25 percent.<sup>31</sup> This adjustment was made in a manner that made it difficult to notice that an adjustment was proposed. The number in question changed from one page of the cost study to the next with no explanation that there was a change and with no

<sup>30</sup> While not on this record, staff used a similar ratio method in docket 6720-TI-120 to compute the mark-up instead of an Arthur Anderson method. However, staff developed the denominator based on what was referred to as extended TELRIC. Extended TELRIC was computed by multiplying the TELRIC rates times the annual volumes for each UNE. The annual volumes had been available from the data on the resale discount that was not evaluated in this proceeding.

<sup>31</sup> The following table demonstrates how an adjustment of \$485 million to the denominator for network support can have this impact on the mark-up.

	Before Adjustment	After Adjustment
Network Support/Annual Cost of Plant Related Investment	125 million/ 1.5 billion	125 million/ 1 billion
Network Support Mark-up	8 %	13 %
General and Corporate Overhead Mark-up	12 %	12%
Total Mark-up	20%	25%

supporting calculations explaining the change. Staff asked SBC to provide the basis for the adjustment.

In response to this request, SBC provided supporting calculations. SBC explained that the TELRIC plant-related costs were adjusted to reflect the effect of the Commission's adjustments to all the TELRIC models. SBC's flowed-through the total dollar effect of all the Commission's adjustments to the TELRIC models.<sup>32</sup> Staff identified that the joint and common model was a separate model from the TELRIC models and that there was no direct link between the models as the joint and common model started from embedded accounting costs and the TELRIC models did not.

SBC asserted that a direct link between the level of investment in the joint and common model and the level of investment in the TELRIC models must be maintained. In its comments on the Draft Order, SBC further proposed that if the Commission did not want to allow SBC's adjustment to increase the joint and common mark-up, the Commission could revisit its fill factor input in the TELRIC models to directly increase UNE rates.<sup>33</sup>

The Commission determines that there is no means of linking accounting costs to TELRIC costs. The issue of whether TELRIC costs are more or less than embedded accounting costs has been widely debated in the industry. The US Supreme Court in *Verizon Telephone Cos. V. FCC*, 122 S. Ct. 1646 (2002) recognized that the TELRIC method and accounting methods are simply two different means of determining costs. While it can be argued that conceptually there should be some form of link between TELRIC and accounting costs, it is also

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<sup>32</sup> In order to do this calculation, SBC used information that was not on the record.

<sup>33</sup> The exchange between staff and SBC used the fill factor (a measure of spare capacity) as an example of a difference between the implicit assumptions of the accounting data and the explicit assumptions included in the TELRIC models.

clear that the precise relationship between TELRIC costs and accounting costs is simply unknown. The Commission determines that there is no record to support flowing-through adjustments from the TELRIC models to the joint and common model and requires SBC to remove its \$485 million adjustment to the denominator for Network Support. Additionally, the Commission determines that this compliance order is not an appropriate place to consider revisiting its original determinations in the *Final Decision* regarding the appropriate inputs for computing UNE rates.

*SBC's Addition of OSS Testing Costs to Joint and Common Costs*

An issue was raised in the August 2002 data request that identified that SBC made an adjustment in its May 21, 2002, compliance filing, to add OSS testing costs to joint and common costs, which accordingly increased the mark-up for joint and common costs. The Commission determines herein that it will allow the addition of OSS testing costs to the joint and common costs for the reasons discussed below. The Commission determines that it will use its Category 3 process to evaluate the reasonableness of the amount of OSS testing costs to include.

SBC, in its September 2002 response, explained that the Commission in its *Final Decision* determined that costs incurred to make UNEs available should be labeled “competition implementation costs” and placed in the “Network Support” category so the costs would be shared by all users of the network. While SBC still disagreed with the Commission’s adjustment, SBC argued, in its September 2002 response, that if costs are considered to be “competition implementation costs,” then OSS testing costs should be allowed. SBC argued that OSS testing expenses are costs incurred to make UNEs available; in addition, they have been

(and will be) incurred at the CLECs' insistence and like the other costs the Commission classified as "competition implementation costs" were incurred to implement the opening of the local exchange market to competition. Accordingly, SBC asserted it must be permitted to recover these OSS testing costs via inclusion in the Network Support category.

The August 2002 data request asserted that SBC added this adjustment in a manner that obscured whether an adjustment was even being proposed. In order to find that SBC inserted an adjustment, staff compared the cost study originally presented in the February 2001 hearing to the May 21, 2002, cost study and found that the amount of Corporate Overhead costs had changed. SBC in its May 21, 2002, compliance filing, neither identified or explained that there was an adjustment nor offered supporting calculations. SBC only identified that the costs were OSS testing costs in response to staff's inquiries in the discovery process.

The August 2002 data request questioned whether these cost should be allowed to be included in the compliance phase of this docket. Staff inquired where in the *Final Decision* was SBC instructed to make this adjustment as the Commission expressed its concern in the *Final Decision* "that no adjustments other than those required by the Commission are made."<sup>34</sup>

The Commission determined that the OSS testing costs are a form of "competition implementation costs," and accordingly should be afforded the same treatment as other "competition implementation costs." The Commission determined that it will use its Category 3 process, which is delegation to the Division Administrator to evaluate the reasonableness of the amount of OSS testing costs added to the Network Support category. However, as the amount of

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<sup>34</sup> *Final Decision* at p. 188.

these costs is constantly changing, the Commission determined it would cap this cost at SBC's proposed \$12.488 million as that was the level of costs at the time of SBC's May 21, 2002, compliance filing. In the interim time period, SBC shall incorporate its proposed \$12.488 million of OSS testing costs in the Network Support category. This adjustment will be subject to the true-up provision of this order.

SBC, in its comments on the Draft Order, further asserted that the Commission had erred in its *Final Decision* and should put competition implementation costs in the wholesale product support category. SBC asserted that these costs would be avoided if it was not required to provide UNEs. The Commission disagrees with SBC. As explained in the *Final Decision*, the Commission placed competition implementation costs into the Network Support category so that the costs would be shared by all users of the network, both SBC retail customers and CLEC customers. The costs would only be avoided if regulation returned to monopoly provision of service instead of reliance on competition.

*Joint and Common Costs-Investment Growth Adjustment*

It appears that SBC made the Commission's investment growth adjustment to only incremental price increases and not to the full plant investment. The Commission determines that its investment growth adjustment should be applied to the full plant investment.

SBC explained that it read the *Final Decision* as rejecting SBC's proposed Telecommunications Plant Indices (TPI) adjustments. SBC asserted that if it were required to aggregate the two sets of adjustments, i.e. apply both the TPI and the CLEC-suggested

investment growth adjustments, the result would be a “mixed bag.” Total investment would increase in some cases, such as cable, and would decline materially in others such as switching.

To the contrary, the Commission determines that having the investment increases for some types of plant and decreases for others is a reasonable result and finds no reason why a “mixed bag” would be unreasonable. The *Final Decision* explained that SBC only forecast the future replacement cost for its current plant, and did not consider the fact that the number of access lines would also increase.<sup>35</sup> It is reasonable for the investment in cable to increase due to the increase in number of access lines and changing prices, and for the investment in switching to decrease as line growth does not lead to immediate switch replacement and switching costs have been declining. Accordingly, the Commission herein determines it is reasonable to require SBC to apply the investment growth adjustment to the full investment and not just the incremental price increase. The calculation should be performed in the same manner as SBC provided in response to staff’s August 2002 data request.

#### *Maintenance Factor*

In reviewing the maintenance factor, it appeared that SBC implemented the Commission’s requirement to remove maintenance expenses in proportion to the amount of fully depreciated plant such that the maintenance factor did not decrease as expected. Upon inquiry, SBC explained that it removed both maintenance expenses associated with fully depreciated plant, as required, and also plant investment associated with fully depreciated plant. In

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<sup>35</sup> *Final Decision* at p. 35.

comments on the Draft Order, SBC explained that because it was required to pretend that maintaining fully depreciated plant was cost-free, it believed it was also reasonable to treat the associated plant as cost-free.

SBC's removal of plant investment, however, is contrary to TELRIC principles. As stated in the *Final Decision*, TELRIC accounting models develop forward-looking costs for UNEs that reflect the "level of efficiency that a competitive market would demand from a provider to achieve competitive prices today."<sup>36</sup> The TELRIC models forecast the cost to build new facilities today by determining plant investment based on new technology. The models then apply other inputs, including the cost of capital and depreciable lives, to the amount of plant investment in order to compute a monthly lease payment. Further, maintenance expenses are added into the lease payment. Use of a maintenance factor ensures that both the plant investment and its ongoing maintenance are covered in the monthly lease payment.

How this model works can be explained through an analogy to an automobile lease. Some automobile leases charge more and include maintenance costs, while others charge less but require the lessee to be responsible for the maintenance. The following example shows how the annual cost and maintenance factors are applied in the TELRIC models.

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<sup>36</sup> *Final Decision* at p. 23.

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Investment in Automobile	\$10,000
Annual Cost Factor <sup>37</sup> -5 year life	23.76%
Annual Lease Payment	\$2,376
Monthly Lease Payment-no maintenance	\$198
Investment in the automobile	\$10,000
Maintenance Factor	2.5% <sup>38</sup>
Annual Maintenance Expense	\$250
Monthly Maintenance Payment	\$21
Monthly Lease Payment with maintenance	\$219

The CLECs argued at hearing that SBC's actual maintenance expenses used to develop its maintenance factor were incurred on plant that was beyond its economic life. To demonstrate this position, the above example is revised to assume a 10 year life and double the maintenance costs.

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<sup>37</sup> Based on a 5 year life and 6 percent cost of capital. \$1,880 in interest is paid over five years.

<sup>38</sup> Based on average expected annual maintenance costs of \$250 divided by a \$10,000 gross investment in the automobile.

Investment in Automobile	\$10,000
Annual Cost Factor <sup>39</sup> -10 year life	13.59%
Annual Lease Payment	\$1,359
Monthly Lease Payment-no maintenance	\$113
Investment in Automobile	\$10,000
Maintenance Factor	5% <sup>40</sup>
Annual Maintenance Cost	\$500 <sup>41</sup>
Monthly Maintenance Payment	\$42
Monthly Lease Payment with maintenance	\$155

This example shows that with the longer life, the lease payment is lowered while the maintenance expenses increase. An automobile can be used even longer by paying even higher maintenance expenses to keep it operating. The TELRIC models assume that once lease payments have fully paid for the plant, then new plant will be installed, or as in the example, a new automobile will be purchased.

Further, to understand the TELRIC model and the problem with SBC's proposed adjustment, it is important to also pay particular attention to the details of the calculation. The TELRIC models multiply the total cost factor of 18.59 percent (13.59 percent related to the automobile payment and 5 percent related to maintenance expenses) times the cost of new plant investment to compute the annual lease payment of \$1,859. The important step to notice is that

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<sup>39</sup> Based on a 10 year life and 6 percent cost of capital. \$3,590 in interest is paid over ten years.

<sup>40</sup> Based on average expected annual costs of \$500 and a \$10,000 gross investment in the automobile.

<sup>41</sup> In day to day experience, this could represent \$250 annual maintenance cost for the first five years and \$750 annual maintenance cost in the last five years.

this factor is multiplied against the new plant investment and not depreciated plant investment. Contrary to the model, SBC's adjustment ignored the forward-looking concept of the new plant installation.

The CLECs proposed at hearing that maintenance expenses be removed in proportion to fully depreciated plant to adjust SBC's accounting data to the level of maintenance that would be consistent with the other model assumptions. The accounting data is based on plant that was operated beyond its economic life. This adjustment assumed that maintenance expenses are incurred evenly each year and removed an equal amount of maintenance expenses for each year the plant is beyond its economic life. If one used a more complex calculation, one could have assumed greater expenses in later years and removed an even larger portion of maintenance expenses. Accordingly, in the *Final Decision*, the Commission found that the CLECs' proposed adjustment was reasonable and adopted it.<sup>42</sup>

In the compliance filing, SBC adjusted both maintenance expenses and plant investment for plant that was fully depreciated. This adjustment can also be explained through the example of an automobile lease. SBC proposed to reduce maintenance expense from \$500 to \$250 (a 50 percent reduction) and also to reduce the investment from \$10,000 to \$5,000 (a 50 percent reduction). This makes no change to the maintenance factor as the remaining \$250 maintenance expenses are divided by a \$5,000 investment, still resulting in a 5 percent factor.

SBC's adjustment to plant investment is problematic because unlike maintenance expenses, plant investment does not change with the useful life of the plant. In other words, the original investment in the automobile stays the same regardless of the subsequent depreciation.

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<sup>42</sup> *Final Decision* at p. 153.

Most importantly, the TELRIC model that computes the UNE lease payment still bases its calculation of the lease payment on the new plant investment, the \$10,000 in the example.

It was not reasonable for SBC to adjust both expenses and investments when the Commission intended to only adjust expenses. The *Final Decision* specifically adjusted only maintenance expenses so that a reasonable input for the TELRIC models would be developed based on the shorter lives in the model compared to the longer lives SBC experiences in operating practice.

SBC clearly acknowledged this TELRIC principle in the alternative adjustment it proposed in its comments on the Draft Order. SBC specifically proposed that the determination of the amount of fully depreciated plant should be based on the Commission-prescribed lives rather than the CLECs' economic life. Using the above automobile example, this would assume a seven-year life for both the lease payment and the maintenance costs.

The Commission determines that this second SBC proposal is a reasonable adjustment that complies with TELRIC principles. The Commission did apply its prescribed lives when developing UNE rates and did not use the economic life proposed by the CLECs in this adjustment. SBC's proposed use of the Commission-prescribed lives would better match the forward-looking efficient investment on which the TELRIC models are based. Accordingly, the Commission adopts SBC's alternative adjustment to the maintenance factor.

Additionally, in reviewing the maintenance factor in SBC's compliance filing, staff identified that SBC applied a productivity factor of 3 percent and did not compound the productivity factor over three years. Staff identified that SBC used 1998 as the base year in its model and forecasted expenses to the year 2001, in the February 2001 hearing. Accordingly,

staff expected to see a productivity adjustment of 8.7 percent.  $(1-(.97)^*(.97)^*(.97))$ . SBC explained that it interpreted the term, 3 percent, to be the entire productivity adjustment. The Commission determines that like the annual price cap adjustment formula, productivity should be compounded over the number of years applicable. The Commission determines that the compounding method is a more reasonable interpretation of its *Final Decision* and should be used here.

#### *IDLC Conversion Costs*

The Commission determines herein that further process is necessary to determine Integrated Digital Loop Carrier (IDLC) Conversion costs. In its March 22, 2002, *Final Decision*, the Commission required IDLC Conversion costs to be collected as monthly recurring charges applicable to all unbundled loops based on a frequency of occurrence of one percent of the time with costs based on average actual historical experience. The Commission further ordered SBC to file cost studies in accordance with the requirements of the order within 60 days of the issuance of the order.

SBC did not include IDLC Conversion cost studies in its May 21, 2002, filing of its compliance cost studies. Staff in its August 2002 data request informed SBC the cost study was missing and requested such a cost study. SBC submitted the IDLC cost study for the first time on September 10, 2002, with its reply comments. SBC proposed to charge \$1.15 per unbundled loop per month on all unbundled loops to recover IDLC conversion costs. The CLECs have not had an opportunity to comment on this cost study. In light of the materiality of the issue, the Commission determines that further process is necessary. The Commission determines that it

would use its Category 3 process, which is delegation to the Division Administrator, to implement its *Final Decision* in regard to IDLC conversion costs. In the interim time period, there will be no charge for IDLC conversion costs. This charge will be subject to the true-up provision of this order.

*SBC Agreement to Other CLEC-Proposed Adjustments*

In SBC's September 2002 response, it agreed with the CLECs on some of their proposed adjustments and incorporated those changes into its revised cost studies filed at that time. SBC accepted the CLECs' electronics related fill factor adjustment, and the CLECs' percentage of central offices with intermediate distribution frames. Accordingly, the Commission agrees it is reasonable to require these adjustments.

*New Cost Studies*

In order points 5 and 6 of the *Final Decision*, the Commission required SBC to submit cost studies for HFPL OSS and for Loop Qualification as there were no cost studies for these elements presented in the February 2001 hearing.

SBC submitted the new cost studies in the May 21, 2002, filing of its compliance cost studies. SBC proposed to charge a nonrecurring charge of \$25.90 for manual loop qualification and a monthly recurring charge of \$.84 for HFPL OSS modification.

In their August 2002 comments on the compliance filing, the CLECs stated they needed an opportunity to cross examine witnesses on the new cost information. In light of the new cost information filed and the CLECs' request for hearings, the Commission determines that further

process is necessary. For the manual loop qualification, the Commission determined that it would use its Category 2 process, which is finalization through individual interconnection agreements to determine an appropriate charge. No determination is made in this order regarding an appropriate charge. Additionally, as the Commission decided not to go forward on line splitting/line splitter requirements, the HFPL OSS modification costs do not need to be determined at this time.

### **Implementation**

The Commission is charged with determining whether rates for unbundled network elements comply with the FCC pricing rules. Prices for UNEs must comply with TELRIC pricing rules. The Commission's determinations in this proceeding comply with the FCC pricing rules specifically 47 C.F.R. § 51.303 defining forward-looking TELRIC costs and with 47 C.F.R. § 51.505 which requires the addition of a reasonable allocation of forward-looking common costs. As explained in the *Final Decision*, this order does not establish UNE prices themselves, but determines the details of a methodology that can be used to determine cost-based prices as required. For example, the Commission made the determinations in its *Final Decision* for the appropriate cost of capital, depreciation rates, level of spare capacity (fill), contract prices and joint and common mark-up to comply with forward-looking TELRIC pricing standards to name a few of such details. The Commission set standards for determining when costs can be recovered through nonrecurring charges and when costs must be recovered through monthly recurring charges. These details are to be used as guidelines and must be considered by Commission appointed arbitration panels, but if necessary they may be changed by the panel

based on the facts and circumstances involved in a particular arbitration.<sup>43</sup> For example, the terms of an offering may differ from those priced in this proceeding such as including an additional amount of redundant routing, or there may be unbundled network elements that were not specifically addressed in this proceeding, such as access to 911 databases. Accordingly, resulting prices from this proceeding would be adjusted to reflect identifiable differences. However, when arbitration panels determine TELRIC compliant prices, arbitration panels must consider that the methods that the Commission adopted in this proceeding are TELRIC compliant. Variations from these resulting prices must be explained and consistent with the forward-looking costing principles discussed in the *Final Decision*.

As explained in the *Final Decision*, this order is a change of law. Interconnection agreements with change of law provisions shall be reopened and modified to be TELRIC compliant as determined by this order. Even if change of law provisions do not exist in interconnection agreements, this order determines TELRIC compliance and UNE rates are required to be modified to be TELRIC compliant. Accordingly, SBC is required to reopen all interconnection agreements and make revisions to be TELRIC compliant. Additionally, to remove incentives for delay, the Commission established subject-to-refund and true-up provisions.<sup>44</sup> Resulting rates determined through the Category 1 and Category 3 processes shall be subject to the true-up provision of the *Final Decision*. Resulting rates determined through the Category 2 process will not be subject to this true-up provision. Interconnection agreements that have provisions for retroactive application of rates are required to make revised rates retroactive to May 21, 2002. The requirements of this order shall be implemented under the standard time

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<sup>43</sup> *Final Decision* at p. 1.

<sup>44</sup> *Final Decision* at pp. 189-190.

intervals for negotiating and arbitrating interconnection agreements and with the option of purchasing from tariffs during such negotiations as made available in this order. Implementation may not be delayed regardless of any language that may appear in interconnection agreements about final or unappealable decisions, unless of course a court issues a stay of a particular requirement.

Now that it has made its implementation determinations, the Commission is concerned that the effect on rates be finalized as expeditiously as possible. The Commission required in its *Order Regarding Compliance Filing* that if parties proposed adjustments to SBC's May 21, 2002, compliance tariffs or costs studies, the party proposing the adjustment should also identify which UNE rates would be affected; the estimated effect on rates and the proposed modifications to draft tariffs if the Commission adopted their position on any issue. This allowed the Commission to be specific in this order as to its required adjustments.

Accordingly, where the Commission has made decisions on particular rate elements that adopted all of the CLECs' or all of SBC's proposed adjustments to a cost study or made only limited adjustments that could readily be hand computed, the Commission is now able to include in this order the rates that result from its selected cost study methods. Additionally, through staff data requests using the Category 1 process, the Commission was able to implement most of its other decisions. As the required modifications are very precisely identified in this order, it was reasonable for the Commission to rely upon staff to advise it whether its decisions were accurately implemented. The Commission has attached Appendix B that includes the rates resulting from its methodology for rate elements where it currently has sufficient information

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from its Category 1 process. It is reasonable to require SBC to incorporate these rates into its tariffs for the purposes described in the *Final Decision*.

In this order, the Commission determined that it would use its Category 2 process, implementation through the individual interconnection agreements, for the Digital Loop Non-Recurring charges, the Manual Service Order charge and Loop Qualification charges. The Commission determined that it would use its Category 3 process, delegation to the Division Administrator, for finalizing the Discount on DLC Electronics, OSS Testing costs, and the IDLC Conversion charge.

As a related issue, since the Commission issued its *Final Decision*, it has issued another order relevant to SBC's UNE rates. That is the order in docket 05-TI-349 issued on January 17, 2003, which specified the assignment of wire centers to zones for unbundled loops. SBC complied with the requirements of that order when filing the revised cost studies in the Category 1 process in this proceeding.

Additionally, SBC filed cost studies for operator services, directory assistance, 911 emergency number services and wireless emergency number services which it later withdrew. The Commission makes no decision in this order regarding SBC's assertions whether such elements are or are not UNEs. Further, no determination is made in this proceeding regarding TELRIC compliance for these elements. In addition, as the Commission vacated the Reciprocal Compensation portion of its *Final Decision* on January 29, 2003, this order makes no determinations regarding appropriate rates for Reciprocal Compensation. Arbitration panels must consider the guidance the Commission has given in this order when establishing UNE rates for any other elements such as these.

In the *Final Decision*, the Commission determined that it would require tariffs to be filed which would be temporarily available to those competitors that have filed a request with SBC for interconnection and access to UNEs under 47 U.S.C. §§ 251 and 252. The tariffs are available until the negotiation or arbitration process has been completed.<sup>45</sup>

To implement this tariffing decision, the Commission required SBC to file proposed tariffs in its compliance filing. However, in Wisconsin, when tariffs are placed on file, Commission approval is not required. Additionally, SBC is allowed to revise tariffs without Commission approval. Accordingly, when issues arise about the terms and conditions of offerings, it is expected that arbitration panels will determine whether terms of offerings are non-discriminatory and comply with federal and state requirements. The tariffs filed as a result of this proceeding do not limit an arbitration panel's ability to establish such compliant terms and conditions.

The Commission retains jurisdiction to hold further hearings and enter such further orders as necessary.

### **Order**

1. This order is effective upon issuance.
2. SBC shall file tariffs with the changes required in this order within three days after the mailing date of this order that incorporate the rates for the rate elements in Appendix B. The resulting rates shall be subject to the true-up process of this order.

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<sup>45</sup> *Final Decision* at p. 185.

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3. SBC shall make these tariffs available to providers that have requested interconnection or access to UNEs under the §§ 251/252 process. The tariffs will be available to providers while the negotiation/arbitration process is underway.

4. SBC shall add back the language it deleted from its tariffs which explained the Commission's decision in 6720-TI-120 regarding the ULS Usage Establishment charge. The method for the possible modification of monthly recurring ULS charges is also included that language to be reinserted. SBC shall remove the Billing Development charge from its tariffs.

5. The Commission stays all determinations relating to the Project Pronto and the HFPL issues.

6. The Commission accepts the provisions in SBC's tariff which do not require it to provide a splitter for line splitting.

7. SBC shall reopen interconnection agreements to reflect the Commission determinations in this proceeding regarding TELRIC compliance and required offerings.

8. The Commission delegates authority to the Division Administrator to implement the Category 3 process to resolve the assigned issues.

Dated at Madison, Wisconsin, \_\_\_\_\_

By the Commission:

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Lynda L. Dorr  
Secretary to the Commission

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See attached Notice of Appeal Rights

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

Appendix A

In order to comply with Wis. Stat. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under Wis. Stat. § 227.53.

AMERITECH WISCONSIN

by

Mr. Michael T. Sullivan, Attorney ([msullivan@mayerbrown.com](mailto:msullivan@mayerbrown.com))  
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PUBLIC SERVICE COMMISSION OF WISCONSIN

*(Not a party, but must be served)*

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Docket 6720-TI-161

*Courtesy Copies:*

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PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
<b>UNBUNDLED LOOPS - END TO END</b>				
	Analog 2w Basic - area A	9.51		
	Analog 2w Basic - area B	10.87		
	Analog 2w Basic - area C	15.25		
	Analog PBX Ground Start - area A	11.80		
	Analog PBX Ground Start - area B	13.35		
	Analog PBX Ground Start - area C	18.02		
	Analog COPTS Coin - area A	9.96		
	Analog COPTS Coin - area B	11.47		
	Analog COPTS Coin - area C	16.08		
	Analog EKL - area A	15.37		
	Analog EKL - area B	16.95		
	Analog EKL - area C	21.71		
	Analog 4 Wire - area A	24.56		
	Analog 4 Wire - area B	27.70		
	Analog 4 Wire - area C	37.07		
	64 Kbps Loop - area A	59.02		
	64 Kbps Loop - area B	61.66		
	64 Kbps Loop - area C	70.28		
	160 Kbps (ISDN) - area A	14.36		
	160 Kbps (ISDN) - area B	17.00		
	160 Kbps (ISDN) - area C	23.39		
	1.544 Mbps - area A	59.91		
	1.544 Mbps - area B	68.05		
	1.544 Mbps - area C	98.83		
	DS3 - Band A	742.82		
	DS3 - Band B	853.21		
	DS3 - Band C	880.30		
	DS3 C.O. Cross Connect	25.89		
	ADSL 2W/HDSL 2W Compatible - area A	9.26		
	ADSL 2W/HDSL 2W Compatible - area B	10.06		
	ADSL 2W/HDSL 2W Compatible - area C	13.61		
	ADSL 2W/HDSL 4W Compatible - area A	18.32		
	ADSL 2W/HDSL 4W Compatible - area B	19.94		
	ADSL 2W/HDSL 4W Compatible - area C	27.09		
	Service Coord. Fee per account, per CO	1.77		
	IDLC Conversion	Delegated		
<b>Non-Recurring Rate Elements - Unbundled Loops - End to End</b>				
	Loop Conditioning			
	Conditioning for the removal of load coils, repeaters, excessive bridged tap per loop, per month	Docket 6720-TI-177		
	Manual Loop Qualification		Per 251/252	

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	Administrative Charge, per order - DS1 Service -NRC		Per 251/252	Per 251/252
	Administrative Charge, per order - DS3 Service -NRC		Per 251/252	Per 251/252
	Design and CO Connection Charge, per circuit - DS1 Service-NRC		Per 251/252	Per 251/252
	Design and CO Connection Charge, per circuit - DS3 Service-NRC		Per 251/252	Per 251/252
	Customer Connection Charge per Termination -DS1 Service-NRC		Per 251/252	
	Customer Connection Charge per Termination -DS3 Service-NRC		Per 251/252	
	Service Order- Initial -NRC		\$0.07	\$0.04
	Service Order - Subsequent NRC		\$0.07	
	Service Order- Record Work Only NRC		\$0.04	
	Line Connection-NRC Stand alone UNE loop		\$30.64	\$3.86
<b>CO to ECS sub-loop</b>				
	2 Wire Analog - area A	4.62		
	2 Wire Analog - area B	5.54		
	2 Wire Analog - area C	6.81		
	4 Wire Analog - area A	14.45		
	4 Wire Analog - area B	16.40		
	4 Wire Analog - area C	19.12		
	2 Wire DSL Compatible - area A	6.28		
	2 Wire DSL Compatible - area B	8.68		
	2 Wire DSL Compatible - area C	12.25		
	4 Wire DSL Compatible - area A	12.18		
	4 Wire DSL Compatible - area B	17.02		
	4 Wire DSL Compatible - area C	24.13		
	2 Wire ISDN Compatible - area A	13.42		
	2 Wire ISDN Compatible - area B	16.11		
	2 Wire ISDN Compatible - area C	19.93		
	4 Wire DS1 Compatible - area A	81.02		
	4 Wire DS1 Compatible - area B	91.45		
	4 Wire DS1 Compatible - area C	100.53		
<b>CO to RT sub-loop</b>				
	DS3 compatible subloop - Band A	731.30		
	DS3 compatible subloop - Band B	834.52		
	DS3 compatible subloop - Band C	849.77		
<b>CO to SAI Sub-Loop</b>				
	2 Wire Analog - area A	5.43		
	2 Wire Analog - area B	5.90		
	2 Wire Analog - area C	6.69		
	4 Wire Analog - area A	16.06		
	4 Wire Analog - area B	17.12		

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	4 Wire Analog - area C	18.89		
	2 Wire DSL Compatible - area A	5.08		
	2 Wire DSL Compatible- area B	4.85		
	2 Wire DSL Compatible- area C	4.60		
	4 Wire DSL Compatible- area A	9.78		
	4 Wire DSL Compatible- area B	9.33		
	4 Wire DSL Compatible- area C	8.87		
	2 Wire ISDN Compatible - area A	10.22		
	2 Wire ISDN Compatible - area B	13.79		
	2 Wire ISDN Compatible - area C	14.40		
	4 Wire DS1 Compatible - area A	51.75		
	4 Wire DS1 Compatible - area B	57.29		
	4 Wire DS1 Compatible - area C	79.70		
<b>CO to Terminal sub-loop</b>				
	2 Wire Analog - area A	9.19		
	2 Wire Analog - area B	10.75		
	2 Wire Analog - area C	15.32		
	4 Wire Analog - area A	23.60		
	4 Wire Analog - area B	26.80		
	4 Wire Analog - area C	36.14		
	2 Wire DSL Compatible - area A	8.85		
	2 Wire DSL Compatible- area B	9.70		
	2 Wire DSL Compatible- area C	13.23		
	4 Wire DSL Compatible- area A	17.32		
	4 Wire DSL Compatible- area B	19.01		
	4 Wire DSL Compatible- area C	26.12		
	2 Wire ISDN Compatible - area A	13.99		
	2 Wire ISDN Compatible - area B	16.67		
	2 Wire ISDN Compatible - area C	23.03		
	4 Wire DS1 Compatible - area A	59.47		
	4 Wire DS1 Compatible - area B	67.16		
	4 Wire DS1 Compatible - area C	97.18		
<b>ECS to SAI sub-loop</b>				
	2 Wire Analog - area A	1.28		
	2 Wire Analog - area B	1.20		
	2 Wire Analog - area C	1.16		
	4 Wire Analog - area A	2.55		
	4 Wire Analog - area B	2.37		
	4 Wire Analog - area C	2.29		
	2 Wire DSL Compatible - area A	1.28		
	2 Wire DSL Compatible - area B	1.20		
	2 Wire DSL Compatible - area C	1.16		
	4 Wire DSL Compatible - area A	2.55		
	4 Wire DSL Compatible - area B	2.37		
	4 Wire DSL Compatible - area C	2.29		
<b>ECS to Terminal sub-loop</b>				

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	2 Wire Analog - area A	5.05		
	2 Wire Analog - area B	6.05		
	2 Wire Analog - area C	9.79		
	4 Wire Analog - area A	10.09		
	4 Wire Analog - area B	12.05		
	4 Wire Analog - area C	19.54		
	2 Wire DSL Compatible - area A	5.05		
	2 Wire DSL Compatible - area B	6.05		
	2 Wire DSL Compatible - area C	9.79		
	4 Wire DSL Compatible - area A	10.09		
	4 Wire DSL Compatible - area B	12.05		
	4 Wire DSL Compatible - area C	19.54		
<b>ECS to NID sub-loop</b>				
	2 Wire Analog - area A	5.80		
	2 Wire Analog - area B	6.81		
	2 Wire Analog - area C	10.62		
	4 Wire Analog - area A	11.56		
	4 Wire Analog - area B	13.56		
	4 Wire Analog - area C	21.22		
	2 Wire DSL Compatible - area A	5.80		
	2 Wire DSL Compatible - area B	6.81		
	2 Wire DSL Compatible - area C	10.62		
	4 Wire DSL Compatible - area A	11.56		
	4 Wire DSL Compatible - area B	13.56		
	4 Wire DSL Compatible - area C	21.22		
<b>SAI to Terminal sub-loop</b>				
	2 Wire Analog - area A	4.88		
	2 Wire Analog - area B	5.83		
	2 Wire Analog - area C	9.66		
	4 Wire Analog - area A	9.75		
	4 Wire Analog - area B	11.66		
	4 Wire Analog - area C	19.29		
	2 Wire DSL Compatible - area A	4.88		
	2 Wire DSL Compatible - area B	5.83		
	2 Wire DSL Compatible - area C	9.66		
	4 Wire DSL Compatible - area A	9.75		
	4 Wire DSL Compatible - area B	11.66		
	4 Wire DSL Compatible - area C	19.29		
<b>SAI to NID sub-loop</b>				
	2 Wire Analog - area A	5.61		
	2 Wire Analog - area B	6.61		
	2 Wire Analog - area C	10.49		
	4 Wire Analog - area A	11.22		
	4 Wire Analog - area B	13.16		
	4 Wire Analog - area C	20.97		

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	2 Wire DSL Compatible - area A	5.61		
	2 Wire DSL Compatible - area B	6.61		
	2 Wire DSL Compatible - area C	10.49		
	4 Wire DSL Compatible - area A	11.22		
	4 Wire DSL Compatible - area B	13.16		
	4 Wire DSL Compatible - area C	20.97		
<b>Terminal to NID sub-loop</b>				
	2 Wire Analog - area A	1.14		
	2 Wire Analog - area B	1.15		
	2 Wire Analog - area C	1.23		
	4 Wire Analog - area A	2.25		
	4 Wire Analog - area B	2.30		
	4 Wire Analog - area C	2.47		
	2 Wire DSL Compatible - area A	1.14		
	2 Wire DSL Compatible - area B	1.15		
	2 Wire DSL Compatible - area C	1.23		
	4 Wire DSL Compatible - area A	2.25		
	4 Wire DSL Compatible - area B	2.30		
	4 Wire DSL Compatible - area C	2.47		
<b>Non-Recurring Rate Elements - Unbundled Sub - Loop</b>				
	2 Wire Analog Sub Loop - NRC		\$137.70	\$52.99
	4 Wire Analog Sub Loop - NRC		\$138.64	\$52.99
	2 Wire DSL Sub Loop - NRC		\$148.38	\$52.98
	4 Wire DSL Sub Loop - NRC		\$152.36	\$53.24
	2 Wire Digital (ISDN) Sub Loop - NRC		\$176.96	\$52.98
	DS1 Sub Loop - NRC		\$346.37	\$78.59
	DS3 Sub Loop - NRC		\$456.49	\$125.20
<b>UNBUNDLED DARK FIBER LOOP</b>				
	Dark Fiber Loop Termination (Per Termination per Fiber)	23.34		
	Dark Fiber Loop Mileage (Per Fiber per Foot)	.002287		
	Dark Fiber Loop Cross-Connect (Per Termination per Fiber)	2.17		
<b>Non-Recurring Rate Elements - Unbundled Dark Fiber Loop</b>				
<b>Inquiry</b>	Dark Fiber Loop - NRC		\$69.18	
<b>PER REQUEST</b>	Dark Fiber Sub-Loop - NRC		\$69.18	
	Dark Fiber Interoffice Transport - NRC		\$284.17	
<b>FIRM ORDER</b>	Administrative Per Order-Connect		\$10.97	12.73
<b>PER FIBER STRAND</b>	Dark Fiber Loop / Sub-Loop - NRC (CO to RT, HUT, CEV or PREM)		\$310.76	116.97
	Dark Fiber Sub-Loop - NRC (RT to RT, HUT, CEV or PREM or HUT to CEV,PREM or CEV to PREM)		\$328.69	\$119.29
	Dark Fiber Interoffice Transport - NRC		\$411.80	\$106.10
<b>LINE SHARING</b>				

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
(If provided for in an interconnection agreement)				
<b>AMERITECH WISCONSIN OWNED SPLITTER</b>	HFPL Cross-Connect Configuration Charge - NRC		\$34.76	39.31
	HFPL Cross-Connect	Per 251/252		
	Splitter	Per 251/252		
	HFPL OSS Modification Charge	Not Required		
<b>CLEC OWNED SPLITTER</b>				
<b>CLEC OWNED SPLITTER</b>	HFPL Cross-Connect Configuration Charge - NRC		\$26.82	\$34.31
	HFPL Cross-Connect	Per 251/252		
	HFPL OSS Modification Charge	Not Required		
<b>UNBUNDLED LOCAL SWITCHING</b>				
	Basic Port	2.83		
	Ground Start Port	2.83		
	ISDN - Direct Port	10.09		
	ISDN - Telephone Number, per Number	.04		
	DID Port	20.83		
	DID Port -Telephone Number, per Number	.04		
	ISDN Prime Port	163.69		
	ISDN Prime Port - Telephone Number, per Number	.04		
	ADTS Port	169.91		
	ULS Trunk Port, per DS1 port	169.78		
	Centrex Basic Port	2.83		
	Centrex ISDN - Dir Port	10.09		
	Centrex EKL Port	5.51		
	Centrex Attn Console Port	7.61		
	Centrex System Features	412.10		
	Local Switching Usage			
	Daily Usage Feed	.000531		
	Service Coord. Fee per account, per CO	1.77		
<b>Non-Recurring Rate Elements - Unbundled Local Switching</b>				
	Change one type line port to another, per each change - NRC			
	CTX Cng & Rearrange per system feature per occurrence - NRC		\$61.99	
	CTX Feature Activation per occasion NRC		\$196.52	\$81.71
	Trunk Ordering Development		Not Allowed	
	<b>(Basic Port = Basic, Ground Start, COPTS, and Basic Centrex)</b>			
	Service Order-Initial-Basic Port NRC		\$0.06	\$0.04
	Basic-Subsequent Service Order- Port Conversion - NRC		\$0.06	

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	Service Order-Record Work Only-Basic Port NRC		\$0.04	
	Port Connection NRC		\$11.21	\$0.69
	Basic Port Conversion NRC		\$11.19	
	<b>(Complex Port = PBX,DID/ADTS, ISDN Direct &amp; Prime, Centrex: ISDN, EKL, Attendant)</b>			
	Service Order-Initial-Complex Port NRC		\$22.75	\$3.57
	Complex-Subsequent Service Order- Port Conversion - NRC		\$0.06	
	Service Order-Record Work Only-Complex Port NRC		\$0.04	
	Port Connection NRC		\$83.25	\$29.29
	Generic Centrex Basic, ISDN, EKL		\$99.21	\$39.67
	Generic Centrex Att Console		\$99.21	\$39.67
	Network Routing, per route per switch NRC		\$18.46	\$10.71
	<b>(Unbundled Local Switching Trunk Port)</b>			
	Service Order -Initial- ULS Trunk Port NRC		\$17.79	\$8.29
	ULS-Subsequent Service Order- Port Conversion - NRC		\$0.06	
	Service Order -Record Work Only - ULS Trunk Port NRC		\$0.04	
	ULS Port Connection NRC		\$290.40	\$180.70
	Centrex Common Block NRC		\$105.24	\$81.87
	DID Port Add/Rearrange per Termination NRC		\$18.46	\$10.71
	ISDN Prime Port Add or Change Channels NRC		\$18.46	\$10.71
	<b>Line Features - Subsequent Order - Initial Feature - Non-Recurring</b>			
	Basic		\$0.05	\$0.05
	Simple Centrex		\$1.20	\$0.81
	COPTS		\$1.07	\$0.46
	PBX		\$49.06	\$35.57
	Complex Centrex		\$29.37	\$26.23
	DID / ADTS		\$59.48	\$20.45
	ISDN - Direct		\$118.38	\$54.93
	ISDN - Prime		\$58.89	\$27.12
	<b>Line Features - Initial &amp; Subsequent Order - Additional Feature - Non-Recurring</b>			
	Basic		\$0.02	\$0.02
	Simple Centrex		\$0.28	\$0.31
	COPTS		\$0.22	\$0.16
	PBX		\$6.60	\$7.64
	Complex Centrex		\$5.33	\$5.15
	DID / ADTS		\$2.91	\$3.39
	ISDN - Direct		\$9.11	\$10.56
	ISDN - Prime		\$2.89	\$3.35
	Customer Training per Hour per Occ - NRC		\$73.83	

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	Billing Development		Not Allowed	
	Custom Routing - per new LCC, per switch - NRC		\$297.09	
<b>ULS - Shared Transport</b>				
	ULS Switch Usage per MOU			
	ULS-ST Reciprocal Compensation per MOU	Per 251/252		
	ULS-ST SS7 Signaling Transport per Message	.000044		
	ULS-ST Blended Transport Usage per MOU	.000646		
	ULS-ST Common Transport per MOU	.000485		
	ULS-ST Tandem Switching per MOU	.000229		
<b>RECIPROCAL COMPENSATION</b>				
	End Office Switching Setup	Per 251/252		
	End Office Switching per MOU	Per 251/252		
	Tandem Switching Setup	Per 251/252		
	Tandem Switching per MOU	Per 251/252		
	Transport Facilities Termination Setup	Per 251/252		
	Transport Facilities Termination per MOU	Per 251/252		
	Transport Facilities Setup Per Mile	Per 251/252		
	Transport Facilities per MOU Per Mile	Per 251/252		
<b>TRANSIT SERVICE</b>				
	Tandem Switching Per Minute	.004406		
	Tandem Transport Termination Per Minute	.000070		
	Tandem Transport Facility Mileage Per Minute	.000061		
<b>INTEROFFICE TRANSMISSION FACILITIES</b>				
	DS1 Entrance Facility, per POT- Band A	59.91		
	DS1 Entrance Facility, per POT- Band B	68.05		
	DS1 Entrance Facility, per POT-Band C	98.83		
	Interoffice Transport DS1 CMT, per term	18.49		
	Interoffice Transport DS1 CM, per mile	2.19		
	DS1 to Voice CO Multiplexing	342.91		
	DS3 Entrance Facility, per POT- Band A	677.90		
	DS3 Entrance Facility, per POT- Band B	684.21		
	DS3 Entrance Facility, per POT- Band C	699.40		
	Interoffice Transport DS3 CMT, per term	191.33		
	Interoffice Transport DS3 CM, per mile	33.29		
	DS3 to DS1 CO Multiplexing per arrangement	473.51		
	OC-3 Entrance Facility per POT	674.66		
	OC-3 Interoffice Mileage Termination per POT	244.01		
	OC-3 Interoffice Mileage - per mile	37.12		

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	OC-3 Add/Drop Multiplexing - per arrangement	527.17		
	OC-3 Add/Drop Function per DS3 Add or Drop	161.03		
	OC-3 Add/Drop Function per DS1 Add of Drop	5.65		
	OC-3 Cross-connection of Services OC-3 to OC-3 Cross-connect - per circuit	1.39		
	OC-3 1+1 Protection with Cable Survivability per OC-3 Entr. Facility/Qtr. Route mile	2.82		
	OC-12 Entrance Facility per POT	1496.89		
	OC-12 Interoffice Mileage Termination per POT	1013.40		
	OC-12 Interoffice Mileage - per mile	202.01		
	OC-12 Add/Drop Multiplexing - per arrangement	838.93		
	OC-12 Add/Drop Function per OC-3 Add or Drop	89.93		
	OC-12 Add/Drop Function per DS3 Add or Drop	67.55		
	OC-12 Cross-connection of Services OC-12 to OC-12 Cross-connect - per circuit	1.39		
	OC-12 1+1 Protection with Route Survivability per OC-12 Entr. Facility/Qtr. Rte mi	3.05		
	OC-48 Entrance Facility per POT	4076.87		
	OC-48 Interoffice Mileage Termination per POT	2009.00		
	OC-48 Interoffice Mileage - per mile	226.97		
	OC-48 Add/Drop Multiplexing - per arrangement	304.35		
	OC-48 Add/Drop Function per OC-12 Add or Drop	240.85		
	OC-48 Add/Drop Function per OC-3 Add or Drop	89.93		
	OC-48 Add/Drop Function per DS-3 Add or Drop	59.70		
	OC-48 Cross-connection of Services OC-48 to OC-48 Cross-connect - per circuit	1.39		
	OC-48 1+1 Protection with Route Survivability per OC-48 Entr Facility/Qtr. Rte mi	12.20		
<b>Non-Recurring Rate Elements - Interoffice Transmission Facilities</b>				
	DS1 Clear Channel Capability per circuit arranged (New/Established) - NRC		\$271.14	\$63.91
	OC-3 1+1 Protection with Cable Survivability per OC-3 Entrance Facility - NRC		\$3,043.59	
	OC-12 1+1 Protection with Cable Survivability per OC-12 Entrance Facility - NRC		\$3,043.59	
	OC-48 1+1 Protection with Cable Survivability per OC-48 Entrance Facility - NRC		\$3,043.59	
	Administrative Charge, per order - DS1 Service -NRC		Per 251/252	Per 251/252

PRODUCT	UNBUNDLED NETWORK ELEMENTS TYPE	Recurring	NRC Install	NRC Disconnect
	Administrative Charge, per order - DS3 Service -NRC		Per 251/252	Per 251/252
	Administrative Charge, per order - OC-3 Service-NRC		\$98.31	\$54.50
	Administrative Charge, per order - OC-12 Service-NRC		\$98.31	\$54.50
	Administrative Charge, per order - OC-48 Service-NRC		\$98.31	\$54.50
	Design and CO Connection Charge, per circuit - DS1 Service-NRC		Per 251/252	Per 251/252
	Design and CO Connection Charge, per circuit - DS3 Service-NRC		Per 251/252	Per 251/252
	Design and CO Connection Charge, per circuit - OC-3 Service-NRC		\$478.89	\$83.94
	Design and CO Connection Charge, per circuit - OC-12 Service-NRC		\$478.89	\$83.94
	Design and CO Connection Charge, per circuit - OC-48 Service-NRC		\$478.89	\$83.94
	Carrier Connection Charge per Termination - DS1 Service-NRC		Per 251/252	
	Carrier Connection Charge per Termination - DS3 Service-NRC		Per 251/252	
	Carrier Connection Charge per Termination - OC-3 Service-NRC		\$910.99	
	Carrier Connection Charge per Termination - OC-12 Service-NRC		\$910.99	
	Carrier Connection Charge per Termination - OC-48 Service-NRC		\$910.99	
<b>DARK FIBER INTEROFFICE</b>				
	Dark Fiber Interoffice Termination (Per Termination per Fiber)	30.41		
	Dark Fiber Interoffice Mileage (Per Fiber per Foot)	.003315		
	Dark Fiber Interoffice Cross-connect (Per Termination per Fiber)	2.69		
<b>UNBUNDLED TANDEM SWITCHING</b>				
	Unbundled Tandem Usage Cost - per Minute of Use	.00033		
	Tandem Trunk DS-1	71.21		
<b>Non-Recurring Rate Elements - Unbundled Tandem Switching</b>				
	Trunk Translations - Features - NRC		\$145.63	\$115.05
	Service Order NRC		\$17.79	\$8.29
	Service Order - Subsequent - Add/Cng NRC		\$18.46	\$10.71

<b>SS7 / STP ACCESS</b>				
	Signal Transfer Point - Port Termination -(For Both IAM/TCAP msgs)	536.02		
	Signal Switching/IAM msg	.000127		
	Signal Transport/IAM msg	.000156		
	Signal Formulation/IAM msg	.000238		
	Signal Tandem Switching/IAM msg	.000282		
	Signal Switching/TCAP msg	.000099		
	Signal Transport/TCAP msg	.000105		
	Signal Formulation/TCAP msg	.000123		
<b>Non-Recurring Rate Elements - SS7 / STP Access</b>				
	Signal Transfer Point per Port - (For Both IAM/TCAP msgs) - NRC		\$878.81	\$183.72
	Orig.Point Code/per svc added or changed – NRC		\$26.40	\$30.61
	Global Title Address Trans per svc added/changed - NRC		\$12.48	\$26.95
<b>CNAM ACCESS</b>				
	CNAM Query	.008631		
<b>800 ACCESS</b>				
	Fac.Based-Local STP Conn-800DB Carrier ID Only	.001119		
	Fac.Based-Local STP Conn-800DB Routing Options	.000042		
	Fac.Based-Reg. STP Conn-800DB Carrier ID Only	.000929		
	Fac.Based-Reg. STP Conn-800DB Routing Options	.000042		
	Non-Fac Based-800DB Call Routing Query	.001231		
	Non-Fac Based-800DB Routing Options	.000042		
<b>LIDB</b>				
	Fac.Based-Local STP Conn-LIDB Validation	.006051		
	Fac.Based-Local STP Conn-LIDB Transport	.000194		
	Fac.Based-Local STP Conn-LIDB to Other DBs	.063676		
	Fac.Based-Reg. STP Conn-LIDB Validation	.006051		
	Fac. Based-Reg. STP Conn-LIDB Transport	.000004		
	Non-Fac.Based - LIDB Validation	.006051		
	Non-Fac. Based - LIDB Transport	.000304		
	Non-Fac. Based - LIDB to Other Databases	.063788		
<b>UNE-P MIGRATION - EXISTING COMBINATIONS WITH DIAL TONE</b>				
	Service Order - Migration Order (Install)		\$0.06	
	Service Order - Migration Order (Disconnect)			\$0.04
<b>UNE-P MIGRATION - EXISTING COMBINATIONS WITHOUT DIAL TONE</b>				
	Line Connection (Install)		\$12.01	
	Line Connection (Disconnect)			\$0.04
<b>MANUAL SERVICE ORDER - UNE-P POTS</b>				
	Manual Service Order (Install)		Per 251/252	
	Manual Service Order (Disconnect)			Per 251/252

