

Exhibit No.:

Issues: Quality of Service

Witness: Larry Henderson

Sponsoring Party: Mo PSC

Type of Exhibit: Surrebuttal Testimony

Case No.: IO-2006-0086

Date Testimony Prepared: January 12, 2006

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY OPERATIONS DIVISION**

**SURREBUTTAL TESTIMONY**

**OF**

**LARRY HENDERSON**

**SPRINT NEXTEL CORPORATION**

**CASE NO. IO-2006-0086**

**Jefferson City, Missouri  
January 2006**

**\*\*Denotes Highly Confidential Information\*\***

**NP**

Exhibit No. 10 NP

Case No(s). 10-2006-0086

Date 2-17-06 Rptr Y4

**FILED<sup>2</sup>**  
MAR 07 2006  
Missouri Public  
Service Commission

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

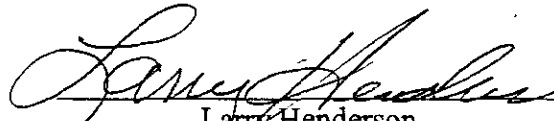
Application of Sprint Nextel Corporation )  
for Approval of the Transfer of Control of )  
Sprint Missouri, Inc., Sprint Long )  
Distance, Inc. and Sprint Payphone )  
Services, Inc. From Sprint Nextel )  
Corporation to LTD Holding Company. )

Case No. IO-2006-0086


**AFFIDAVIT OF LARRY HENDERSON**

STATE OF MISSOURI     )  
                                  ) ss  
COUNTY OF COLE     )

Larry Henderson, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 11 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

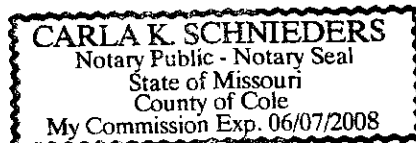
  
Larry Henderson

Subscribed and sworn to before me this 4<sup>th</sup> day of January, 2006.

  
Notary Public

My commission expires

June 7, 2008



1  
2 **SURREBUTTAL TESTIMONY**

3 **OF**

4 **LARRY HENDERSON**

5 **SPRINT NEXTEL CORPORATION**

6 **CASE NO. IO-2006-0086**

7 **Q. Please state your name.**

8  
9 A. My name is Larry R. Henderson.

10  
11 **Q. Are you the same Larry R. Henderson who filed Rebuttal Testimony**  
12 **in this case?**

13 A. Yes.

14 **Q. What is the purpose of your Surrebuttal Testimony?**

15  
16 A. My purpose is to respond to the testimony filed by Communications  
17 Workers of America's Research Economist Debbie Goldman. Specifically, I will  
18 respond to her basic claim that Sprint Missouri's service quality has been deteriorating. I  
19 will provide evidence that Sprint Missouri has been providing very good service for  
20 many years and service has improved rather than deteriorated over the past four years.

21 **Q. Do you agree with Ms. Goldman's statement, page 19, line 9, that**  
22 **service quality at Sprint Missouri has been deteriorating over the past seven years?**

23 A. No. In my opinion such a statement is misleading, especially if  
24 Ms. Goldman is concluding Sprint Missouri is providing inadequate service. I will  
25 respond to her use of information contained in the Automated Reporting Management  
26 Information System (ARMIS) report. Ms. Goldman fails to mention how Sprint's  
27 ARMIS report results are better than the results submitted by other companies. Second,

Surrebuttal Testimony of  
Larry Henderson

1 there is a logical reason to expect the ARMIS measurement for the out-of-service repair  
2 interval to increase over the past decade. Third, Ms. Goldman may have misquoted some  
3 of the data contained in the ARMIS report.

4 **Q. Do you have a general comment about the FCC's ARMIS report**  
5 **quality of service data?**

6 A. Yes. The FCC does not establish service objectives for these  
7 measurements. In other words, the FCC has not tried to establish a minimum threshold  
8 performance result where, if performance crosses a certain threshold, that the company's  
9 service quality should be considered inferior. The FCC is simply attempting to identify  
10 trends. Such an approach differs from the Missouri Public Service Commission quality  
11 of service results in that the Missouri Commission does establish service objectives.

12 **Q. How do Sprint Missouri's ARMIS report results compare with the**  
13 **results submitted by other companies?**

14 A. Schedule I lists other companies submitting quality of service results to  
15 the ARMIS report Out Of Service Repair interval. The schedule indicates the average  
16 hours taken by reporting price cap companies to restore an out of service condition. This  
17 time is calculated from the time the report was received to the time the report was closed.  
18 The time frame for the schedule is 1998 thru 2004. A company aggregate is shown for  
19 BellSouth; Qwest; SBC; Verizon; AllTel; Cincinnati; Citizens and Sprint. Results for  
20 Sprint Missouri are stated as a stand- alone company but are also contained in Sprint's  
21 aggregate results. In 1998, Sprint Missouri had a time interval of 13.3 hours. The  
22 average of all companies in 1998 was 23.3 hours. In 2004, Sprint Missouri had a time  
23 interval of 16 hours. The average of all companies in 2004 was 25.8 hours. It is notable

Surrebuttal Testimony of  
Larry Henderson

1 that Sprint Missouri has the second lowest receipt-to-close hours in the nation, in both  
2 1998 and 2004.

3 **Q. Has the ARMIS measurement for the out-of-service repair interval**  
4 **increased for most companies?**

5 A. Yes. Schedule 1 demonstrates that the average of all reporting companies  
6 increased from 23.3 hours to 25.8 hours. This 2.5 hour difference represents an 11%  
7 increase from 1998 to 2004. Sprint Missouri's interval increased from 13.3 hours to 16  
8 hours. This 2.7 hours increase represents a 20% increase. The percentage difference  
9 appears significant, but percent change is a misleading indicator. Schedule 1  
10 demonstrates that ALLTEL had a 53% increase in out-of-service repair interval time  
11 from 1998 through 2004. However, their out-of-service repair interval is the lowest in  
12 the nation at 15.3 hours.

13 **Q. Would you expect the out-of-service repair interval to increase over**  
14 **the past decade?**

15 A. Yes. Unless a company has extremely poor performance to begin with, I  
16 would expect most companies to experience increased out-of-service repair intervals.  
17 The ARMIS measurement for the out-of-service repair interval attempts to measure the  
18 length of time it takes a company to resolve an out-of-service condition. The timing of  
19 this measurement begins when the company receives the trouble report and concludes  
20 when the company resolves it. Receipt of a customer's trouble report is when the  
21 customer calls the company to report the trouble. After regular business hours, a  
22 company may simply record the necessary information at the time of the customer's call  
23 and then act on it the next day.

Surrebuttal Testimony of  
Larry Henderson

1 I would expect this measurement interval to increase over the past decade because  
2 consumers have increased opportunities to report trouble, especially outside normal  
3 business hours. For example, in order to report their phones are out of service, a  
4 consumer must contact the company. In my opinion, in the past most customers did not  
5 have the capability to immediately report the trouble. A customer may have to wait until  
6 the next day and report the trouble when they have access to a operational phone at work,  
7 or alternatively the customer could try and find a working phone at a neighbor's house or  
8 another location and place the call to the company. However, today many customers  
9 have a wireless phone and they could use a wireless phone to immediately report the  
10 trouble. In the past, I think it is reasonable to expect most consumers discovering an out-  
11 of-service condition after regular business hours would wait until the next morning when  
12 they would have access to a working phone to report the trouble. As more consumers  
13 immediately report trouble on their phone lines, such consumer response will place  
14 pressure to increase a company's out-of-service interval.

15 **Q. Please explain.**

16 A. Immediately reporting trouble can have an impact on a company's out-of-  
17 service interval. As an example, if a consumer discovers their phone service is out-of-  
18 service at 6:00 pm and reports it at 8:00 am the next day, the out-of-service interval will  
19 be nine hours if the company restores service by 5:00 pm. If the consumer immediately  
20 reports trouble at 6:00 pm and the company restores service by 5:00 pm the next day, the  
21 out-of-service interval is 23 hours. In this respect, as more consumers immediately report  
22 trouble such a consumer response will tend to increase a company's out-of-service  
23 interval even though the company may be consistently restoring service within 24 hours.

24

Surrebuttal Testimony of  
Larry Henderson

1           **Q.     Should an increase in a company's out-of-service repair interval**  
2 **reflect deteriorating service?**

3           A.     Not necessarily. I would be cautious in drawing such a conclusion. It is  
4 possible for a company to continue to provide the same or even better service than it has  
5 previously but experience an increase out-of-service repair interval solely on the basis  
6 that consumers have increased opportunity to report trouble during after hours.

7           **Q.     Do you have any comments regarding the percentage increases of the**  
8 **various measurements cited in Ms. Goldman's testimony?**

9           A.     Yes. Although I disagree with her ultimate conclusions that Sprint  
10 Missouri's service has been deteriorating, the data cited her testimony is confusing and  
11 perhaps inaccurate. Her testimony, page 19, lines 14-20, suggests Sprint's out-of-service  
12 repair interval increased 20% from 1998 to 2004. In addition, her testimony suggests  
13 Sprint's repeat trouble reports increased by 121% during this same time period. I'd like  
14 to comment about each of these percentages.

15           **Q.     What comments do you have regarding Ms. Goldman's suggestion**  
16 **that Sprint's out-of-service repair interval increased 20% from 1998 to 2004?**

17           A.     Ms. Goldman states that Sprint Missouri's out-of-service repair interval  
18 averaged 10.6 hours in 1998 and this figure grew to 15.4 hours in 2004. Her testimony  
19 fails to clarify how these figures represent an increase of 20%; however, my review of the  
20 FCC's ARMIS report shows that Sprint Missouri's out-of-service interval for 1998 was  
21 13.3 hours rather than 10.6 hours. The FCC's ARMIS report also shows Sprint  
22 Missouri's out-of-service interval for 2004 was 16 hours rather than 15.4 hours. In this  
23 regard, her comparison of Sprint Missouri's out-of-service repair interval for 1998 versus  
24 2004 should be 13.3 hours in 1998 and 16 hours in 2004.

Surrebuttal Testimony of  
Larry Henderson

1           **Q.     If Ms. Goldman had only looked at Sprint Missouri's out-of-service**  
2 **repair interval results for the last five years rather than seven years what do the**  
3 **ARMIS report results show?**

4           A.     Schedule 2 shows the ARMIS report data for out-of-service repair  
5 intervals from 2000 thru 2004. The exhibit shows Sprint Missouri's out-of-service repair  
6 interval time decreased from 16.3 hours to 16 hours. This change represents a two  
7 percent decline in out-of-service repair interval time.

8           **Q.     What comments do you have regarding Ms. Goldman's suggestion**  
9 **that Sprint's repeat trouble report percentage increased by 121% from 1998 to**  
10 **2004?**

11          A.     This percentage appears to be over-stated. Ms. Goldman's Exhibit 17  
12 shows this percentage should be approximately 62% rather than 121%. Therefore,  
13 Ms. Goldman's exhibit and the figure cited on page 19 of her testimony are inconsistent.

14          **Q.     Do you have any other comments about Ms. Goldman's reference to**  
15 **the repeat trouble report measurement?**

16          A.     Yes. In my opinion, the Federal Communications Commission's (FCC's)  
17 repeat trouble report rate may not provide an accurate reflection of the company's quality  
18 of service. The FCC's criteria for repeat trouble reports is simply based on two criteria:  
19 (1) the initial report has to be coded out of service and closed, and (2) the second report  
20 on the same line must be received within 30 days of the closing of the first report. An  
21 incorrect inference might be that a second trouble report is a negative reflection on the  
22 company in the sense the company failed to properly resolve the customer's initial  
23 trouble report. However, the FCC's measurement does not attempt to make any  
24 distinction on the relationship between the customer's two trouble reports. In other



Surrebuttal Testimony of  
Larry Henderson

1 words, the customer's second trouble report could be caused by events totally beyond the  
2 control of the company. For example, customer trouble reports caused by a cut cable or  
3 faulty customer premise equipment could still be counted in calculating a company's  
4 repeat trouble report rate according to the FCC's definition.

5 **Q. Is it common for trouble reports to be caused by events totally beyond**  
6 **the control of the company?**

7 A. Yes. Operational reviews conducted by the Commission Staff indicate  
8 that on average 65% of total trouble reports received by a company are not related to the  
9 company's network. This figure suggests that over half of a company's trouble reports  
10 can be caused by factors beyond the company's control. For example, reported trouble  
11 could be caused by faulty customer provided wiring and customer provided equipment.  
12 I simply bring this point up to raise caution from drawing conclusions from the FCC's  
13 measurement of trouble reports, for the FCC does not appear to make distinction between  
14 troubles caused by the company's facilities versus factors beyond the company's control.

15 **Q. Is Sprint Missouri providing inadequate service?**

16 A. No. Any inference that Sprint Missouri is providing inadequate service is  
17 incorrect. As pointed out in my Rebuttal Testimony, Sprint Missouri is in compliance  
18 with the service objectives and is exceeding the surveillance levels for quality standards  
19 established by this Commission in rule 4 CSR 240-32.080. Schedules 3 through 7 show  
20 Sprint Missouri's quality of service results for the past seventeen quarters (from the third  
21 quarter of 2001 through the third quarter of 2005). Specifically, these schedules show  
22 Sprint Missouri's performance results for several different measures. Overall, these  
23 schedules show the company provides very good service to its customers.

24 **Q. What specific information is contained in these schedules?**

Surrebuttal Testimony of  
Larry Henderson

1           A.     These schedules graphically show Sprint Missouri's performance results  
2 for a particular measure. Each schedule attempts to also show the trend line for Sprint  
3 Missouri's results. The schedules also identify the Commission's service objective and  
4 surveillance level for a particular measure.

5           **Q.     Please explain the distinction between service objective versus**  
6 **surveillance level.**

7           A.     A service objective represents an acceptable level of service for an  
8 established category of service or performance measure. In contrast a surveillance level  
9 represents a substandard level of performance for an established category of service or  
10 performance measure. If a company's performance result falls within surveillance level  
11 the company is required to immediately investigate and take appropriate corrective action  
12 to achieve and maintain the Commission's service objective. In general, the  
13 Commission's rules establish a buffer zone between a measure's service objectives  
14 versus surveillance level. In other word, it is possible for a company to fail to meet the  
15 Commission's service objective but still not fall into the Commission's surveillance level.  
16 Surveillance level is viewed as substandard performance clearly requiring immediate  
17 attention by the company.

18           **Q.     Please explain Schedule 3.**

19           A.     Schedule 3 shows Sprint Missouri's quarterly performance results of  
20 installation of basic local telecommunications service within five days. This measure  
21 attempts to show if a company is responding to requests for telecommunications service  
22 in a timely manner. The Commission's service objective is to install basic local  
23 telecommunications service within five days for at least 90% of the company's orders for  
24 basic local service. Sprint Missouri exceeded this objective for all quarters. This

Surrebuttal Testimony of  
Larry Henderson

1 schedule also shows that Sprint Missouri has steadily improved its performance for this  
2 measure during the third quarter of 2001 through the third quarter of 2005.

3 **Q. Please explain Schedule 4.**

4 A. Schedule 4 shows Sprint Missouri's quarterly performance results for  
5 meeting installation commitments given for the installation of basic local  
6 telecommunications service. This measure attempts to show if a company is installing  
7 service within the time frame or time commitment provided to the customer. The  
8 Commission's service objective is to meet at least 90% of the company's commitments  
9 for installing basic local service. Sprint Missouri exceeded this objective for all quarters.  
10 This schedule also shows that Sprint Missouri has steadily improved its performance for  
11 this measure during the third quarter of 2001 through the third quarter of 2005.

12 **Q. Please explain Schedule 5.**

13 A. Schedule 5 shows Sprint Missouri's quarterly performance results  
14 regarding the number of trouble reports received per 100 access lines. This measure  
15 attempts to show if a company's customers are experiencing a significant amount of  
16 trouble with their telecommunications service. Trouble reports caused by faulty customer  
17 premise equipment or inside wire are not counted in this performance measure. The  
18 company needs to specifically identify the cause of the problem in order to exclude the  
19 trouble report from its performance result. In this respect, if the company investigates a  
20 trouble report and the line tests ok the trouble report is included in the company's  
21 calculation for this performance measure. Likewise, a trouble report for the same access  
22 line for trouble already reported but not yet cleared is not counted. The Commission's  
23 service objective is for a company to have less than 6 trouble reports per 100 lines.  
24 Sprint Missouri was significantly below this objective for all seventeen quarters. Sprint

Surrebuttal Testimony of  
Larry Henderson

1 Missouri averaged approximately \*\* \_\_\*\* trouble reports per 100 lines during this time  
2 period.

3 **Q. Please explain Schedule 6.**

4 A. Schedule 6 shows Sprint Missouri's quarterly performance results for  
5 resolving out-of-service trouble reports, and, specifically what percentages of out-of-  
6 service trouble reports are cleared in less than 24 hours. A company is allowed to exclude  
7 certain trouble reports as described for Schedule 5. The Commission's service objective  
8 is to clear at least 90% of out-of-service trouble reports within 24 hours. Sprint Missouri  
9 exceeded this objective for \*\* \_\_\*\* out of 17 quarters. Sprint failed to meet this  
10 Commission objective during the 3<sup>rd</sup> quarter of 2005, the most recent reporting time  
11 period, with \*\* \_\_\_\_\*\* of out-of-service trouble reports restored within 24 hours.  
12 Despite not meeting the Commission's service objective for this quarter, the company  
13 still exceeded the Commission's surveillance level of 85%.

14 **Q. Please explain Schedule 7.**

15 A. Schedule 7 shows Sprint Missouri's quarterly performance results in  
16 meeting repair commitments for the repair of basic local telecommunications service.  
17 This measure attempts to see if a company resolving trouble reports within the time frame  
18 originally provided to the customer. The Commission's service objective is to resolve at  
19 least 90% of trouble reports within the time frame provided to the customer. Sprint  
20 Missouri met this objective only \*\* \_\_\*\* out of 17 quarters from the third quarter of 2001  
21 to the third quarter of 2005. Despite not meeting the Commission's service objective,  
22 Sprint Missouri still exceeded the Commission's surveillance level of 85% for all for all  
23 17 quarters.

**NP**

Surrebuttal Testimony of  
Larry Henderson

1           **Q.     Please explain Schedule 8.**

2           A.     Schedule 8 takes information from Schedules 5 and 6 by determining what  
3 percent of total trouble reports reflect an out-of-service condition. The time frame of this  
4 schedule is for seventeen quarters from the third quarter of 2001 to the third quarter of  
5 2005. This report is used to verify if a company is coding trouble reports correctly. This  
6 report provides a certain amount of validity to trouble report data contained in the  
7 quarterly quality report. A low percentage of out-of- service reports would prompt  
8 questions concerning the validity of out-of-service cleared within 24 hours.

9           **Q.     Does this conclude your Surrebuttal Testimony?**

10  
11          A.     Yes, it does.

**SCHEDULE 1**  
**Out of Service Repair Intervals in Hours receipt to clear**  
**(Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)**

**7 Year Trend**

**All Reporting ILECs, Business & Residence**

<b>COMPANY</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>%Change</b>
<b>BELLSOUTH AGGREGATE</b>	21.5	22.9	21.6	19.4	18.7	20	31.5	47%
<b>QWEST AGGREGATE</b>	26.6	26.8	19.8	14.5	13.9	14.7	16.3	-39%
<b>SBC AGGREGATE</b>	27.6	23.9	36.1	23.6	20.5	20.1	23.7	-14%
<b>VERIZON AGGREGATE</b>	19.4	20.7	23	19.7	21.3	28.9	27.4	41%
<b>ALLTEL AGGREGATE</b>	10	7.1	7.5	15.3	9.2	24.4	15.3	53%
<b>CINCINNATI BELL AGGREGATE</b>	NA	30.1	35.9	38.6	34.7	57.9	26.7	-11%
<b>CITIZENS AGGREGATE</b>	22.1	16.3	18.9	19.7	15.9	23.2	20.3	-8%
<b>SPRINT AGGREGATE</b>	14.8	18.5	16.1	13.8	15.5	17.5	22.9	55%
<b>All Reporting ILECs</b>	<b>23.3</b>	<b>22.7</b>	<b>26.6</b>	<b>20.3</b>	<b>19.6</b>	<b>22.6</b>	<b>25.8</b>	<b>11%</b>
<b>Sprint Missouri</b>	<b>13.3</b>	<b>13.8</b>	<b>16.3</b>	<b>14.2</b>	<b>17.1</b>	<b>15.4</b>	<b>16</b>	<b>20%</b>

## SCHEDULE 2

### Out of Service Repair Intervals in Hours receipt to clear

(Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)

#### 5 Year Trend

#### All Reporting ILECs, Business & Residence

COMPANY	2000	2001	2002	2003	2004	% Change
BELLSOUTH AGGREGATE	21.6	19.4	18.7	20	31.5	46%
QWEST AGGREGATE	19.8	14.5	13.9	14.7	16.3	-18%
SBC AGGREGATE	36.1	23.6	20.5	20.1	23.7	-34%
VERIZON AGGREGATE	23	19.7	21.3	28.9	27.4	19%
ALLTEL AGGREGATE	7.5	15.3	9.2	24.4	15.3	104%
CINCINNATI BELL AGGREGATE	35.9	38.6	34.7	57.9	26.7	-26%
CITIZENS AGGREGATE	18.9	19.7	15.9	23.2	20.3	7%
SPRINT AGGREGATE	16.1	13.8	15.5	17.5	22.9	42%
All Reporting ILECs	26.6	20.3	19.6	22.6	25.8	-3%
Sprint Missouri	16.3	14.2	17.1	15.4	16	-2%

**Schedules  
3 through 8  
Are Deemed  
Highly  
Confidential  
In Their  
Entirety**