## **ORIGINAL**



Susan S. Masterton Attorney Law/External Affairs
Post Office Box 2214
1313 Blair Stone Road
Tallahassee, FL 32316-2214
Mailstop FLTLH00107
Voice 850 599 1560
Fax 850 878 0777
susan masterton@mail.sprint.com

March 22, 2004

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

RE: Docket No. 000121B-TP

Dear Mrs. Bayó:

Enclosed is an original and 15 copies of Sprint's March 2004 Root Cause Analysis (RCA) report as required by Order Number PSC-03-0176-CO-TP in Docket 000121B-TP. This order required that any failure in three consecutive months to meet any performance for a given level of disaggregation shall require a RCA by Sprint, which shall then be published on a monthly basis. This report is for results for the period of November 2003 through January 2004 as published in the December, January and February reports.

A copy of this letter is enclosed. Please stamp it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

Susan S. Masterton

Enclosures

AUS

CAF CMP

COM

CTR ECR cc: Lisa Harvey

Jerry Hallenstein

**David Rich** 

RECEIVED & FILED

EPSC-BUREAU OF RECORDS

03813 MAR 22 \$

FPSC-COMMISSION CLEAR



## March 2004 Root Cause Analysis Report (reflects January 2004 data published February 20) Florida Public Service Commission

## **Background**

If there is noncompliance at the aggregate level in three consecutive months for a given level of disaggregation, Sprint shall provide a report of root cause analysis on a monthly basis. Sprint's root-cause analysis shall include a plan for corrective action with key activities and anticipated completion dates for implementation.

Measure 1: Average Response Time to Pre-Order Queries Submeasure 1.08.02: Loop Pre-Qualification - All Manual Description of Issue Improvement Plan Start Projected **Estimated** End Date Improvement Impact Date An IRES (Integrated Request Entry System) calculation 20 2004 Sprint implemented a system change in February 2004 to resolve 10 2004 TBD error caused longer intervals for orders received on this issue. Sprint also implemented a process change to more Friday and worked on Monday. quickly address Loop Pre-Qualification requests.

| Measure 2: Average FOC Notice Interval Submeasure 2.03.01: Electronic/Manual Mix – Residential POTS   |               |                          |                     |             |   |  |  |  |  |
|---|---------------|--------------------------|---------------------|-------------|---|--|--|--|--|
| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |  |  |  |  |
| Sprint is experiencing an increase in CLEC project orders which require more manual intervention. For example, a large CLEC is converting from one product type to another. | 4Q 2003       | 2Q 2004                  | TBD                 |             | Several initiatives have been implemented to balance the workload in the service centers. These include streamlining current processes and resource management.  A new Resource Management Tool was completely implemented in January 2004. Sprint is analyzing historical data to determine scheduling needs and constraints. Once this process is completed, Sprint will make changes to improve cycle time as appropriate.  Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months. |  |  |  |  |

DOCUMENT NUMBER - DATE

03813 MAR 22 5



Measure 2: Average FOC Notice Interval
Submeasure 2.03.02: Electronic/Manual Mix – Business POTS

| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |
|---|---------------|--------------------------|---------------------|-------------|---|
| Sprint is experiencing an increase in CLEC project orders which require more manual intervention. For example, a large CLEC is converting from one product type to another. | 3Q 2003       | 2Q 2004                  | TBD                 |             | Several initiatives have been implemented to balance the workload in the service centers. These include streamlining current processes and resource management.  A new Resource Management Tool was completely implemented in January 2004. Sprint is analyzing historical data to determine scheduling needs and constraints. Once this process is completed, Sprint will make changes to improve cycle time as appropriate.  Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months. |

Measure 2: Average FOC Notice Interval

| Submeasure 2.03.11: Electronic/Manual Mix – UNE Loops – Non Designed  |               |                          |                     |             |   |  |  |  |  |
|---|---------------|--------------------------|---------------------|-------------|---|--|--|--|--|
| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |  |  |  |  |
| Sprint is experiencing an increase in CLEC project orders which require more manual intervention. For example, a large CLEC is converting from one product type to another. | 4Q 2003       | 2Q 2004                  | TBD                 |             | Several initiatives have been implemented to balance the workload in the service centers. These include streamlining current processes and resource management.  A new Resource Management Tool was completely implemented in January 2004. Sprint is analyzing historical data to determine scheduling needs and constraints. Once this process is completed, Sprint will make changes to improve cycle time as appropriate.  Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months. |  |  |  |  |



Measure 3: Average Reject Notice Interval

| Submeasure 3.03.02.01: Electronic/Manual Mix - Co Description of Issue  | Start   | Projected   | Estimated | End  | Improvement Plan   |
|---|---------|-------------|-----------|------|--|
|   | Date    | Improvement | -         | Date |  |
| Sprint is experiencing an increase in CLEC project orders which require more manual intervention. For example, a large CLEC is converting from one product type to another. | 3Q 2003 | 2Q 2004     | TBD       |      | Several initiatives have been implemented to balance the workload in the service centers. These include streamlining current processes and resource management.  |
|   |         |             |           |      | A new Resource Management Tool was completely implemented in January 2004. Sprint is analyzing historical data to determine scheduling needs and constraints. Once this process is completed, Sprint will make changes to improve cycle time as appropriate. |
|   |         |             |           |      | Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months.   |

| Measure 3: Average Reje | ect Notice Interva | ļ <b>i</b> |     |  |
|-------------------------|--------------------|------------|-----|--|
| 0.1 0.00.00.00          | 777 / 1 /4 /       | 135        | . — |  |

| Submeasure 3.03.02.02: Electronic/Manual Mix – Content Errors – UNE Loops and Ports   |               |                          |                     |             |   |  |  |  |  |
|---|---------------|--------------------------|---------------------|-------------|---|--|--|--|--|
| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |  |  |  |  |
| Sprint is experiencing an increase in CLEC project orders which require more manual intervention. For example, a large CLEC is converting from one product type to another. | 4Q 2003       | 2Q 2004                  | TBD                 |             | Several initiatives have been implemented to balance the workload in the service centers. These include streamlining current processes and resource management.  A new Resource Management Tool was completely implemented in January 2004. Sprint is analyzing historical data to determine scheduling needs and constraints. Once this process is completed, Sprint will make changes to improve cycle time as appropriate.  Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months. |  |  |  |  |



Measure 6: Average Jeopardy Notice Interval
Submeasure 6.01.02: Residential POTS - Installation

| Description of Issue   | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact                              | End<br>Date | Improvement Plan   |
|--|---------------|--------------------------|--|-------------|--|
| Keying errors by service center representatives are causing an increase in the interval for ILEC jeopardized orders. Examples of keying errors include using incorrect dates, data entry, etc. | 4Q 2003       |                          | Less than<br>1% of<br>jeopardized<br>ILEC orders |             | The errors were sent to the appropriate supervisors for coaching purposes. |
| An ILEC order had a keying error (Jeopardy Notice Installation date) that created a 252-day interval. This caused the ILEC interval to appear much longer when compared to the CLEC interval.  |               |                          |  |             | į  |

Measure 7: Average Completed Interval

| Submeasure 7.01.02: Residential POTS – No Field W   | ork     |             |           |      |   |
|---|---------|-------------|-----------|------|---|
| Description of Issue  | Start   | Projected   | Estimated | End  | Improvement Plan  |
|   | Date    | Improvement | Impact    | Date |   |
| Cause analysis is ongoing. One cause that has already been identified as a contributor to shorter ILEC intervals is "no physical work" orders. These orders yield short ILEC intervals. | 3Q 2003 | TBD         | TBD       |      | The lack of "no physical work" orders for CLEC results is inherent to the business. For example: a "no physical work" order is a "change of ownership" in which a Sprint retail customer calls Sprint and requests a change to the person billed for service (for example, when one roommate transfers the bill to another roommate's name). If a CLEC customer called a CLEC with the same request, the CLEC would handle this internally and would not submit an order to Sprint on their customer's behalf.  A cross-functional team continues to look for opportunities of reducing CLEC intervals in order to achieve parity with ILEC intervals.  Sprint is in the process of implementing a system change to exclude orders for feature only changes which pertain to access line/feature bundle services (no net gain of an access line). This change is expected to balance the CLEC and ILEC intervals. |



Measure 7: Average Completed Interval

| Submeasure 7.11.01: UNE Loops Non-Designed - Fiel  |         |             |                     |      |  |
|--|---------|-------------|---------------------|------|--|
| Description of Issue   | Start   | Projected   | Estimated           | End  | Improvement Plan   |
|  | Date    | Improvement | Impact              | Date | ; **   |
| Certain facilities will not support UNE Loop service. In some cases, this situation cannot be identified until a technician is dispatched on the due date. Additional work may be required in which case the service cannot be provided on the original due date. Sprint does not provide UNE Loops for Sprint retail customers. | 2Q 2003 | 1Q 2004     | 60-70% of<br>orders |      | Records are being updated to enable these facilities to be identified earlier in the provisioning process so that all work can be completed by the original due date.  Sprint has implemented several new processes and technologies to enable the use of UNE Loops that are located behind remote end offices. The entire process should be completed by January 1, 2005. |

Measure 7: Average Completed Interval
Submeasure 7.131.02: UNE Platform – No Field Work

| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |
|---|---------------|--------------------------|---------------------|-------------|---|
| Cause analysis is ongoing. One cause that has already been identified as a contributor to shorter ILEC intervals is "no physical work" orders. These orders yield short ILEC intervals. | 3Q 2003       | TBD                      | TBD                 |             | The lack of "no physical work" orders for CLEC results is inherent to the business. For example: a "no physical work" order is a "change of ownership" in which a Sprint retail customer calls Sprint and requests a change to the person billed for service (for example, when one roommate transfers the bill to another roommate's name). If a CLEC customer called a CLEC with the same request, the CLEC would handle this internally and would not submit an order to Sprint on their customer's behalf.  A cross-functional team continues to look for opportunities of reducing CLEC intervals in order to achieve parity with ILEC intervals.  Sprint is in the process of implementing a system change to exclude orders for feature only changes which pertain to access line/feature bundle services (no net gain of an access line). This change is expected to balance the CLEC and ILEC intervals. |



Measure 11: Percent of Due Dates Missed

| Submeasure 11.101.01: UNE Loops x-DSL Provisioned – Field Work |         |             |           |      |   |  |  |  |
|--|---------|-------------|-----------|------|---|--|--|--|
| Description of Issue   | Start   | Projected   | Estimated | End  | Improvement Plan  |  |  |  |
|  | Date    | Improvement | Impact    | Date |   |  |  |  |
| Certain facilities will not support UNE Loop service. In       | 2Q 2003 | 1Q 2004     | 30-40% of |      | Records are being updated to enable these facilities to be identified |  |  |  |
| some cases, this situation cannot be identified until a        |         |             | orders    |      | earlier in the provisioning process so that all work can be completed |  |  |  |
| technician is dispatched on the due date. Additional           |         |             |           |      | by the original due date.   |  |  |  |
| work may be required in which case the service cannot          |         |             |           |      |   |  |  |  |
| be provided on the original due date. Sprint does not          |         |             |           |      | Sprint has implemented several new processes and technologies to      |  |  |  |
| provide UNE Loops for Sprint retail customers.                 |         |             |           |      | enable the use of UNE Loops that are located behind remote end        |  |  |  |
|  |         |             |           |      | offices. The entire process should be completed by January 1, 2005.   |  |  |  |
| Unusually high workload related to weather increased           | 3Q 2003 | 1Q 2004     | 50-60% of |      |   |  |  |  |
| the volume of trouble tickets. Trouble tickets are             |         |             | orders    |      | from 7:00 PM to increase parity for trouble ticket and service order  |  |  |  |
| weighed higher and dispatched first, causing an increase       |         |             |           |      | dispatch. The earlier cut-off time allows more service orders to be   |  |  |  |
| in service order carryovers. This impacted both ILEC           |         |             |           |      | scheduled for the day, decreasing the amount of service order         |  |  |  |
| and CLEC service orders.                                       |         |             |           |      | carryovers for the day.   |  |  |  |
| An unexpected spike in the workload caused orders to           | 1Q 2004 | 1Q 2004     | 30-40% of |      | This is expected to be a temporary condition. The results are         |  |  |  |
| be carried over.   | 10,2001 | 1 200.      | orders    |      | improving for February 2004.  |  |  |  |
|  |         |             | 52.3515   |      | 1   |  |  |  |
|  |         |             |           |      |   |  |  |  |
|  |         | ĺ           |           |      |   |  |  |  |
|  |         |             |           |      |   |  |  |  |



Measure 11: Percent of Due Dates Missed

| Submeasure 11.11.01: UNE Loops Non-Designed - Fic  | ubmeasure 11.11.01: UNE Loops Non-Designed – Field Work |                          |                     |             |   |  |  |  |  |  |
|--|---|--------------------------|---------------------|-------------|---|--|--|--|--|--|
| Description of Issue   | Start<br>Date   | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan  |  |  |  |  |  |
| Certain facilities will not support UNE Loop service. In some cases, this situation cannot be identified until a technician is dispatched on the due date. Additional work may be required in which case the service cannot be provided on the original due date. Sprint does not provide UNE Loops for Sprint retail customers. | 2Q 2003   | 1Q 2004                  | 60-70% of orders    |             | Records are being updated to enable these facilities to be identified earlier in the provisioning process so that all work can be completed by the original due date.  Sprint has implemented several new processes and technologies to enable the use of UNE Loops that are located behind remote end offices. The entire process should be completed by January 1, 2005 |  |  |  |  |  |
| Unusually high workload related to weather increased the volume of trouble tickets worked each month. Trouble tickets are weighed higher and dispatched first, causing an increase in service order carryovers. This impacted both ILEC and CLEC service orders.   | 3Q 2003   | 1Q 2004                  | 20-30% of<br>orders | 1-31-04     | Steps have been taken to change the default due time to 5:00 PM from 7:00 PM to increase parity for trouble ticket and service order dispatch. The earlier cut-off time allows more service orders to be scheduled for the day, decreasing the amount of service order carryovers for the day.  |  |  |  |  |  |
| An unexpected spike in the workload caused orders to be carried over.  | 1Q 2004   | 1Q 2004                  | 20-30% of<br>orders |             | This is expected to be a temporary condition. The results are improving for February 2004.  |  |  |  |  |  |

Measure 17a: Percentage Troubles in 5 Days for New Orders

| Submeasure 17a.01: Residential POTS                         |         |             |           |      |  |
|---|---------|-------------|-----------|------|--|
| Description of Issue  | Start   | Projected   | Estimated | End  | Improvement Plan   |
|   | Date    | Improvement | Impact    | Date |  |
| Troubles are being reported on some non-dispatched          | 4Q 2003 | 4Q 2004     | 85-95% of |      | Non-dispatchable orders meeting certain criteria are being             |
| orders. Non-dispatchable orders automatically flow          |         | į           | trouble   |      | dispatched to ensure service is provided. Data is being accumulated    |
| through provisioning systems and are completed with no      |         |             | tickets   |      | to identify actionable causes for troubles. Corrective actions will be |
| indication of any trouble condition until a customer calls. |         |             |           |      | implemented as appropriate. Sprint is also investigating potential     |
| For example there may be a disconnected jumper at the       |         | ŧ           |           |      | ideas for ameliorating the impact of small CLEC volumes in cases       |
| site. In these situations the CLEC will contact Sprint to   |         | Į           |           |      | where low CLEC ticket volume may decrease the effectiveness of         |
| report a trouble.   |         | 1           |           |      | the statistical parity comparisons.                                    |



|  | e 18: | Av | erag | e Cor | npletion | <b>Notice Interval</b> |
|--|-------|----|------|-------|----------|------------------------|
|  |       |    |      |       |          |                        |

| Description of Issue   | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact | End<br>Date | Improvement Plan   |
|--|---------------|--------------------------|---------------------|-------------|--|
| Some orders with errors are not being cleared within the objective because they require manual intervention.   | 1Q 2004       | 2Q 2004                  | 30-40% of<br>orders |             | Sprint added service center representatives to augment its staff to process CLEC orders. The new group of representatives should be fully operational within six months. |
| Some orders with porting indicators fail completion.   | 1Q 2004       | 1Q 2004                  | 10-20% of<br>orders |             | Sprint implemented a process change to eliminate issues with these orders.   |
| Some orders with specific errors fail completion (These errors apply to orders when Sprint must rearrange facilities for an existing customer prior to providing service to a new customer). | 1Q 2004       | 2Q 2004                  | 5-10% of<br>orders  |             | Sprint implemented changes to several tables within the ARC (Automated Routing Completion) system to minimize failures.  |

## Measure 19: Customer Trouble Report Rate

| Description of Issue  | Start   | Projected   | Estimated | End  | Improvement Plan  |
|---|---------|-------------|-----------|------|---|
|   | Date    | Improvement | Impact    | Date |   |
| Troubles are being reported on some non-dispatched          | 2Q 2003 | 2Q 2004     | 70-80% of |      | Non-dispatchable orders meeting certain criteria are being        |
| orders. Non-dispatchable orders automatically flow          |         |             | trouble   |      | dispatched to ensure service is provided. Data was accumulated to |
| through provisioning systems and are completed with no      |         |             | tickets   |      | identify causes for troubles and provided to the field teams for  |
| indication of any trouble condition until a customer calls. |         | ļ           |           |      | appropriate corrective action plans. Sprint is doing additional   |
| For example there may be a disconnected jumper at the       |         |             |           |      | analysis to target specific problem areas.                        |
| site. In these situations the CLEC will contact Sprint to   |         |             |           |      |   |
| report a trouble.   |         |             |           |      |   |

| Measure 20: Percentage of Customer Trou | ble Not Resolved Within Estimated Time |
|---|--|
| Submeasure 20.11.01: UNE Loops Non-Des  | signed - Dispatched                    |

| Description of Issue  | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact             | End<br>Date | Improvement Plan  |
|---|---------------|--------------------------|---------------------------------|-------------|---|
| Unusually high workload related to weather caused some troubles to be carried over past the original commitment time. This had a greater impact on CLEC results than on ILEC results. | 2Q 2003       | 1Q 2004                  | 85-95% of<br>trouble<br>tickets |             | Changes to systems, processes and procedures to reduce carrying over CLEC tasks are being investigated and corrective actions will be implemented as appropriate.   |
| An unexpected spike in the workload caused orders to be carried over.   | 1Q 2004       | 1Q 2004                  | 20-30% of<br>orders             |             | An enhancement to Sprint's scheduling system was implemented in mid-December 2003. Root cause analysis performed in the month of February found that entry errors and misunderstanding of the functionality of the enhancement caused an overstatement of resources, which in turn, caused an overbooking of tasks. Sprint plans to complete the audit and corrections by the end of March. |



Measure 21: Average Time to Restore

| Submeasure 21.11.02: UNE Loops - Non-designed - No Dispatch |          |             |           |      |  |  |  |
|---|----------|-------------|-----------|------|--|--|--|
| Description of Issue  | Start    | Projected   | Estimated | End  | Improvement Plan   |  |  |
|   | Date     | Improvement | Impact    | Date |  |  |  |
| There was major outage caused by a fire at a power          | 4Q 2003  | 1Q 2004     | 40% of    |      | Sprint is reviewing its field operations process for damaged fiber   |  |  |
| company transformer that damaged a fiber cable.             |          |             | trouble   |      | cables in order to improve the outage resolution timeframe.  |  |  |
| Consequently, numerous trouble tickets were submitted       |          |             | tickets   |      |  |  |  |
| including two that exceeded the commit time by 50           |          |             | Į.        |      | A business end user customer location was vandalized and all   |  |  |
| hours.  |          |             |           |      | facilities were cut off at the outside building terminal. Several other  |  |  |
| There were three significant outages that caused non-       |          |             |           |      | businesses were impacted by this event as well.  |  |  |
| compliance for this submeasure.                             |          |             | 1         |      | Five remote terminals and one Digital Networking Unit (DNUS)   |  |  |
| compliance for this stromeasure.                            |          |             | ļ         |      | working out of Kissimmee failed due to a fiber cut approximately a   |  |  |
|   |          |             | ]         |      | half mile from the Kissimmee Central Office. A temporary cable   |  |  |
|   |          |             |           |      | was installed in order to alleviate the outage. A construction   |  |  |
|   | <u> </u> |             |           |      | company was responsible for the outage.  |  |  |
|   |          |             |           |      |  |  |  |
|   |          |             |           |      | Last year the Sprint Winter Garden District team sponsored   |  |  |
|   |          |             |           |      | meetings with county officials and local law enforcement to  |  |  |
| <u> </u>  | ]        |             |           |      | encourage them to enforce the Sunshine Law (Chapter 556, Florida   |  |  |
|   |          |             |           |      | Statutes Underground Facility Damage Prevention and Safety Act)  |  |  |
|   |          |             |           |      | to control unnecessary facilities damages. As a result of these meetings, Orange County has taken a proactive approach by paying |  |  |
|   |          | ]           |           |      | off-duty officers to check excavators for legitimate locate tickets. If  |  |  |
|   |          |             |           |      | they do not have such tickets, a \$250 fine is levied along with a   |  |  |
|   |          |             |           |      | citation. The fines are revenue for the issuing agency.  |  |  |

| Measure 23: Frequency of Repeat Trouble Reports in 30 Days Submeasure 23.131: UNE Platform |               |                          |                              |             |   |  |  |
|--|---------------|--------------------------|------------------------------|-------------|---|--|--|
| Description of Issue   | Start<br>Date | Projected<br>Improvement | Estimated<br>Impact          | End<br>Date | Improvement Plan  |  |  |
| There are a high percentage of CLEC repeat trouble reports.                                | 1Q 2004       | 2Q 2004                  | 21% of<br>trouble<br>tickets |             | Data was accumulated to identify causes for troubles and provided to the field teams for appropriate corrective action plans. Sprint has organized a team to investigate repeat troubles. |  |  |