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January 21, 2004

Ms. Blanca S. Bayó, Director  
Division of the Commission Clerk  
& Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

JAN 21 PM 4:39  
COMMISSION  
CLERK

Re: Docket No. 030852-TP

Dear Ms. Bayó:

Enclosed for filing on behalf of Sprint-Florida, Incorporated and Sprint Communications Limited Partnership are the original and 15 copies of Sprint's Rebuttal Testimony of Kent W. Dickerson and Exhibits KWD-1 - KWD-3.

Copies are being served on the parties in this docket pursuant to the attached certificate of service.

Please acknowledge receipt of this filing by stamping and initialing a copy of this letter and returning same to my assistant. If you have any questions, please do not hesitate to call me at 850/599-1560.

Sincerely,

Susan S. Masterton

Enclosure

- AUS \_\_\_\_\_
- CAF \_\_\_\_\_
- CMP \_\_\_\_\_
- COM 5/10/04
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
- GCL \_\_\_\_\_
- OPC \_\_\_\_\_
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**DOCKET NO. 030851-TP & 030852-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by electronic and U.S. mail this 21<sup>st</sup> day of January, 2004 to the following:

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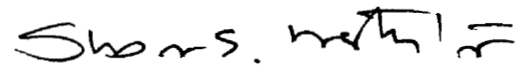
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Susan S. Masterton

(+ Signed Protective Agreement)

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **REBUTTAL TESTIMONY**

3   **OF**

4   **KENT W. DICKERSON**

5  
6  
7   **INTRODUCTION**

8   **Q.    Please state your name, business address, employer and current position.**

9    A.    My name is Kent W. Dickerson. My business address is 6450 Sprint Parkway,  
10       Overland Park, KS 66251. I am employed as Director - Cost Support for  
11       Sprint/United Management Company.

12  
13   **Q.    Please summarize your qualifications and work experience.**

14    A.    I received a Bachelor of Science degree from the University of Missouri - Kansas  
15       City in 1981 with a major in Accounting. In 1984, I passed the national exam and  
16       am a Certified Public Accountant in the State of Missouri.

17  
18       From 1981 to 1983, I was employed as a Corporate Income Tax Auditor II for the  
19       Missouri Department of Revenue. From 1983 to 1985, I worked for Kansas Power  
20       and Light (now Western Resources) in the Tax and Internal Audit areas. I joined  
21       United Telephone Midwest Group in September, 1985 as a Staff Accountant in  
22       the Carrier Access Billing area. Thereafter, I moved through a progression of  
23       positions within the Toll Administration and General Accounting areas of the  
24       Finance Department.

1 In 1987, I was promoted into the Carrier and Regulatory Services group as a  
2 Separations/Settlement Administrator performing Federal and Intrastate  
3 access/toll pool settlement, reporting and revenue budgeting functions. I was  
4 promoted to Manager - Pricing in June, 1989 where I performed FCC regulatory  
5 reporting and filing functions related to the United Telephone - Midwest Group  
6 Interstate Access revenue streams. In 1991, I was promoted to Senior Manager -  
7 Revenue Planning for United Telephone - Midwest Group. While serving in this  
8 position, my responsibilities consisted of numerous FCC regulatory reporting and  
9 costing functions. In 1994, I accepted a position within the Intrastate Regulatory  
10 operations of Sprint/United Telephone Company of Missouri where my  
11 responsibilities included regulatory compliance, tariff filings, and earnings  
12 analysis for the Missouri company's intrastate operations. Since December 1994,  
13 I have set-up and directed a work group which performs cost of service studies for  
14 retail services, wholesale unbundled network elements cost studies, and state and  
15 federal Universal Service Fund cost studies. Over the last seven years, I have been  
16 charged with developing and implementing cost study methods which conform  
17 with Total Service Long Run Incremental Cost ("TSLRIC") and Total Element  
18 Long Run Incremental Cost ("TELRIC") methodologies. I am responsible for  
19 written and oral testimony, serving on industry work groups, and participating in  
20 technical conferences related to TSLRIC/TELRIC costing methodology, filing of  
21 studies within 18 individual states that comprise Sprint's Local Telephone  
22 Division (LTD) and providing cost expertise to Sprint's participation in regulatory  
23 cost dockets outside of the LTD territories.

24

1 **Q. Have you previously testified before state regulatory commissions?**

2 A. Yes. I have testified before the Florida, Nevada, North Carolina, Texas, Kansas,  
3 Missouri, Georgia, and Wyoming regulatory commissions regarding  
4 TSLRIC/TELRIC cost matters.

5

6

#### PURPOSE OF TESTIMONY

7 **Q. What is the purpose of your testimony?**

8 A. The purpose of my testimony is to respond to the cases submitted by BellSouth  
9 (BST) and Verizon in response to the FCC's Triennial Review Order ("TRO")<sup>1</sup>  
10 and to provide evidence related to impairment triggers for dedicated transport  
11 routes and building locations. Specifically, I will respond to BST witnesses  
12 Shelley Padget, Wayne Gray, and Anhirudda Banerjee and Verizon Witnesses  
13 Orville Fulp and John White.

14

15 I will show that throughout their testimony, both companies consistently relied on  
16 numerous self serving assumptions and failed to provide the route and location  
17 specific data required to overturn the FCC's national findings of impairment.  
18 Specifically, both BST's and Verizon's submissions in this proceeding fail to  
19 overcome the national finding that competitive local exchange carriers ("CLECs")  
20 are impaired without unbundled access to Dedicated Transport and high capacity  
21 loops.

22

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<sup>1</sup> *Triennial Review Order.*

1 **Q. Please describe the “self-provisioning trigger,” the “competitive wholesale**  
2 **facilities trigger” and the “potential deployment” test set forth in the FCC’s**  
3 **Triennial Review Order.**

4 **A. The FCC made a national finding that CLECs are impaired when competing in**  
5 **the local market without access to unbundled DS3 loops, DS1 loops and dark**  
6 **fiber from the ILEC, and they identified three tests that must be met at specific**  
7 **customer locations to overturn the impairment finding. First, the “self-**  
8 **provisioning trigger” allows a state commission to conclude that CLECs are not**  
9 **impaired without access to unbundled DS3 loops at a specific customer location**  
10 **where two or more competing providers not affiliated with each other or the ILEC**  
11 **have either deployed their own DS3 facilities and are serving customers via those**  
12 **facilities at that specific customer location or have deployed DS3 facilities by**  
13 **attaching their own optronics to activate dark fiber transmission facilities obtained**  
14 **under a long-term indefeasible right of use and are serving customers with the**  
15 **facility at that location.<sup>2</sup> Second, the “competitive wholesale facilities trigger”**  
16 **allows a state commission to conclude that CLECs are not impaired without**  
17 **access to unbundled DS3 loops at a specific customer location where two or more**  
18 **competing providers not affiliated with each other or the ILEC have deployed**  
19 **their own DS3 facilities and offer DS3 loops over their own facilities on a widely**  
20 **available wholesale basis to other competing providers. The competing**  
21 **providers’ DS3 facilities may use dark fiber facilities obtained on an unbundled,**  
22 **leased or purchased basis if it has attached its own optronics to activate the fiber.**

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<sup>2</sup> 47 C.F.R. § 51.319(a)(5)(i)(A).

1 The competing provider must have access to the entire customer location,  
2 including each individual unit within that location.<sup>3</sup> Third, the “potential  
3 deployment” test, is based upon the economic feasibility of two or more CLECs  
4 building a loop to a particular customer location even if no CLEC has actually  
5 built such a loop based upon its own analysis of the local market. The “potential  
6 deployment” test requires the ILEC to produce evidence that a CLEC is “not  
7 impaired without access to an unbundled DS3 loop at a “specific customer  
8 location.”<sup>4</sup>

9  
10 **DEDICATED TRANSPORT**

11 **Q. Please address the criteria used by the FCC to determine non-impairment**  
12 **for dedicated transport.**

13 **A.** The FCC’s TRO establishes “competitive trigger” criteria to determine whether  
14 carriers are impaired without access to unbundled network elements. Separate  
15 competitive triggers have been established for self-provisioned providers and for  
16 wholesale providers.

17  
18 For dedicated transport, the self provisioning trigger applies to dark fiber and DS-  
19 3 services and is satisfied if the Commission finds “that three or more competing  
20 providers not affiliated with each other or the incumbent LEC, including  
21 intermodal providers of service comparable in quality to that of the incumbent  
22 LEC” have deployed their own transport facilities, are operationally ready to use

---

<sup>3</sup> 47 C.F.R. § 51.319(a)(5)(i)(B).

<sup>4</sup> *Id.*



1 those facilities to provide dedicated transport along that route and have terminated  
2 their facilities either at a collocation arrangement or at a similar arrangement.

3  
4 The wholesale trigger, which applies to dark fiber, DS-1 and DS-3 services, is  
5 satisfied if the state commission finds that “two or more competing providers not  
6 affiliated with each other or the incumbent LEC, including intermodal providers  
7 of service comparable in quality to that of the incumbent LEC and each satisfy  
8 four conditions;

- 9 1) They have deployed their own transport facilities and are operationally  
10 ready to use those facilities along a particular route. These facilities may  
11 include “dark fiber” facilities obtained on an unbundled, leased or  
12 purchased basis if they have attached their own optronics to activate the  
13 fiber;
- 14 2) They are willing to immediately provide, on a widely available basis,  
15 dedicated transport along the route;
- 16 3) Their facilities terminate in a collocation or similar arrangement, as  
17 appropriate, and;
- 18 4) Requesting carriers may obtain reasonable and nondiscriminatory access  
19 to the provider’s facilities through a cross-connect.<sup>5</sup>

20  
21 **Q. Have BST and Verizon provided lists of transport routes that they claim to**  
22 **meet either the self-provisioning or wholesale criteria?**

---

<sup>5</sup>See, TRO at Appendix B, 47 C.F.R. §51.319(e)(1)(ii).

1 A. Yes. BST, in direct supplemental testimony served on January 9, 2004 has  
2 identified 718 routes that they claim meet either the self-provisioning trigger or  
3 the wholesale trigger for unbundled DS-3 and dark fiber transport. These routes  
4 are identified in Supplemental Direct Exhibit SWP-9 of Shelly Padgett's Direct  
5 Supplemental Testimony. Verizon has identified 25 routes meeting the FCC's  
6 self provisioning criteria for dark fiber and DS-3 level capacity and 67 routes  
7 meeting the FCC's wholesale trigger for DS-1s, DS-3s and dark fiber. These  
8 routes are identified in Exhibits F.1 – F.4 of the Joint Supplemental Testimony of  
9 Orville D. Fulp and John White served on January 9, 2004.

10

11 **Q. What support have BST and Verizon provided to substantiate the routes**  
12 **they have identified as meeting the FCC's dedicated transport triggers?**

13 A. BST and Verizon identified transport routes where they claim at least three non-  
14 affiliated competing carriers have deployed their own fiber transport facilities and  
15 extended them into BST and Verizon central offices through collocation. In other  
16 words, both BST and Verizon assume that the CLEC has an actual route in  
17 existence when the CLEC has a fiber collocation presence in any two or more  
18 central offices. Both BST and Verizon allege that a "route" exists between central  
19 offices "A" and "Z" if the same CLEC has collocations with fiber that exits the  
20 "A" and "Z" central offices. BST and Verizon make these same assumptions for  
21 identifying dedicated transport routes that meet the wholesale trigger. If at least  
22 two carriers have fiber collocation in two central offices and the incumbent  
23 identifies them as a wholesale provider, BST and Verizon assume the route meets  
24 the wholesale trigger.

1

2 **Q. Do BST and Verizon support their trigger analyses with data provided by**  
3 **competitive carriers through their response to the Staff's Request for**  
4 **Discovery?**

5 A. No. Both BST and Verizon indicate that the data responses received from  
6 competitive providers were insufficient. On page 4, lines 4 and 5 of their  
7 Supplemental Direct Testimony, witnesses Doug Fulp and John White indicate  
8 that "not all competitive carriers have responded to the Commission's data  
9 requests as of this filing date and many did not respond fully or adequately." On  
10 page 18, lines 8 - 11 of her Direct Testimony, BST witness Shelly Padgett states  
11 that "[she] initially hoped to rely on discovery responses from competitive  
12 carriers. Unfortunately, to date, BST has received far fewer responses than  
13 expected, so [BST] has been forced to rely heavily on [their] own billing and  
14 operations data regarding collocation arrangements and fiber entrance facilities."  
15 Based on these statements, the BST's use of the data request responses should not  
16 be viewed as a credible source of information.

17

18 **Q. Have BST or Verizon validated that a CLEC is actually providing transport**  
19 **service or offering wholesale service between two BST wire centers prior to**  
20 **counting the CLEC in the trigger analysis?**

21 A. No. Both carriers have simply identified pairs of central offices based on  
22 collocations and broad statements contained in marketing materials. They have  
23 also based conclusions regarding bandwidth availability along specific routes on  
24 general carrier information contained on carrier websites when in fact such

1 information may not be applicable to each individual route. For example, a web  
2 site may indicate that a provider offers DS-1 through OC-n facilities, but a  
3 specific route may be at full capacity or not available at all, which would  
4 invalidate that carrier's eligibility in terms of satisfying the wholesale trigger  
5 along a particular route. BST and Verizon have provided little evidence that the  
6 CLEC has actually self-provisioned the facility it claims and is truly providing  
7 transport service between two BST central offices. Further, there is little evidence  
8 that there are end-to-end circuits as I discuss immediately below. For example,  
9 looking at the diagram in attached Exhibit KWD-1, a CLEC may have fiber  
10 collocations in Wire Center A and Wire Center B and, according to BST and  
11 Verizon's simplified trigger analysis, would therefore have a route between A and  
12 B. But, that CLEC may be solely using its facilities from wire center A and from  
13 wire center B to connect loops they serve in wirecenter A and B to their self-  
14 provisioned dial-tone switch. Such a CLEC does not qualify for inclusion in any  
15 trigger analysis seeking to remove BST's or Verizon's obligations for unbundling  
16 dedicated transport between those two locations.

17  
18 **Q. Are there other examples of flaws in BST's and Verizon's transport trigger**  
19 **analyses?**

20 **A.** Yes. It is possible for a carrier to own or lease via a long-term IRU only *portions*  
21 of a specific route. Specifically, a carrier may have built their own facilities from  
22 the collocation site into the manhole just outside the ILEC central office, but they  
23 do not own or control under a long-term IRU lease, the entire interoffice segment  
24 of the route between the manholes. For example, three different CLECs may

1 indeed have collocations in the ILEC's Wire Center A and Wire Center B with  
2 their own fiber in and out of the collocation site into the first manholes. However,  
3 all three CLECs may lease on a non-IRU basis fiber from the same wholesale  
4 provider for the interoffice transport between the manholes. (See attached Exhibit  
5 KWD-2) Thus, none of the three CLECs would qualify as examples of self-  
6 deployment of dedicated transport for competitive triggers. This example  
7 demonstrates the weakness of simply counting collocations and fiber going in and  
8 out of the wire center. The result is making the flawed assumption that all three  
9 CLECs have found it to be technically and economically feasible to self-provision  
10 transport, end-to-end, between Wire Center A and Wire Center B when, in reality,  
11 they have not. In this example in Exhibit KWD-2, no competitive triggers have  
12 been met.

13 Another version of this scenario that would not qualify under the competitive  
14 trigger criteria is where the carrier owns the interoffice transport fiber between the  
15 manholes, but does not necessarily own the transport from the manholes into their  
16 fiber based collocation site. Instead, they are leasing that fiber via a non-IRU  
17 arrangement from another provider who is collocated in the same end office.  
18 Therefore, under these scenarios, the CLEC doesn't actually own or control the  
19 entire transport route – end to end.

20  
21 Another weakness in simply evaluating collocation sites is that fiber-based  
22 collocation at wire centers A and B does not, on its own, support a conclusion that  
23 dedicated transport routes exist between wire centers A and B.

1 It is possible that the carrier may service its collocation arrangements in wire  
2 centers A & B via separate non-connected fiber rings as illustrated in attached  
3 Exhibit KWD-3.

4 **Q. Do BST and Verizon make any other broad assumptions in completing its**  
5 **trigger analysis?**

6 A. Yes. Both carriers assume that the mere existence of collocation at two central  
7 offices meets the self provisioning trigger for DS-3 and dark fiber regardless of  
8 whether both are actually available. Even assuming a carrier has deployed its  
9 own fiber between two central offices, it violates the FCC's requirement of a  
10 granular analysis to assume there is dark fiber available. A granular analysis is  
11 required to show if there is dark fiber and if so, whether there are sufficient  
12 quantities of dark fiber available to satisfy current demand along that route.<sup>6</sup>

13  
14 **Q. Do BST and Verizon assume that every collocation designated contains**  
15 **channelization of the OCn facilities?**

16 A. Yes. Both carriers assume that any carrier that has deployed its own fiber and  
17 attached OCn electronics to the fiber will channelize the OCn system into all  
18 lower levels of bandwidth such as DS-3 and DS-1 at each location with lit fiber  
19 and therefore the self provisioning trigger is met for DS-3 and dark fiber  
20 dedicated transport and the wholesale trigger is met for DS-1, DS-3 and dark  
21 fiber. For BST and Verizon to imply that this is done in all instances fails to  
22 supply the granular analysis required by the FCC. Each terminal is uniquely

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<sup>6</sup> 47 C.F.R. §51.319(e)(3)(i)(B)

1 equipped with the amount and type of channel interface equipment necessary to  
2 serve the specific type and quantities of services that will utilize the terminal.  
3 Every route is unique yet BST and Verizon applied a broad assumption rather  
4 than provide route specific factual evidence as to what specific OCn system  
5 channelization has actually occurred on each of the routes that are listed as  
6 meeting the triggers. A route cannot meet the test of operational readiness if the  
7 proper channel interface equipment is not in place.

8  
9 **Q. Do BST and Verizon also assume that dark fiber will always be present?**

10 A. Yes. Both carriers assume that dark fiber will exist on any route that meets the  
11 self-provisioning trigger. BST states that “unless we learn through discovery that  
12 carriers do not have extra dark fiber, it is reasonable to **assume** that any dark fiber  
13 facility that meets the self provisioning trigger may count toward the wholesale  
14 trigger if the provisioning CLEC chooses to wholesale them.”<sup>7</sup> Similarly,  
15 Verizon states that “as a matter of basic network engineering, the vast majority of  
16 self provisioned fiber transport facilities will have spare fibers.”<sup>8</sup> The FCC’s TRO  
17 requires that transport routes cannot be removed from BST’s and Verizon’s  
18 unbundling obligations simply based on these broad assumptions. Rather, each  
19 route must be validated with route specific data. The assumption, of both BST  
20 and Verizon, that spare fibers are pulled into the central office cable vault and  
21 then into the collocation site leading to another assumption, that spare/dark fiber  
22 exists for the entire route in question cannot meet the FCC’s required route

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<sup>7</sup> BST Direct Testimony of Shelly Padgett, pg 19, lines 19-21. Emphasis added.

<sup>8</sup> Verizon Joint Direct Testimony of Doug Fulp and John White, pg. 22, lines 5 -7.

1 specific analysis. In many cases spare fibers may not extend beyond the first fiber  
2 splice outside the central office and therefore would not satisfy the competitive  
3 triggers.

4  
5 **Q. Do BST and Verizon make an assumption about wholesale facilities?**

6 A. Yes. BST and Verizon assume incorrectly that any route that qualifies for the self  
7 provisioning trigger also meets the wholesale facilities trigger. BST asserts that  
8 the only question that needs to be answered is whether the competitive carrier  
9 chooses to offer transport to other carriers on a wholesale basis. Similarly,  
10 Verizon makes generalizations based on information contained on carrier web  
11 sites as well as information available through 3<sup>rd</sup> party data services. Simply  
12 because a carrier announces that it offers wholesale facilities, if that  
13 announcement is not route specific, then it cannot be assumed (as BST and  
14 Verizon have done) that each and every route where that carrier is present is  
15 offered at wholesale regardless of the purpose, use, or operational readiness of  
16 that route. Furthermore, it cannot be assumed that when a carrier is making such  
17 statements that the underlying facilities are exclusively their own. In fact, the  
18 underlying facility may be BST's own facilities acquired via special access or as  
19 unbundled network elements.

20  
21 **Q. How do these flaws impact BST and Verizon's transport trigger cases?**

22 A. Both analyses and resulting conclusions are unreliable for purposes of concluding  
23 that the FCC's dedicated transport triggers have been satisfied. Neither BST nor



1 Verizon have substantiated that the routes they identify are indeed actual routes  
2 capable of meeting the criteria for the triggers.

3 **Q. Do BST or Verizon list Sprint as a trigger-qualifying wholesaler or self-**  
4 **provider of dedicated transport?**

5 A. Yes. Sprint is included in BST's list as a self-provisioning provider for DS-1,  
6 DS-3 and dark fiber dedicated transport for 15 routes in the Orlando LATA, three  
7 in the Jacksonville LATA and 34 in the Southeast Florida LATA (Miami area).

8  
9 **Q. Does Sprint agree with BST's claims that Sprint's Orlando area facilities**  
10 **satisfy the FCC's requirements of a trigger carrier?**

11 A. At this time, Sprint does not take issue with BST's identification of its Orlando  
12 transport facilities as satisfying the trigger requirements for dedicated transport.  
13 However, many of the routes in the Jacksonville and Miami areas, where BST  
14 claims Sprint facilities satisfy the triggers, are invalid due to BST's overreaching  
15 and inaccurate assumptions. These invalid trigger claims regarding Sprint  
16 transport facilities provide direct evidence of BST's faulty and incomplete  
17 analysis and resulting conclusions regarding dedicated transport triggers as I  
18 described earlier in my testimony. The Commission should require the same kind  
19 of confirmation of BST's claims for triggers that Sprint provides for its Orlando  
20 area transport for the other routes claimed by BST and should not accept  
21 conclusions which are not based on objective verification.

22 **Q. Could you briefly describe Sprint's transport arrangements in Florida that**  
23 **are included in BST's trigger claims?**

1 A. Sprint's transport arrangements in the Orlando area are comprised of Sprint  
2 owned fiber facilities which are connected via collocations at certain BST wire  
3 centers. In the Jacksonville and Miami areas, Sprint's transport arrangements are  
4 accomplished via a lease of dark fiber facilities from a third-party supplier. Sprint  
5 maintains collocations in several BellSouth wire centers and has provisioned  
6 optronics to activate the dark fiber. Sprint utilizes these arrangements to transport  
7 interexchange traffic to its long distance points-of-presence and ultimately to its  
8 backbone long distance network.

9  
10 **Q. Please describe the problems with BellSouth's claims regarding Sprint as a**  
11 **trigger for dedicated transport.**

12 A. There are two significant issues associated with BellSouth's claims that Sprint  
13 satisfies the self-provisioning trigger requirements for dedicated transport.

14  
15 1. BST's practice of assuming transport facilities exist between pairs of wire  
16 centers where collocations exist resulted in improper identification of 16  
17 routes in the Miami area as Sprint self-provisioned transport. Sprint's  
18 transport arrangement in Miami consists of two separate and distinct fiber  
19 rings deployed utilizing leased dark fiber and Sprint collocations in BST wire  
20 centers. There are 5 BST wire centers on one ring and 4 BST wire centers on  
21 the second ring. The fiber transport rings do not connect. Yet BellSouth's  
22 approach of utilizing collocations to identify transport routes without  
23 validating that the facility connects the collocations has resulted in claims of  
24 routes between these two fiber rings when in reality, the facilities are not

1 connected. This is the exact scenario I previously described in my testimony  
2 on page 11 and in Exhibit KWD-3.

- 3
- 4 2. BST has claimed that Sprint's transport arrangements in the Jacksonville and  
5 Miami areas satisfy the self-provisioning trigger for DS1, DS3 and dark fiber.  
6 In reality, Sprint's transport arrangements in these areas carry traffic at the  
7 OCn level and Sprint has not provisioned DS1s or DS3s on these transport  
8 routes. This is the scenario that I previously described in my testimony on  
9 page 13 and provides further evidence of the impact of broad assumptions in  
10 BST's trigger case for transport that are not supported by the alternative  
11 network facilities that are in place.

12

13 **LOOP**

14 **Q. Please address the criteria used by the FCC to determine non-impairment**  
15 **for high capacity loops.**

16 **A.** As it does with transport triggers, the TRO establishes competitive triggers for  
17 self-provisioned providers and for wholesale providers that must be applied on a  
18 location specific basis. The self-provisioning trigger applies to dark fiber and DS-  
19 3 loops. If a specific customer location is served by at least two (2) self-  
20 provisioned providers, the state Commission "shall find that a requesting  
21 telecommunications carrier is not impaired without access to" DS-3 and dark fiber  
22 loops on an unbundled basis. Similarly, if a customer location is served by at

1 least two (2) wholesalers, the requesting telecommunications carrier is not  
2 impaired without access to dark fiber, DS-3 and DS-1 loops.<sup>9</sup>

3  
4 **Q. Has BST made a claim that the self provisioning or the wholesale trigger has  
5 been met for any location?**

6 A. Yes. BST has filed in Supplemental Exhibit SWP-2 a list of 81 DS-1 loop  
7 customer locations it claims qualify as meeting the wholesale trigger. BST has  
8 filed in Supplemental Exhibit SWP-4 a list of 83 DS-3 loop locations it claims  
9 qualify as self provisioning triggers. Of those locations BST alleges meet the  
10 triggers for DS-3 loops, 82 locations are alleged to meet the self-provisioning  
11 trigger and 70 locations are alleged to meet the wholesale trigger. BST has filed  
12 in Supplemental Exhibit SWP-5 82 dark fiber loop locations it claims qualify as  
13 self provisioning triggers.

14  
15 **Q. Has Verizon made a claim that the self provisioning or the wholesale trigger  
16 has been met for any location?**

17 A. Yes. Verizon presents a list of only 12 customer locations alleged to meet one or  
18 both of the FCC's triggers in its Supplemental testimony. The arguments Verizon  
19 presents are similar to the arguments BST uses in its filing. Thus my testimony in  
20 this area is intended to respond to the testimonies of both companies.

21  

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<sup>9</sup> 47 C.F.R. 51.319(a)

1   **Q.    What are some of the assumptions that BST has included in defining where**  
2       **triggers occur?**

3    A.    In Supplemental Exhibit SWP-5, BST incorrectly assumes that any provider of lit  
4       fiber facilities will automatically be a provider of dark fiber. BST prepared  
5       Exhibit SWP-5 by simply repeating the 82 locations they alleged to meet the self  
6       provisioning triggers for DS-3 loops contained in Exhibit SWP-4. As noted  
7       above, BST does this without specific knowledge of dark fiber deployment at  
8       each of these locations. The presence of lit fibers in any one section of fiber cable  
9       does not force a conclusion that spare fiber exists. In fact, the fiber cable cross-  
10      section for each fiber cable segment, in any ILEC or CLEC network, will have  
11      varying amounts of spare fibers including some cross-sections with little or no  
12      spare. These spare fibers may or may not be spliced into adjoining cable  
13      segments. As an illustrative example, a CLEC may enter a building with a 24  
14      fiber cable entrance facility with 8 of the fibers lit. The fiber cable which feeds  
15      the entrance facility may only have 12 fibers with all fibers lit. The 24 fiber size  
16      may have been chosen to prevent additional construction costs for placing another  
17      fiber cable in the building entrance facility at a later date. It may have been  
18      chosen because the carrier has standardized on 24 fiber cable for all building  
19      entrances, or it may simply have been chosen because that's what the carrier had  
20      in inventory. In this example, the spare fibers cannot be offered because they do  
21      not go beyond the building entrance facility. In other words, the unused fibers  
22      within the 24 fiber cable entering the building cannot be counted because there  
23      are no spare fibers in the 12 fiber feeder cable to connect them to. They are  
24      effectively stranded fibers.

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**Q. Does spare fiber capacity automatically create an ability to offer dark fiber?**

A. No. Spare fiber capacity does not automatically and universally create an ability to offer dark fiber. ILEC and CLEC fiber networks are rarely built end-to-end at a single point in time, but are comprised of many cable segments spliced end-to-end that have been placed at various points in time and for varying demand forecasts. Certain segments with little or no spare fibers in the fiber sheath may create a “bottle-neck” for any facility provisioning and preclude the offering of dark fiber along that route. If spare fibers are limited or not contiguous, the provider may also choose to restrict any fiber availability on that route due to its own facility requirements. For dark fiber to be available, it must be available for the entire route for which a carrier seeks to lease facilities. BST is incorrect in assuming that lit fiber automatically means the offering of dark fiber from the same provider.

**Q. What other assumption has BST made in establishing whether or not a customer location meets the competitive trigger criteria?**

A. BST has assumed that unless a carrier identified specific barriers related to provisioning high capacity loops at a location, that the CLECs have access to the entire premises. By doing so, BST is effectively asked this Commission to make a blanket finding for all buildings on its lists and not complete separate findings for each building when BST itself has not been able to provide evidence that access is available to the entire customer location. The TRO asks state commissions to validate triggers on a location specific basis and not generalize or

1 group all buildings using unconfirmed broad assumptions applied across all  
2 locations. BST has done exactly the opposite of what the TRO required and  
3 attempts to use unfounded generalizations about the locations to craft them into a  
4 list of locations that lacks the data necessary to overturn the FCC's national  
5 findings of impairment.

6  
7 **Q. What other evidence does BST use to determine if a specific location has met**  
8 **the competitive trigger criteria?**

9 A. As indicated on page 6 of Ms. Padgett's testimony, BST first used carrier  
10 discovery responses describing the locations they serve with high capacity  
11 facilities. However, since not every party adequately responded to BST's  
12 discovery requests, BST purchased data from Georeports, Inc. who is an  
13 independent consulting firm specializing in national business and residential  
14 databases.

15  
16 **Q. Are data obtained through independent third parties sufficient enough to**  
17 **determine if a customer location meets either the self provisioning or**  
18 **wholesale trigger criteria?**

19 A. No. Sprint reviewed information from several data providers in an effort to  
20 determine locations served by competitive providers in our own local serving  
21 areas. Although the data includes information regarding which carriers serve  
22 specific locations and the levels of service offered by each carrier (i.e. DS-1, DS-  
23 3), it does not provide specific information as to whether each carrier owns their  
24 own facilities or merely leases access from another provider. In addition, there is

1 no indication as to whether capacity is available at a specific location, nor is there  
2 information regarding whether each carrier has access to the entire premise. BST  
3 used the GeoLit Plus Report that Sprint's research found lacking as described  
4 above and thus their assertions are unproven and unreliable at best.

5  
6 **Q. Is there anything consistent throughout BST's testimony that leads you to**  
7 **conclude that BST's analysis does not meet the FCC's criteria set forth in the**  
8 **TRO?**

9 A. Yes. BST has based its analysis on many assumptions and ignored facts  
10 presented to them through discovery. BST's assumptions about CLEC wholesale  
11 offerings were inferred from general CLEC marketing representations and  
12 completely lack the necessary location specific or route specific data. It is  
13 noteworthy that the Commission's wording of Issues 1, 2 ,3, and 5 acknowledged  
14 the need for customer location specific data. In response to these issues, however,  
15 Ms. Padgett ignores this clear language and admits BST's use of numerous  
16 unfounded assumptions in her testimony.

17  
18 **Q. Are there additional examples where BST relied upon unfounded**  
19 **assumptions versus the necessary location specific facts in its claims related**  
20 **to the self-provisioning and wholesale trigger analyses?**

21 A. Yes. BST relied upon assumptions throughout its case for self-deployment and  
22 wholesale triggers. On page 18 lines 14 and 15 of Ms. Padgett's testimony, she  
23 used "the assumption that competitive carriers can route traffic between any pair  
24 of fiber based collocation arrangements in a LATA." Effectively Ms. Padgett's



1 testimony admits that BST has not done the necessary fact based analysis to  
2 overturn the FCC's national findings of impairment. Ms. Padgett uses another  
3 unsupported assumption on page 19 line 6 where she argues the mere presence of  
4 OCn facilities automatically means that DS1 transport is also available. On page  
5 19 lines 15-16, Ms. Padgett assumes that interoffice facilities always have spare  
6 fiber strands. As discussed above regarding availability of dark fiber, this is not  
7 always the case. On page 27 line 6, Ms. Padgett assumes that unless carriers  
8 responded specifically through discovery that ample fiber was unavailable, that  
9 enough spare fiber capacity exists to allow for wholesale. Thus, where BST is  
10 not encumbered by evidence to the contrary, it automatically alleges each location  
11 or route qualifies through the use of a series of assumptions. The use of these  
12 assumptions shows that BST has not conducted the detailed fact based analysis  
13 the FCC requires ILECs to complete in order to prove non-impairment related to  
14 self-provisioning and wholesale.

15  
16 **Q. Are the assumptions BST witness Mr. Gray makes valid in regards to BST's**  
17 **self provisioning and wholesale trigger analysis?**

18 **A.** No, they are not. On page 4, lines 5 to 7 of Mr. Gray's direct testimony, he  
19 states:

20 The carrier can then attach electronics to subdivide (or  
21 "channelize") the available capacity, activating the amount of  
22 capacity and number of channels needed along the loop.

23 Mr. Gray assumes that the carrier will attach additional electronics to the optical  
24 equipment and provide a greater variety of services. Attaching channel banks to

1 optical equipment to derive DS-1s is indeed technologically feasible, but will not  
2 happen if the customer demand does not exist. BST assumes that services can be  
3 provided without making a fact-based determination that the services are indeed  
4 available at the locations they have claimed for competitive trigger relief. On  
5 page 5, lines 20 to 23, Mr. Gray makes the assumption that intra-building network  
6 cable and termination (INCT) is available 50% of the time. If INCT is owned by  
7 BST, the CLEC will need to pay BST for access to the cables and may be  
8 required to pay the building owner in other instances. This assumption shows that  
9 BST has not completed a site specific analysis to determine the effect of cost on  
10 the CLECs. On page 8, Mr. Gray assumes that a carrier can route traffic between  
11 wirecenters where it is collocated. As discussed above regarding self-deployment  
12 of transport facilities, this is yet another faulty assumption used in BST's case.

13  
14 **POTENTIAL DEPLOYMENT OF LOOPS**

15 **Q. What specific factors must the Florida Commission consider when reviewing**  
16 **BST's filing related to potential deployment?**

17 **A. The state commission is directed by the rules to consider these factors:**

18 evidence of alternative loop deployment at that location; local  
19 engineering costs of building and utilizing transmission facilities;  
20 the cost of underground or aerial laying of fiber or copper; the cost  
21 of equipment needed for transmission; installation and other  
22 necessary costs involved in setting up service; local topography  
23 such as hills and rivers; availability of reasonable access to rights-  
24 of-way; building access restrictions/costs; and

1                   availability/feasibility of similar quality/reliability alternative  
2                   transmission technologies at that particular location.<sup>10</sup>

3  
4     **Q.     Why must BST demonstrate to the Florida Public Service Commission that**  
5           **two or more CLECs can “potentially deploy” a DS3 loop to a specific**  
6           **customer location in order to meet the “potential deployment” test and**  
7           **disprove CLEC impairment?**

8     A.     According to the FCC, the “potential deployment” test should only be applied by  
9           the Commission if BST has already failed to meet the FCC triggers for disproving  
10          impairment that evaluate “actual deployment” -- the “self-provisioning trigger”  
11          and the “competitive wholesale facilities trigger.” To prove either of the  
12          preliminary triggers, BST must prove that two or more CLECs actually have loop  
13          facilities present at the specific customer location. It would be illogical to  
14          conclude that the FCC thought it necessary to show the “actual deployment” of  
15          two “real” competitors with facilities to disprove impairment while concluding  
16          that the ILEC need only show the existence or possibility of one “potential”  
17          competitor to disprove impairment. From a practical standpoint, meeting the  
18          FCC’s “potential deployment” test should logically be more difficult than proving  
19          either of the first two triggers. In effect, BST must demonstrate that CLECs  
20          serving or potentially serving the Florida marketplace have a clear opportunity to  
21          profit if only they would build facilities at a specific customer location, but that

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<sup>10</sup> *Id.*

1 every CLEC has somehow misevaluated the market and failed to capitalize on the  
2 available revenue-generating opportunity that has been identified by BST.

3  
4 **Q. If it is economic for one CLEC to potentially deploy at a customer location  
5 isn't it logical that another CLEC could also deploy at the same location?**

6 A. No. It depends on a variety of complicated location-specific factors. The revenue  
7 for DS-3 loops at a location is finite. Adding additional carriers at a location will  
8 not increase the overall revenue opportunity at that location. Instead, with a finite  
9 amount of revenue at a location, the revenue potential per competitor goes down  
10 with each new provider assuming some capture of revenue by each competitor.  
11 Those competing carriers splitting the revenues consist of the ILEC and a  
12 minimum of two CLECs for the location to qualify for relief under any of the  
13 triggers. If a specific customer location has revenue potential for one potentially-  
14 deploying CLEC of \$60,000 per year, the revenue potential is obviously less for a  
15 second potentially-deploying CLEC confronted with competition from the ILEC  
16 (starting with 100% of the revenue) and the first CLEC. The second-deploying  
17 CLEC also may find that the local authorities may delay or deny application for  
18 rights-of-way rather than have the streets opened up again. Further, at specific  
19 customer locations where BST has only identified one competitor that is alleged  
20 to have an alternative fiber route in close proximity to the location, the second  
21 deploying CLEC's cost of doing business at that location will include all the costs  
22 of building (or otherwise acquiring access to) the entire fiber route past the  
23 location, not just the costs of the fiber lateral into the customer premises.

24

1 **Q. Has BST claimed to use the “potential deployment” test to prove that CLECs**  
2 **are not impaired without access to DS3 loops in Florida?**

3 A. Yes. BST witness Banerjee identifies 421 locations in Supplemental Exhibit  
4 AXB-2 where BST contends that CLECs could potentially deploy their own  
5 loops.

6  
7 **Q. What test did BST invent as a proxy for all the factors identified by the FCC**  
8 **for evaluating customer locations under the “potential deployment” test?**

9 A. BST concluded that they could disprove CLEC impairment and capture the FCC’s  
10 “potential deployment” criteria at all 421 locations by considering the following.  
11 First, BST claims that the locations have an estimated annual telecommunications  
12 revenue stream of \$60,000 or more. Second, BST estimated the costs of building  
13 fiber laterals to those locations meeting the revenue threshold. This was  
14 completed through identifying current CLEC locations where fiber is located and  
15 identifying the length of extending fiber to those buildings meeting the revenue  
16 threshold. The cost of extending the fiber was then amortized, and those locations  
17 where there was a positive net present value after accounting for various operating  
18 costs were selected for the list.

19  
20 **Q. Did BST provide any of the above information that showed how the locations**  
21 **and routes allegedly qualify for potential deployment?**

22 A. No. BST did not provide any supporting documentation, workpapers,  
23 calculations or even the basic formulas used to show how the locations and routes  
24 allegedly qualify for potential deployment. The net present values are absent and

1 calculation of construction costs were not provided and only vaguely referenced  
2 by Dr. Banerjee's testimony. BST did not include any of the information listed in  
3 Dr. Banerjee's testimony on page 11, lines 16 to 19. This information includes  
4 cost of goods sold (COGS), network costs, sales and marketing, general and  
5 administrative expenses. BST also indicates that it used the BACE model to  
6 determine the COGS and other network costs. As discussed in my testimony in  
7 Docket No. 030851-TP, the Mass Market Switching docket, I showed that none of  
8 the above pieces of information can be viewed in the BACE. Further, none of  
9 BST's calculations for determining the cost of the laterals, location of the  
10 buildings, or revenues for the locations were included in its filing. Thus, BST has  
11 provided results based on assumptions and a model that cannot be audited. BST  
12 has not provided the Florida PSC the information necessary for it to make a  
13 decision overturning the FCC's national findings of impairment for high capacity  
14 loops.

15  
16 **Q. Do you agree that BST's "test" is a fair substitute for the factors in the**  
17 **FCC's "potential deployment" test?**

18 **A.** No. As I will discuss below, BST's formulaic, cookie-cutter approach to  
19 analyzing all 421 locations has failed to identify the number of customer locations  
20 that can be served profitably (if any) by two CLECs. Specific facts are essential  
21 to calculate the revenue potential for each customer location and to determine the  
22 feasibility of building facilities. Even if we know the telecommunications  
23 expenditure at a customer location, CLECs need to know details about the  
24 particular customers, such as their contract status with the current telecom

1 provider and their interest in changing providers. BST's analysis of costs and  
2 revenue potential for CLECs are fundamentally flawed. BST does not perform  
3 the location-by-location granular analysis required by the FCC, and BST does not  
4 take into account many of the obstacles and barriers to deployment specifically  
5 highlighted by the FCC in its order and rules.

6  
7 **Q. What are some of the fundamental flaws in BST's "potential deployment"**  
8 **analysis?**

9 A. First, BST has not properly quantified the revenue stream that will be available  
10 and must be shared between the minimum of two CLECs and BST at each  
11 specific customer location. Second, BST's purported analysis of site-specific  
12 costs at each customer location is overly simplified and generic. They do not  
13 provide a realistic and valid assessment of the cost of deployment at each  
14 customer location as mandated by the FCC. Mr. Gray's testimony makes many  
15 assumptions that indicate BST has not completed a site-specific analysis. Third,  
16 BST superficially evaluates the critical operational readiness and timing issues  
17 that any deploying competitor will face. Customers will not wait for months for  
18 a CLEC to obtain building access, rights-of-way, construction permits and,  
19 finally, the actual construction of a DS3 loop facility. Nor does BST indicate if  
20 any of the customer locations/businesses are under long-term contracts of service  
21 with BST that would prohibit the CLECs from acquiring the customers and/or  
22 generating revenue if the CLECs built facilities. BST eschewed the multi-factor  
23 customer specific location analysis mandated by the FCC in favor of an overly

1           simplistic approach that does not justify a finding of non-impairment at the  
2           identified locations.

3

4           **Q.    Has BST witness Banerjee clearly disclosed which of BST's 421 locations**  
5           **currently have at least one CLEC that has chosen to construct their own DS3**  
6           **loops?**

7           A.    No. Dr. Banerjee's testimony is very unclear on this point. Based on his  
8           testimony at lines 10 through 17 on page 7, it appears BST is claiming potential  
9           deployment at some locations where no CLECs have currently constructed  
10          alternative loops.

11

12          **Q.    What are some of the problems with the BST analysis regarding alternative**  
13          **loop deployment?**

14          A.    Evidence of alternative loop deployment is a potential indicator that a customer  
15          location is or was a target for potential deployment. It is important to note,  
16          however, that the presence of one CLEC does not mean a second CLEC can  
17          profitably construct at that same location. Assuming, based upon BST's  
18          testimony, that a portion of the identified locations already have alternative loop  
19          deployment and that the key conditions for potential deployment are almost  
20          indistinguishable in these 421 locations, it is difficult to understand and surprising  
21          that no CLEC has taken advantage of the profitable opportunities that BST claims  
22          in additional locations without alternative loop deployment. Though BST may  
23          have a theory, facts to explain this anomaly are not available from BST because  
24          they have chosen not to perform the detailed specific customer location analysis



1 that is needed to prove “potential deployment.” CLECs that have constructed  
2 loops will construct the fiber laterals to serve other customers at new locations  
3 when there is potential for profit. The fact that CLECs have not constructed fiber  
4 laterals to serve more locations is evidence that suggests that the profitability of  
5 building to more locations does not exist and contradicts BST’s assertion. Unless  
6 one believes that all BST’s competitors have it “wrong” while BST has it “right,”  
7 it is reasonable to assume that the lack of more alternative loop deployment is  
8 because the locations present unique challenges and obstacles that BST wants to  
9 gloss over. Conduit may not be available. Rights-of-way may not be obtainable  
10 in a reasonable timeframe. Further, the effort to construct the facilities may  
11 require too much time for the businesses to wait. Sufficient revenue potential  
12 may not exist, and cost recovery may not be feasible for many reasons. The  
13 biggest spending customer at a particular location might be bound up with a  
14 multi-year contract for services with BST. A location-by-location granular  
15 analysis would likely show meaningful differences in the size and revenue  
16 potentials in these locations that could explain why it is not economic for a CLEC  
17 to build its own loop. BST has simply not given the FPSC enough information to  
18 prove its case.

19  
20 **Q. Do you agree with BST’s evaluation of competitors with alternative fiber**  
21 **facilities?**

22 **A.** No. BST claims that each location is within short enough distance of at least two  
23 alternative providers to justify the construction of additional fiber. The available  
24 revenue potential must be further divided, and the costs and operational issues for

1 the second CLEC deployment may be prohibitive. Building owners may not  
2 grant access to a second competitor. Authorities may not provide access to rights-  
3 of-way. Customers may not be willing to wait for the additional provisioning  
4 delays encountered by the second competitor. These are among the factors  
5 identified by the FCC that BST does not address.

6  
7 **Q. Is BST's estimation of the revenue at the 421 locations sufficient?**

8 A. No. BST assumes that \$60,000 is sufficient annual revenue to justify building  
9 fiber into all 421 identified locations, but \$60,000 is too low. The testimony does  
10 not discuss or address the specific revenue opportunity for each of the 421  
11 locations. We are told that BST relied upon data from TNS to estimate the  
12 revenues available at each location, but these figures are never revealed. The  
13 TNS data are based on surveys of a small portion of the companies and do not  
14 provide fact based evidence of the true revenue opportunity at each specific  
15 location. Thus, the TNS data do not provide the granularity of detail CLECs need  
16 to make the decision to build to the specific locations. The Florida PSC must  
17 have location-by-location analysis of the revenue potential at specific customer  
18 locations if it is to determine if the FCC's potential deployment test can be met.

19  
20 **Q. What are some of the problems with BST's \$60,000 threshold?**

21 A. It is unclear from BST witness Banjeree's testimony if the revenue threshold  
22 properly accounts for larger revenue required to support multiple CLECs at each  
23 location. Since BST used the \$60,000 annual revenue threshold as a filter on all  
24 locations, it appears that BST has erroneously assumed that all of the potentially

1           deploying carriers to a location can be supported by that \$60,000 amount. BST  
2           has not divided the estimated location revenue between BST and the potentially-  
3           deploying CLECs. This overstates the revenue potential for the minimum of two  
4           competitors because BST's analysis fails to take into account that the revenue will  
5           be shared between BST and two loop-deploying CLECs. The first competitor to a  
6           location will have the first take of customers willing to leave BST at the location.  
7           The second deploying competitor must evaluate whether they can capture enough  
8           customers from the ILEC and CLEC to make a build economically feasible. The  
9           second CLEC will only build if it sees sufficient revenue opportunity to recover  
10          its costs, and BST does not account for this dynamic. Assuming, for purposes of  
11          analysis, that two CLEC carriers build, each of three carriers will have at best an  
12          equal share of the annual revenue, or \$20,000.<sup>11</sup> Studies, however, have shown  
13          that CLEC revenue for private line type services are less. For example, Insight  
14          Research Corporation has found that CLEC private line revenue is 14.6% of the  
15          private line services market.<sup>12</sup> Faulkner Information Services' research has  
16          shown that CLECs serve approximately 13.2% of the entire telecommunications  
17          market.<sup>13</sup> Further BST's own testimony shows that at best, CLECs might obtain  
18          50 percent of the revenue at a specific location.<sup>14</sup> Serving a single location with  
19          multiple customers should be no different from the market. The BST analysis  
20          does not acknowledge that ILEC customers are not going to readily give their

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<sup>11</sup> \$20,000 = \$60,000/3

<sup>12</sup> March 2003. Insight Research Corporation. "Private Line Services: 2003-2008."

<sup>13</sup> 2003. Faulkner Information Services. "Telecommunications in the US: Market Trends"

<sup>14</sup> Banerjee Direct testimony, page 13, lines 19-21.

1 business to a deploying alternative provider unless there is a price advantage.

2 This dynamic will generally decrease the potential revenue as the alternative  
3 provider looks for ways to secure a new customer and decreases its price for  
4 service. The need for competitors to build will increase, likely more than double,  
5 the total investment requirement because the second CLEC competitor will  
6 probably have to build the entire fiber route past the location and not just the fiber  
7 spur. Even assuming that \$60,000 annual revenue is sufficient to justify loop  
8 deployment for one provider that will receive most or all of the revenue, that is  
9 not the situation that we have here. BST should at minimum reevaluate the  
10 locations identified for potential deployment based on greater of annual  
11 telecommunications revenue, plus some portion of revenue that the ILEC will  
12 maintain, not \$60,000, because FCC requirements dictate that there must be at  
13 least three providers -- two competitors and an ILEC -- at each customer specific  
14 location.<sup>15</sup> Based on BST's analysis and testimony, the minimum required  
15 revenue at each location would be at least \$240,000.

16  
17 **Q. Please discuss how you calculated the \$240,000 annual revenue requirement**  
18 **per location.**

19 **A.** Assuming BST's testimony that CLECs have at best 50 percent of the revenues at  
20 a location, sharing the revenue means that CLEC's at best will have \$15,000 of  
21 annual revenue. This amount is far too low to economically justify the

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<sup>15</sup> Sprint is not endorsing BST's methodology even with the Sprint suggested modifications. For purposes of illustration, we are correcting obvious errors and flaws in the BST approach to demonstrate that BST has not come close to disproving impairment at the identified loop locations.

1 construction of fiber facilities, while \$60,000 of annual revenue per provider is a  
2 more credible figure. Assuming that each CLEC receives \$60,000 of annual  
3 revenue, two CLECs would need \$120,000 of annual revenue. If CLECs have at  
4 best 50 percent of the revenue at a location that means that the ILEC has \$120,000  
5 of revenue. In total, based on the evidence BST has presented in testimony, the  
6 minimum amount of revenue required to justify competitive providers building is  
7 \$240,000. This amount increases the likelihood that two CLEC competitors could  
8 economically construct their own DS-3 loops to a specific location.

9  
10 Of course even proceeding on an assumed revenue figure of \$240,000 does not  
11 provide the location specific facts necessary to overturn the FCC's national  
12 finding of impairment. It is also important to note that no quantification of this  
13 material correction to BellSouth's case is possible due to BellSouth's failure to  
14 provide the information required. I can say conclusively however, that this  
15 correction will remove locations from BellSouth's list.

16  
17 **Q. What was BST's estimate of the cost for a competitor with alternative fiber**  
18 **facilities to build a fiber lateral to one of the specific customer locations?**

19 **A.** The direct testimony of Mr. Gray on behalf of BST provides an estimated cost of  
20 construction for a fiber lateral extending from a main fiber route into a customer  
21 building along the fiber route. Witness Gray's cost results are used as inputs into  
22 witness Banerjee's model to determine the locations with the costs related to the  
23 fiber being variable based on the distance of the lateral.

1 **Q. At pages 6 and 11 of his testimony, Mr. Gray reveals BST's loop and**  
2 **transport installed equipment costs were estimated using BST's costs. Are**  
3 **the BST vendor costs in Mr. Gray's cost study indicative of prices CLECs**  
4 **would pay for the similar equipment?**

5 **A. No. I disagree with Gray's assumption that CLECs can obtain equipment and**  
6 **cable as cheaply as BST does. It is a well-accepted fact in our industry that**  
7 **telecommunication equipment vendor prices are directly influenced by the**  
8 **volume of equipment purchased. It defies logic to suggest that a startup CLEC**  
9 **could attain the same level of equipment purchases as the incumbent LEC (in this**  
10 **case BST), and yet that is the premise BST asks the Florida Commission to**  
11 **accept. Even assuming the CLEC in question is Sprint and is then able to**  
12 **leverage vendor prices of Sprint's Local Telephone Division, the overwhelming**  
13 **threefold size advantage of BST's operations versus Sprint's operations supports**  
14 **the conclusion that Sprint's CLEC ventures would pay higher equipment vendor**  
15 **prices than a threefold larger competitor (i.e. BST). While the extremely**  
16 **confidential nature of company specific vendor prices makes it difficult to share**  
17 **actual purchase data, my experience reviewing and preparing cost study inputs for**  
18 **USF, UNE, and TSLRIC purposes makes me confident that the vendor prices**  
19 **Sprint pays are higher than the vendor prices BST pays for the same or similar**  
20 **equipment. Based on company size alone, Sprint cannot command the same**  
21 **economies of scale that BST can and cannot obtain the same discounts on**  
22 **equipment and cable. Smaller companies will experience an even greater**  
23 **discrepancy in cost.**

24

1    **Q.    Do you have additional concerns with Mr. Gray's analysis?**

2    A.    Yes. Based on my review of Exhibit AWG-3 of Mr. Gray's testimony, I believe  
3        the plant mix is inaccurate and the conduit factor understates the cost of  
4        constructing underground cable. Sprint is a provider of local services in Florida.  
5        The locations where BST seeks relief will most likely be in densely populated  
6        urban areas, where underground facilities are the norm. BST has assumed that  
7        some portion of the structure facilities will be 35% assigned to aerial and buried  
8        plant. New aerial plant cannot be installed within Florida because of Florida PSC  
9        Rule 25-4.088. Because of the threat of hurricanes in Florida, aerial plant  
10       construction – especially fiber to an enterprise customer location – would not be a  
11       wise decision even if it were a legal option. Buried plant will not be constructed  
12       in densely populated urban areas. In densely populated areas, more roads and  
13       sidewalks must be dealt with along with all of the traffic they carry. Burying fiber  
14       consists of digging a trench, laying the cable, and closing the trench with the  
15       thought that the cable will never have to be accessed again. Where a road must be  
16       crossed, the road either needs to be ripped up and repaired to bury the cable or a  
17       pipe needs to be pushed under the road. If the carrier buried the cable and wanted  
18       access at future time, it would need to “unbury” it, access the cable, and rebury  
19       the cable, which is costly and time consuming and not practical. In an urban area,  
20       carriers want the flexibility to access their cables and add new as necessary.  
21       Building conduit provides carriers the flexibility in that the carrier places 4 inch  
22       pipes in the ground, divided into sections with inner-duct, and pulls fiber through  
23       the pipes. If additional fiber needs to be added in the future, the carrier accesses  
24       the conduit through manholes, and pulls additional fiber through assuming ample

1 duct space was constructed. Buried plant does not allow this type of flexibility  
2 without constantly cutting roads, digging trenches and restoring the roads. Thus,  
3 because of laws in Florida and economic considerations of building new  
4 telecommunications plant, underground facilities will be the norm in the areas  
5 where the locations for loop facilities are found to merit relief under the potential  
6 deployment trigger.

7  
8 **Q. Does BST's conduit factor accurately account for the costs of constructing**  
9 **the conduit?**

10 A. No. Based on Sprint's experience as an ILEC in Florida, the cost of constructing  
11 conduit is significantly higher. Based on Sprint's cost studies for unbundled  
12 loops filed and approved in Docket No. 990649-TP, Sprint's cost of constructing  
13 the conduit is approximately 3.25 times the cost per foot found in BST's conduit  
14 factor. Based upon Sprint's experience as an ILEC with building conduit systems  
15 and installing fiber in an urban environment, underground fiber construction is  
16 substantially higher than the costs assumed within BST's analysis. The costs will  
17 always be location specific to extend fiber from the closest point of access  
18 (manhole) to an access point within the customer's location to access the  
19 customer location's wiring. The construction of new conduit at existing locations  
20 is the most labor intensive and expensive type of construction that must be  
21 completed. The construction will require the cutting of streets and sidewalks; the  
22 use of machinery for trenching; the detailed engineering effort to avoid water  
23 lines, sewer lines, power lines, and other provider's telecommunications lines all



1 of which run into the locations; traffic control; work in manholes; fiber splicing  
2 equipment; and may require work to be done at night at a higher cost of labor.

3  
4 **Q. Can you determine from BST's analysis how much conduit will be required**  
5 **to build the laterals?**

6 A. No. Because BST did not provide any supporting calculations in its testimony, I  
7 cannot determine the length of the laterals BST alleges can be economically built.  
8 BST's testimony reveals only that they listed locations with distances that  
9 produced costs low enough to produce a positive net present value, and thus it is  
10 unknown how much conduit will need to be constructed at each location. The  
11 amount of conduit to be constructed will have an impact on the amount of time  
12 required to build the facilities.

13  
14 **Q. What is the impact of construction intervals on a CLEC's ability to serve a**  
15 **specific location?**

16 A. It is critical to recognize how difficult it will be for a CLEC to obtain customers at  
17 a customer location when they do not have facilities in place. A variety of factors  
18 affect the length of time to build the fiber lateral. Delays can lead to long periods  
19 when the end user customer or CLEC must weather the high cost of buying  
20 special access from the ILEC on a month- to- month basis. Through all this  
21 uncertainty, the customer must be willing to wait for the competitive provider to  
22 build facilities.

23

1 **Q. Does BST's case include an examination of location specific building space**  
2 **requirements?**

3 A. No. BST's case does not include an examination of location specific building  
4 space requirements.

5  
6 **Q. Why is the specific customer location building space requirement important**  
7 **for correct cost analysis?**

8 A. Based on BST's analysis, the costs related to a space at the customer location  
9 have not been included in the analysis. Witness Gray's Exhibit AWG-3 accounts  
10 for SONET equipment, channel banks, fiber and some structure costs (albeit  
11 understated as discussed above), but does not account for the costs of space  
12 required at the customer location. For loop facilities, there must be a room or  
13 space to house the fiber optic equipment and access the premises wiring. Before  
14 fiber optic terminal equipment can be added to a building, the building must have  
15 a room or space to house the equipment. The equipment is expensive and critical  
16 to the telecommunications services provided to the customers and critical to the  
17 customer's business interests. Protecting the fiber optic equipment is therefore  
18 essential. Ideally, there will be a room that is temperature controlled, locked so  
19 only the technicians can access the equipment as needed, and has access to the  
20 building/location cabling. If this type of room is unavailable for the competitors'  
21 equipment at each location identified by BST, one will have to be constructed  
22 adding to the costs. The room must also have access to the building/location  
23 wiring, or building the fiber lateral and provisioning the optronics will be  
24 pointless as service could not be provided. Each building will have unique

1 architecture and space constraints and must be evaluated individually. Finally,  
2 the existing telecommunications equipment locations were most likely not  
3 designed to house the equipment of a minimum of at least three providers. The  
4 existing equipment locations most likely do not have the security needed to  
5 separate each provider's equipment. Thus, there is a high probability of requiring  
6 CLECs to build an equipment room or building at a customer location. BST has  
7 not done the granular level of analysis to show how much space is available,  
8 whether it is sufficient for a minimum of three carriers, and nor have they  
9 quantified the costs to the CLEC.

10

11 **Q. Will delayed or blocked access to rights-of-way impact the cost of fiber**  
12 **lateral deployment?**

13 A. Yes. Access to rights-of-way is critical for a competing carrier to build a lateral  
14 from the main route to the customer location. Municipalities charge fees for  
15 construction and sometimes place moratoriums on construction to avoid  
16 constantly having streets under construction. This FCC-identified barrier to  
17 deployment can add additional costs and delays to a particular project. It is not  
18 apparent that BST's analysis considers this necessary cost.

19

20 **Q. Did BST address local topography in its cost of deployment analysis and**  
21 **could topography affect the cost?**

22 A. No. A CLEC attempting to construct high capacity loops to specific existing  
23 locations faces many existing challenges. As these locations are already occupied  
24 by existing businesses, each location brings the construction complexities of

1 existing water lines, sewer lines, power lines, and at least two other provider's  
2 telecommunications lines. Thus, CLEC construction through already existing  
3 infrastructure is considerably more costly and complex than that of the ILEC's  
4 greenfield construction.

5  
6 **Q. Does BST's filing discuss the impact of customer churn on capital recovery?**

7 A. No. BST mentions churn on page 12 of Banerjee's testimony, but does not use it  
8 in its analysis.

9  
10 **Q. What is the impact of customer churn?**

11 A. Customer churn limits the time for recovery of the investment in the fiber build.  
12 Though the optronics can be removed if the customer chooses to leave the CLEC  
13 for another carrier, the cost of labor to engineer and build the fiber and engineer  
14 and install and remove the optronics, and prepare the building will still be  
15 incurred. BST amortized the cost of construction over ten years.<sup>16</sup> Ten years is  
16 entirely too long to assume a customer would subscribe to competitive services.  
17 Based on Sprint's experience as a competitive provider, a much shorter and more  
18 realistic customer life must be assumed to properly balance the risk of customer  
19 churn. A CLEC must recover the costs specific to that location, which will  
20 include constructing the conduit, pulling in the fiber, modifying equipment  
21 rooms/buildings, engineering and installing the optical equipment, any permitting  
22 fees related to construction, and any rent paid to the location owner. The optical

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<sup>16</sup> Banerjee Direct Testimony, page 12 line 14-17 and page 13 lines 8-10.

1 equipment can be amortized over the economic life of the asset because it can be  
2 assumed that the equipment may be reused at another location. Moreover, as  
3 noted above the CLEC must recover the location specific costs of the building and  
4 cable over a shorter, more realistic customer life that recognizes the probability of  
5 customer churn. BST has not amortized the investments in this manner and has  
6 placed an unacceptably high level of risk upon the CLEC through its use of a 10  
7 year depreciation life and no loss in revenues associated with customer churn.

8  
9 **Q. On page 13 lines 8 to 10 of Mr. Banerjee's testimony, BST mentioned that it**  
10 **used a discount rate of 10.8 percent. Is this a realistic discount rate for**  
11 **CLECs to use?**

12 A. No. As discussed in the testimony of Sprint witness Dr. Staihr in Docket No.  
13 030851-TP, the Mass Market Switching docket, a discount rate of 10.8 percent is  
14 far too low to accurately represent CLEC capital costs. Thus, BST has  
15 substantially understated a CLEC's overall costs to construct and operate high  
16 capacity loops.

17  
18 **Q. What is the overriding flaw in BST's "potential deployment" analysis?**

19 A. BST chose to ignore the FCC's mandate that each customer location be evaluated  
20 individually. BST's analysis relied upon ideal and uniform conditions in 421  
21 locations and did not complete the location-specific analysis the FCC requires.  
22 They also assumed uniform costs and revenue availability at all locations that they  
23 targeted to disprove impairment and did not account for unique challenges of  
24 competitors deploying new facilities. Building a fiber lateral is not as inexpensive

1 as BST alleges and must be dealt with uniquely for each location. BST has based  
2 its cost of construction on numerous assumptions that will not be applicable at  
3 every location and in any event must be proven factual at each location. That  
4 individual CLECs may have built loops, as contended by BST, to some of the  
5 locations BST identified, suggests that conditions for building are not identical at  
6 all 421 locations and not economically favorable for loop deployment at most.

7  
8 **POTENTIAL DEPLOYMENT OF TRANSPORT ROUTES**

9 **Q. Has BST requested relief from the national impairment finding regarding**  
10 **transport routes based upon “potential deployment?”**

11 A. Yes. According to the testimony of BST witness Banerjee, BST seeks relief of  
12 155 transport routes under the potential deployment trigger shown in Exhibit  
13 AXB-3.

14  
15 **Q. What factors are necessary for a state commission to consider in evaluating**  
16 **the case for potential deployment of transport routes?**

17 A. As described in detail my loop testimony above, each transport route requires an  
18 individual factual analysis. The FCC rules dictate that a state commission must  
19 consider:

- 20 • local engineering costs of building and utilizing transmission facilities;
- 21 • the cost of underground or aerial laying of fiber or copper;
- 22 • the cost of equipment needed for transmission;
- 23 • installation and other necessary costs involved in setting up service;
- 24 • local topography such as hills and rivers;

- 1           • availability of reasonable access to rights-of-way;
- 2           • availability/feasibility of similar quality/reliability alternative transmission
- 3           technologies along the particular route; and
- 4           • customer density or addressable market.<sup>17</sup>

5

6           **Q.    How did BST determine that 155 transport routes should be relieved under**

7           **potential deployment?**

8           A.    BST completed a “buy or build” analysis, where it estimated the savings CLECs

9           currently leasing transport facilities from BST would experience by building their

10          own transport facilities.<sup>18</sup> Based on BST’s analysis, any transport route that

11          supported three CLECs constructing facilities and generated a positive net present

12          value qualified for relief under the potential deployment trigger. To determine the

13          routes, BST reviewed routes where facilities are currently being leased and linked

14          wirecenters where collocation exists to other wirecenters connected with the

15          leased transport facilities. BST uses only current collocations as a starting point

16          and identifies wirecenters that could potentially be collocation sites. Based on the

17          distance between wirecenters where CLECs are currently collocated and the

18          wirecenters that are the potential collocation sites, BST produces a construction

19          cost estimate of the transport route.

20

21          **Q.    Are there problems with this approach?**

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<sup>17</sup> 47 C.F.R. § 51.319(e)(2)(i)(B)(ii)

<sup>18</sup> See Banerjee Direct Testimony, pages 17 to 21.

1 A. Yes. BST makes several assumptions that are incorrect and not supported by  
2 evidence in the record. BST misstates the costs of the fiber facilities. Further,  
3 BST assumes that CLECs will want to build to those transport routes listed under  
4 the potential deployment list through the assumption that CLECs will achieve  
5 savings by not leasing facilities from BST or other providers. I will discuss each  
6 in more detail below and show that BST has not conducted a detailed, route-  
7 specific analysis that the FCC requires.

8

9 **Q. Has BST correctly estimated the costs of deploying transport routes?**

10 A. No, BST has not correctly estimated the cost of deploying transport routes. The  
11 simplistic analysis BST filed shows that BST has not developed a route specific  
12 analysis of the costs required to build the actual routes, if indeed CLECs chose to  
13 do so. The plant mix BST has assumed in Exhibit AWG-6 in Gray's testimony is  
14 not indicative of the plant mix a new provider building transport facilities would  
15 experience. Because of the risk of hurricanes in Florida, the risks to fiber placed  
16 on poles, would not be a workable alternative. For transport routes, there should  
17 be a mix of buried and underground cable only. Thus, BST has not actually  
18 developed the costs a CLEC would experience. The arguments made above  
19 related to the cost of constructing conduit also hold true for conduit related to  
20 transport facilities. The combination of incorrect plant mix, and the fact that a  
21 CLEC will never obtain equipment as cheaply as BST can results in incorrect  
22 costs of facility deployment. BST has not provided the route-specific analysis  
23 related to the cost of deployment the FCC's TRO requires. Thus, BST has failed



1 to meet the FCC's requirements necessary to satisfy the potential deployment  
2 trigger.

3  
4 **SUMMARY OF TESTIMONY**

5 **Q. Would you please summarize your testimony?**

6 A. Both BST's and Verizon's dedicated transport cases are flawed and unreliable  
7 because BST and Verizon have not properly substantiated on a route-specific  
8 basis if a competitive route actually exists, is operationally ready, and the trigger  
9 services are being offered. BST and Verizon have applied a series of  
10 assumptions that simply cannot be validated. Their inspections only attempt to  
11 insure that active fiber reaches beyond the central office cable vault. This  
12 Commission, however, must insure that BST and Verizon correctly and fully  
13 support each individual route with actual route specific facts and without the  
14 application of unsupported assumptions or theories – something that BST and  
15 Verizon have not yet done. Their lists of routes and applicable triggers are based  
16 on assumptions and not fact. BST and Verizon have failed to factually meet the  
17 FCC triggering requirements and should have their transport route filing rejected.

18  
19 More specifically, many of the dedicated transport routes in which Sprint is  
20 identified as a carrier meeting the triggers are erroneous. Sprint's investigation  
21 into the facts about Sprint facilities has shown that BST's attempt to generalize  
22 and make broad assumptions does not satisfy the FCC's granular analysis that

1 must be performed on a route-by-route and customer location-by-customer  
2 location basis.

3 BST and Verizon have also applied numerous erroneous assumptions in the  
4 determination of what services and, therefore, what competitive triggers are  
5 present at each specific customer location it seeks to remove from unbundling.

6 Their assumptions related to the presence of dark fiber based on lit fiber is flawed.

7 Their assumptions that lit fiber automatically means that each specific location  
8 includes demuxing electronics to all levels of service is also flawed. BST and

9 Verizon also failed to consider or have assumed away the requirement that  
10 CLECs have access to all customers at each specific location, and chose instead to

11 present this commission with a perspective that competitive triggers are a simple  
12 counting exercise. BST and Verizon fail to meet the FCC requirement for a fact-

13 based showing that actual triggered services are available to all customers at each  
14 location and for each service level for which BST and Verizon wish to remove the

15 selected building from unbundling. BST and Verizon have failed to adequately  
16 support with facts any triggered building list and should have their loop filings  
17 rejected.

18  
19 With respect to potential deployment, the FPSC should reject BST's "potential  
20 deployment" analysis for loops and transport, and the FCC's national finding of  
21 impairment should remain in effect for locations and routes where BST has  
22 requested findings of non-impairment under the potential deployment trigger.

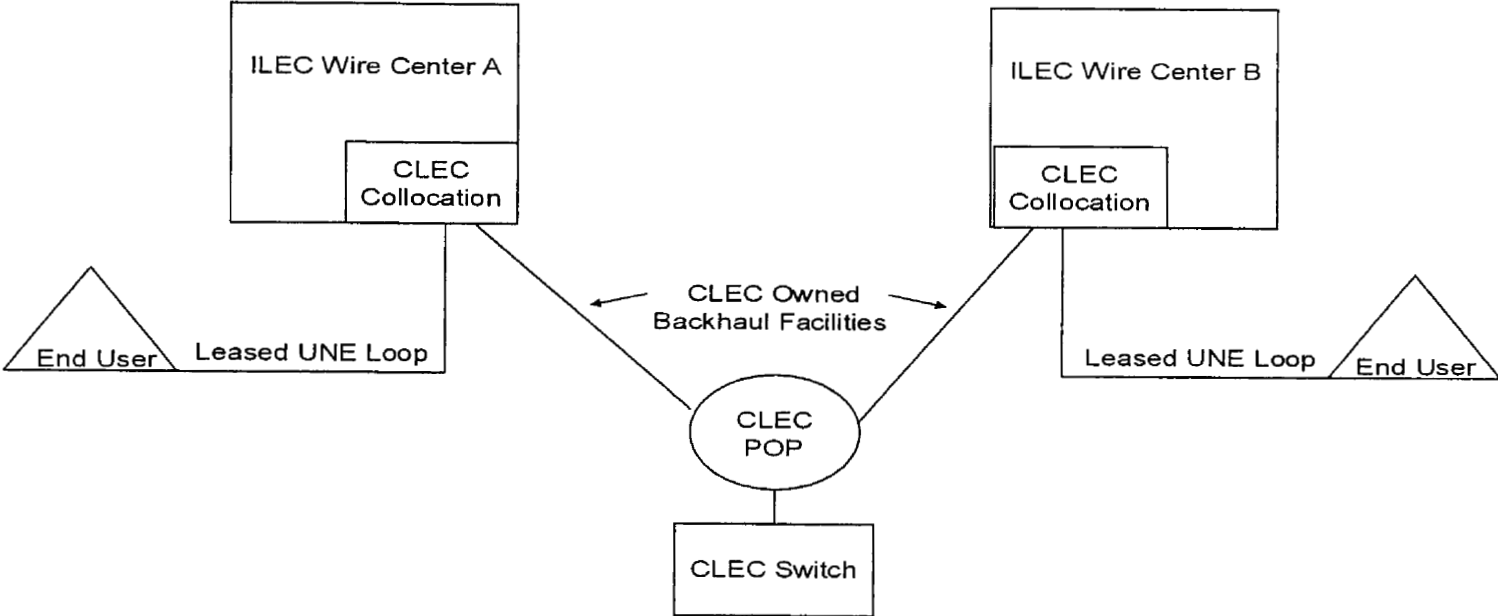
23 BST overstates the potential revenue available from deployment and makes  
24 unfounded and unrealistic generalizations related to the cost of acquiring

1 customers at the locations and estimated savings along routes listed for relief.  
2 BST has misstated the ease with which CLECs can acquire customers at the  
3 locations and transport routes BST listed for relief under the potential deployment  
4 trigger and BST's petition should be rejected.  
5  
6

7 **Q. Does this conclude your rebuttal testimony?**

8 **A. Yes, it does.**  
9

CLEC Fiber for Local Service Loop to Switch Backhaul Facilities



Wholesale Common Transport for Multiple CLECs



Separate Non-Connected Fiber Rings

