and only became aware of it as a result of a self-initiated check of the CostQuest website.

REDACTED

Fourth, after the February 16, 2004 Commission Order, BellSouth finally allowed Sprint access to an open, electronic version of the BACE Model at a BellSouth location.

## A. Switching Investment

**Q. Has Sprint analyzed the Switching investments generated by the "corrected" January 22, 2004 version of the BACE Model?**

A. Yes. This analysis is summarized on Exhibit KWD-13. Row 10 represents annual investment in switching equipment from the BellSouth "corrected" January 22, 2004 filing. Row 11 shows that the average investment per line over years 2 – 10 ranges from *** $[redacted] to $[redacted] ***. Row 13 shows that Sprint's average switching investment per line is *** $[redacted] *** as approved in Docket No. 990649-TP. Thus the BACE Model understates switching investment in years 2 – 10 by a range of *** [redacted]% to [redacted]% *** (Row 14).

**Q. Is this reasonable?**

A. No. The BACE Model switching investment per line for a start-up CLEC is severely understated even when compared to a mid-sized ILEC such as Sprint. A start-up CLEC without Sprint's economies of scale intuitively would have even higher per line costs.

Specifically, the CLEC modeled by the BACE Model has one switch per LATA. The CLEC has *** [redacted] *** switches in Florida, while BellSouth has *** [redacted] *** switches. The overwhelming volume of BellSouth's *** [redacted] *** switches compared to the CLEC's *** [redacted] *** clearly suggests BellSouth's use of their internal vendor cost to estimate the CLEC's cost is not reasonable.

## B. DLC Investment

**Q. Has Sprint analyzed the DLC (Digital Loop Carrier) investments generated by the "corrected" January 22, 2004 version of the BACE Model?**

A. Yes. This analysis is also summarized on Exhibit KWD-13. Row 21 represents annual investment in DLC equipment from the BellSouth "corrected" January 22, 2004 filing. Row 22 shows that the average investment per line over the ten years ranges from *** $[redacted] to $[redacted] ***. Row 24 shows that Sprint's Commission-approved average DLC investment per line was *** $[redacted] *** in Docket No. 990649-TP. Thus the BACE Model understates DLC investment by a range of *** [redacted]% to [redacted]% *** over the ten year period (Row 25).

**Q. Is the BACE Model DLC investment per line reasonable?**

A. No. The BACE Model DLC investment per line for a start-up CLEC is severely understated even when compared to a mid-sized ILEC such as

Sprint. A start-up CLEC without Sprint's economies of scale would have even higher per line costs.

Specifically, the CLEC modeled by the BACE Model has approximately *** [redacted] *** DLCs in Florida, while BellSouth has approximately 4,200 DLCs. (Sprint – Florida has approximately 1,500 DLCs. Since BellSouth – Florida has about 2.8 times the number of switched access lines in Florida as Sprint, a reasonable estimate of the number of BellSouth DLCs is approximately 4,200.) Thus the dramatically larger number of DLCs in BellSouth's network versus the start-up CLEC modeled in the BACE Model again shows BellSouth's use of their internal vendor cost to be unreasonable.

### C. Operating Support System (OSS) Costs

**Q. Has your on-site review of the BACE Model resulted in any other material understatements?**

A. Yes. The outcome of the on-site review of the BACE Model indicates that costs related to both Operating Support Systems (OSS) and Network and General Support Assets are also severely understated.

**Q. Please explain the understatement of Operating Support Systems (OSS) costs.**

A. As defined by the BACE Model, the cost element labeled "OSSStartup" theoretically captures the cost of all ordering, billing, and network-related systems required by any provider to supply local telephone service. The BACE Model calculates its total cost for OSS by multiplying the input value of *** $[redacted] *** by the BSTAsPctOfScopeOfOperations factor of *** [redacted] *** (which according to the BACE Model Methodology Manual "accounts for the relative size of the CLECs national scope of operations as compared to the BellSouth operating territory within the state"), resulting in a final OSS input value of *** $[redacted] ***.

These OSS systems are assumed to have a *** [redacted]-year *** life in the BACE Model. Therefore, the *** $[redacted] *** investment is made in both Year 1 and *** Year [redacted] ***, for a total OSS investment of *** $[redacted] *** over the 10-year analysis period. In comparison, Sprint/United Management Company had over *** $[redacted] *** in capitalized software on its books as of year-end 2003, of which over half (or *** $[redacted] ***) was attributable solely to Sprint's ILEC operations. Included in this total was *** $[redacted] *** in capitalized software additions that Sprint ILEC booked in 2003 alone, not to mention the over *** $[redacted] *** in expensed software enhancements recorded in 2003. The *** $[redacted] *** in capital additions made in 2003 by Sprint (a 100-year old company with existing OSS systems) by themselves exceed the 10-year total additions generated by the BACE Model for a hypothetical CLEC starting with no embedded OSS.

To illustrate the point in another way, the amount of capitalized software on Sprint's books is approximately 41 times greater than the amount predicted by the BACE Model for a new CLEC. By any measure, the *** [redacted] *** for OSS costs as shown in the BACE Model is severely understated, particularly considering that there is limited scalability in provisioning OSS systems (i.e., the same basic OSS must be in place for the first customer as for the millionth customer).

## D. Network and General Support Assets

**Q. Have you reviewed the BACE Model estimates of Network/General Support Asset capital costs?**

A. Yes. Within the BACE Model, the cost element labeled "CapitalRelatedtoG&A" is apparently intended to capture the cost of Network and General Support assets (e.g., Vehicles, Work Equipment, Buildings, and Office Equipment) utilized by the CLEC. The BACE Model calculates its total investment for these Support Assets by multiplying the input value of *** [redacted] (or [redacted]) *** by the amount of revenue in each year to determine the resulting total investment (not capital additions) in each year. In other words, the Support Asset balance grows (or declines) in lock-step with revenue growth.

However, similar to the testimony related to the G&A Expense calculation in the BACE Model, it is unrealistic to calculate Support Asset investment based

on Revenue trends. Setting that point aside for the moment, the amounts calculated by the BACE Model do not bear any reasonable relationship to reality.

The BACE Model shows an investment in Support Assets of *** $[redacted] *** in Year 1, *** $[redacted] *** in Year 2, and *** $[redacted] *** in Year 3, with a growth to *** $[redacted] *** in Year 10, with an access lines served count of roughly *** [redacted] *** in Year 10. In comparison, Sprint-Florida had over *** $[redacted] *** in Network and General Support Assets on its books as of year-end 2002, which is approximately 18 times greater than the Year 10 asset amount produced by the BACE Model, even though Sprint-Florida's Access Line count of 2,200,000 is only *** [redacted] times *** the CLEC's Year 10 access line count. Again, by any measure, the ultimate *** $[redacted] *** in Support Asset investment as shown in the BACE Model is dramatically understated, as are the Year 1 through Year 9 amounts.

## Summary

**Q. Please summarize your Supplemental Surrebuttal Testimony.**

A. Sprint's last-minute on-site review of the BellSouth BACE Model was insufficient to allow an adequate review of all areas of such a complex model.

Sprint's additional analysis has identified that switch investment, DLC investment, OSS costs, and network and general support assets are all

# Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results for End Office Switches and Loop DLC Equipment

Sprint
Exhibit KWD - 13

| Row | Description | C Source/Calculation | D Year 1 | E Year 2 | F Year 3 | G Year 4 | H Year 5 | I Year 6 | J Year 7 | K Year 8 | L Year 9 | M Year 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | **BACE Access Lines** | | | | | | | | | | | |
| 6 | BACE Access Lines | Note A. | 384,084 | 587,598 | 696,092 | 757,158 | 790,330 | 809,220 | 822,110 | 828,604 | 833,300 | 836,320 |
| 7 | | | | | | | | | | | | |
| | | In Docket No. 990649B-TP | In Docket No. 990649B-TP | | | | | | | | | |
| 9 | **Switching** | | | | | | | | | | | |
| 10 | Bell South BACE Model | | | | | | | | | | | |
| 11 | Capex-Switching | [redacted] | $ 43,275,767 | [redacted] | $ 3,118,660 | $ 1,072,481 | $ 1,376,258 | $ 5,120,068 | $ 2,691,491 | $ 2,818,893 | $ 5,274,982 | $ 3,149,909 |
| 12 | Capex per line-cumulative | | $ 112.67 | | $ 66 65 | $ 62 69 | $ 61 80 | $ 66 69 | $ 68 91 | $ 71.78 | $ 77.70 | $ 81 19 |
| 13 | | | | | | | | | | | | |
| 14 | Sprint Investment per line (1) | WS Investment Support | $ 157 50 | $ 157.50 | $ 157 50 | $ 157 50 | $ 157.50 | $ 157.50 | $ 157 50 | $ 157 50 | $ 157 50 | $ 157 50 |
| 15 | BACE % Capital Understated | E14=(E13-E11)/E11 | 40% | 111% | 136% | 151% | 155% | 136% | 129% | 119% | 103% | 94% |
| 16 | | | | | | | | | | | | |
| 17 | (1) Hosts Only Investment and Excludes Line Termination Investment | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | |
| 20 | **Digital Loop Carrier (DLC)** | | | | | | | | | | | |
| 21 | Bell South BACE Model | | | | | | | | | | | |
| 22 | Capex-DLC | [redacted] | | | | | | | | $ 6,923,786 | $ 6,796,387 | $ 6,774,853 |
| 23 | Capex-DLC per line-cumulative | | | | | | | | | $ 8 36 | $ 16 46 | $ 24 51 |
| 24 | | | | | | | | | | | | |
| 25 | Sprint Investment per line | | | | | | | | | $ 325 90 | $ 325.90 | $ 325 90 |
| 26 | BACE % Capital Understated | | | | | | | | | 3800% | 1879% | 1230% |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | Note A Access lines are from BellS | [redacted] | | | | | | | | duct Area = Internet | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | |
| 32 | Note B Capex-Switching is from Be | [redacted] | | | | | | | | enter = Local Switching | | |
| 33 | | and Cost Element <> BuildingLoading Total Capex-Switching excludes Cost Elements BuildingLoading and FeatureFunctionality | | | | | | | | | | |
| 34 | | | | | | | | | | | | |
| 35 | Note C Capex-DLC is from BellSouth filed BACE Model results The Report Data Source is Revenue and Cost, fields to view include Cost Center Criteria 1 Cost Center = DLCEquipment | | | | | | | | | | | |

In Docket No 990649B-TP

Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results
for End Office Switches and Loop DLC Equipment

Sprint
Exhibit KWD - 13

**Approved UNE Switch Investments, DLC Investments and Lines**

| A | B | C | D | E |
|---|---|---|---|---|
| Row | Description | | | |
| 7 | Switching | Commission Approved In Docket No. 990649B-TP | | Commission Approved In Docket No. 990649B-TP |
| 9 | | Host & Remote Switches | | Host Switches Only Excludes Line Termination Investment |
| 10 | Access Lines | [redacted] | | [redacted] |
| 11 | Total Switch Investment | | | |
| 12 | Switching Investment per Line | | | |

*Source:* FL Docket #990649-TP
Staff approved switching investments

*File:* Sprint TELRIC Model
Inpflt01.xls

*Data:* [redacted]

# Comparison of Sprint Florida Commission Approved Capital to Bell South BACE Model Results for End Office Switches and Loop DLC Equipment

DLC

| | Commission Approved In Docket No. 990649B-TP |
|---|---|
| DLC Lines | [redacted] |
| Total DLC Investment | |
| DLC Investment per Line | |

*Source:* FL Docket #990649-TP
Staff approved UNE-P DLC investments

*File:* Sprint TELRIC Model
Inpflt01.xls

*Data:* [redacted]

Specifically, the CLEC modeled by the BACE Model has one switch per LATA. The CLEC has thirteen switches in Florida, while BellSouth has *** [redacted] *** switches. The overwhelming volume of BellSouth's *** [redacted] *** switches compared to the CLEC's thirteen clearly suggests BellSouth's use of their internal vendor cost to estimate the CLEC's cost is not reasonable.

## B. DLC Investment

**Q. Has Sprint analyzed the DLC (Digital Loop Carrier) investments generated by the "corrected" January 22, 2004 version of the BACE Model?**

A. Yes. This analysis is also summarized on Exhibit KWD-13. Row 21 represents annual investment in DLC equipment from the BellSouth "corrected" January 22, 2004 filing. Row 22 shows that the average investment per line over the ten years ranges from *** $[redacted] to $[redacted] ***. Row 24 shows that Sprint's Commission-approved average DLC investment per line was *** $[redacted] *** in Docket No. 990649-TP. Thus the BACE Model understates DLC investment by a range of *** [redacted]% to [redacted]% *** over the ten year period (Row 25).

**Q. Is the BACE Model DLC investment per line reasonable?**

A. No. The BACE Model DLC investment per line for a start-up CLEC is severely understated even when compared to a mid-sized ILEC such as